

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the Fiscal Year Ended December 31, 2019
Or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____
Commission file number 1-16811



United States Steel Corporation

United States Steel Corporation
(Exact name of registrant as specified in its charter)

Delaware
(State of Incorporation)

25-1897152
(I.R.S. Employer Identification No.)

600 Grant Street, Pittsburgh, PA 15219-2800
(Address of principal executive offices)

Tel. No. (412) 433-1121

Securities registered pursuant to Section 12 (b) of the Act:

Title of Each Class	Trading Symbol	Name of Exchange on which Registered
United States Steel Corporation Common Stock, par value \$1.00	X	New York Stock Exchange
United States Steel Corporation Common Stock, par value \$1.00	X	Chicago Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark whether the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15 (d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for at least the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or emerging growth company. See the definition of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes No

Aggregate market value of Common Stock held by non-affiliates as of June 28, 2019 (the last business day of the registrant's most recently completed second fiscal quarter): \$2.6 billion. The amount shown is based on the closing price of the registrant's Common Stock on the New York Stock Exchange composite tape on that date. Shares of Common Stock held by executive officers and directors of the registrant are not included in the computation. However, the registrant has made no determination that such individuals are "affiliates" within the meaning of Rule 405 under the Securities Act of 1933.

There were 170,047,076 shares of United States Steel Corporation Common Stock outstanding as of February 10, 2020.

Documents Incorporated By Reference:

Portions of the Proxy Statement for the 2020 Annual Meeting of Stockholders are incorporated into Part III.

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FORWARD-LOOKING STATEMENTS

This report contains information that may constitute "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. We intend the forward-looking statements to be covered by the safe harbor provisions for forward-looking statements in those sections. Generally, we have identified such forward-looking statements by using the words "believe," "expect," "intend," "estimate," "anticipate," "project," "target," "forecast," "aim," "should," "will" and similar expressions or by using future dates in connection with any discussion of, among other things, operating performance, trends, events or developments that we expect or anticipate will occur in the future, statements relating to volume changes, share of sales and earnings per share changes, anticipated cost savings, potential capital and operational cash improvements, U. S. Steel's future ability and plans to take ownership of its Big River Steel joint venture as a wholly owned subsidiary, and statements expressing general views about future operating results. However, the absence of these words or similar expressions does not mean that a statement is not forward-looking. Forward-looking statements are not historical facts, but instead represent only the Company's beliefs regarding future events, many of which, by their nature, are inherently uncertain and outside of the Company's control. It is possible that the Company's actual results and financial condition may differ, possibly materially, from the anticipated results and financial condition indicated in these forward-looking statements. Management believes that these forward-looking statements are reasonable as of the time made. However, caution should be taken not to place undue reliance on any such forward-looking statements because such statements speak only as of the date when made. Our Company undertakes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law. In addition, forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from our Company's historical experience and our present expectations or projections. These risks and uncertainties include, but are not limited to the risks and uncertainties described in this report in "Item 1A. Risk Factors" and those described from time to time in our future reports filed with the Securities and Exchange Commission.

References in this Annual Report on Form 10-K to "U. S. Steel," "the Company," "we," "us," and "our" refer to United States Steel Corporation and its consolidated subsidiaries unless otherwise indicated by the context.

Non-Generally Accepted Accounting Principles (non-GAAP) Financial Measures

This report contains certain non-GAAP financial measures such as earnings (loss) before interest, income taxes, depreciation, depletion and amortization (EBITDA), adjusted EBITDA, adjusted net earnings (loss), adjusted net earnings (loss) per diluted share, free cash flow, net debt and cash conversion cycle.

We believe that EBITDA, considered along with the net earnings (loss), is a relevant indicator of trends relating to cash generating activity and provides management and investors with additional information for comparison of our operating results to the operating results of other companies.

Adjusted net earnings (loss) and adjusted net earnings (loss) per diluted share are non-GAAP measures that exclude the effects of restructuring and other charges, the December 24, 2018 Clairton coke making facility fire, the Big River Steel options mark to market, the impact of the tax valuation allowance, the 2018 United Steelworkers labor agreement signing bonus and related costs, Granite City Works temporary idling and restart charges, the loss on shutdown of certain tubular pipe mill assets, gains associated with the sale of our retained interest in U. S. Steel Canada Inc., gains on equity investee transactions, loss on extinguishment of debt and other related costs, the effect of tax reform and other adjustments that are not part of the Company's core operations (Adjustment Items). Adjusted EBITDA is also a non-GAAP measure that excludes the effects of the Adjustment Items. We present adjusted net earnings (loss), adjusted net earnings (loss) per diluted share and adjusted EBITDA to enhance the understanding of our ongoing operating performance and established trends affecting our core operations, by excluding the effects of events that can obscure underlying trends. U. S. Steel's management considers adjusted net earnings (loss), adjusted net earnings (loss) per diluted share and adjusted EBITDA as alternative measures of operating performance and not alternative measures of the Company's liquidity. U. S. Steel's management considers adjusted net earnings (loss), adjusted net earnings (loss) per diluted share and adjusted EBITDA useful to investors by facilitating a comparison of our operating performance to the operating performance of our competitors. Additionally, the presentation of adjusted net earnings (loss), adjusted net earnings (loss) per diluted share and adjusted EBITDA provides insight into management's view and assessment of the Company's ongoing operating performance, because management does not consider the adjusting items when evaluating the Company's financial performance. Adjusted net earnings (loss), adjusted net earnings (loss) per diluted share and adjusted EBITDA should not be considered a substitute for net earnings (loss),

earnings (loss) per diluted share or other financial measures as computed in accordance with U.S. GAAP and is not necessarily comparable to similarly titled measures used by other companies.

Net debt is a non-GAAP measure calculated as total debt less cash and cash equivalents. We believe net debt is a useful measure in calculating enterprise value. Both EBITDA and net debt are used by analysts to refine and improve the accuracy of their financial models which utilize enterprise value.

Free cash flow is a measure of cash generated from operations, after any investing activity and dividends paid to stockholders. We believe that free cash flow provides further insight into the Company's overall utilization of cash.

We believe the cash conversion cycle is a useful measure in providing investors with information regarding our cash management performance and is a widely accepted measure of working capital management efficiency. The cash conversion cycle should not be considered in isolation or as an alternative to other GAAP metrics as an indicator of performance.

10-K SUMMARY

This section provides an overview of U. S. Steel's business, strategy and financial performance for 2019. It does not contain all of the information that may be important to a reader. Please read the entire Annual Report on Form 10-K.

Our vision is for U. S. Steel to be the industry leader in delivering high-quality, value-added products and innovative solutions that address our customers' most challenging steel needs. Underlying our efforts is our belief that we must operate as a principled company committed to a code of conduct that is rooted in our Gary Principles and our core values. Our core values are articulated in our **S.T.E.E.L.** Principles - **S**afety First, **T**rust and Respect, **E**nvironmentally Friendly Activities, **E**thical Behavior, and **L**awful Business Conduct. These core values guide U. S. Steel and help support the economic and societal benefits associated with strong domestic manufacturing capabilities, of which steel is a foundational industry.

We aim to achieve our vision by successfully executing on our world-competitive, "best of both" strategy. By bringing together the best of the integrated steelmaking model with the best of the mini mill steelmaking model, we will transform our business to drive long-term cash flow through industry cycles. We aim to offer an unparalleled product platform to serve customers, achieve world-competitive positioning in strategic, high-margin end markets, and deliver high-quality, value-added products and innovative solutions that address our customers' most challenging steel needs. To become a "best of both" company, we are enhancing our focus on operational and commercial excellence and promoting technological innovation, so we can establish a more competitive cost structure and enhance our capabilities ... two key drivers for our strategy.

The diagram below illustrates our world-competitive "best of both" strategic framework and highlights the key actions to transform our business.



Over the past several years, we have proactively re-shaped our footprint and transformed our balance sheet. We used the strength and foundation of our business to align our balance sheet with the investment horizon to execute our strategy.

Our strategy is informed by our critical success factors, which are the bedrock of the "best of both" strategy: (1) Move

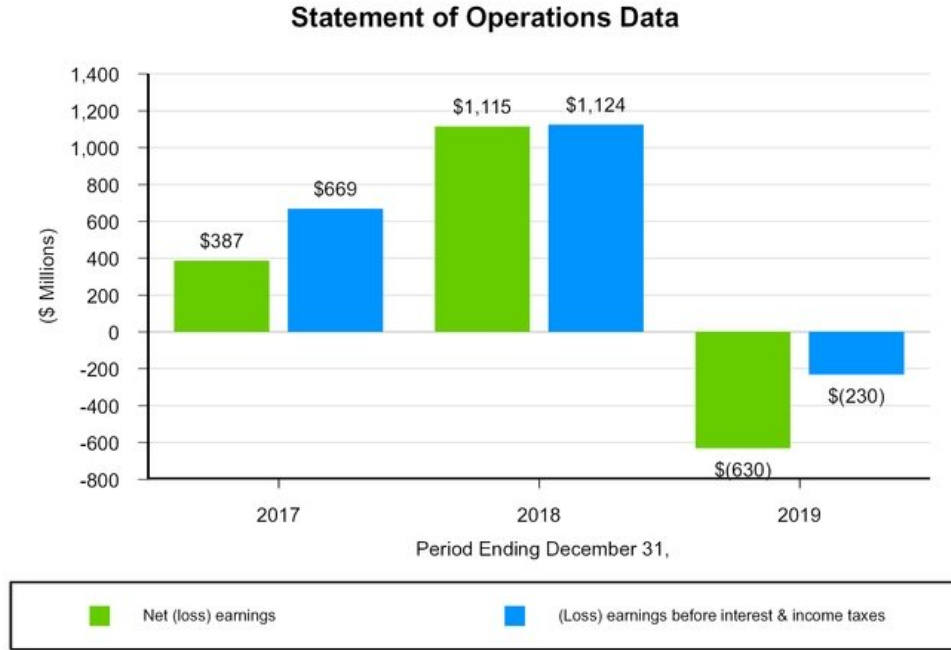
Down the Cost Curve; (2) Win in Strategic Markets; and (3) Move Up the Talent Curve. Several of the strategic projects we are undertaking are expected to result in operational improvements. Additionally, the enhanced operating model and organizational structure we implemented beginning in 2020 will also position U. S. Steel to lower its structural fixed costs. We are also investing in new technologies to improve our cost position and increase our capabilities, including our investment in Big River Steel, the electric arc furnace (EAF) at Fairfield Tubular Operations, endless casting and rolling at Mon Valley Works, Gary Works hot strip mill upgrades and the dynamo line at our USSK facility which is within our USSE segment. We will focus on strategic markets, where there is the greatest opportunity to provide differentiated, innovative and value-added solutions that will help our customers succeed. We know that to accomplish our objectives, we also need to move up the talent curve, which we are doing by investing in our employees and providing the training and resources they need to succeed. This will help us reinforce a culture where accountability, fairness and respect are foundational, and high performance and inclusion in all its forms are valued and celebrated.

In 2019, we announced several transformation initiatives key to our strategy. On October 31, 2019, U. S. Steel acquired a 49.9% ownership interest in Big River Steel at a purchase price of approximately \$683 million in cash, with a call option to acquire the remaining 50.1% within the next four years. Our investment in Big River Steel will add sustainable steel making technology to our footprint and improve our competitive positioning. Big River Steel is a technological leader combining mini mill technology with aspects of the integrated model to achieve the benefits of each. In December 2019, we announced our intention to indefinitely idle a significant portion of our Great Lakes Works operation near Detroit, Michigan. We expect to begin idling the iron and steelmaking facilities on or around April 1, 2020, and the hot strip mill rolling facility before the end of 2020. This action will transition our footprint to focus on facilities and assets that are differentiated by cost and/or capability.

Ultimately, we intend to center our North American Flat-Rolled operations around three distinct, market-leading assets: Big River Steel, Mon Valley Works, and Gary Works, to transform the business to offer customers differentiated products to deliver highly competitive long-term cash flow generation through higher earnings and lower maintenance capital expenditures.

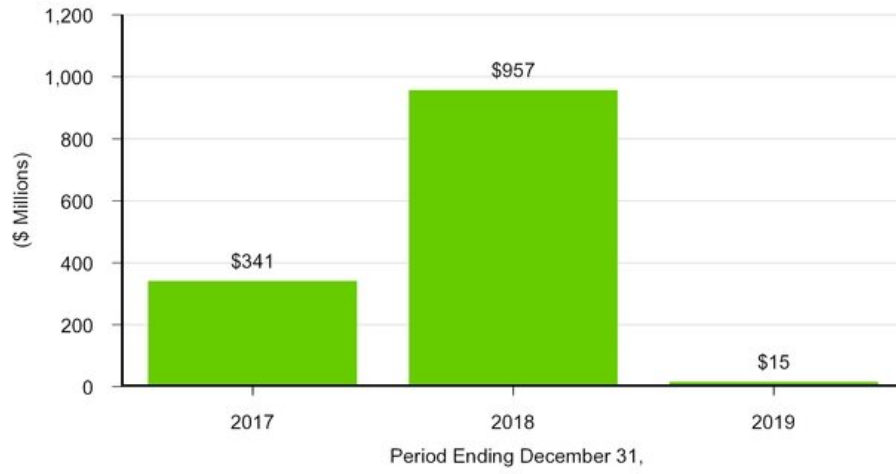
KEY PERFORMANCE INDICATORS

This section provides an overview of select key performance indicators for U. S. Steel which management and investors use to assess the Company's financial performance. It does not contain all of the information you should consider. Fluctuations for year to year changes are explained in Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations."



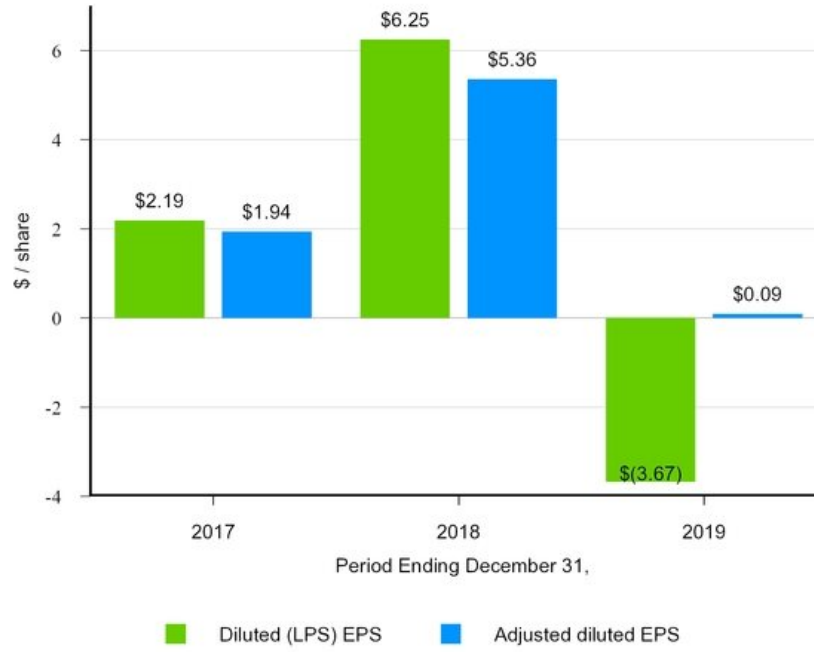
- Our 2019 net loss includes unfavorable restructuring impacts of \$275 million for the indefinite idling of certain of our Flat-Rolled facilities, plant exit costs at USSE and Company-wide headcount reductions implemented to reduce fixed costs and support our strategy to become a world-competitive, "best of both" steel company. Our financial results were also negatively impacted by lower average realized prices across all of our business segments, significant market challenges in our USSE segment and a \$334 million non-cash charge to tax expense that increased the valuation allowance related to our net domestic deferred tax asset.
- Our 2018 net earnings include a favorable impact of \$374 million due to the reversal of a portion of our deferred tax asset valuation allowance.
- Our 2017 net earnings include an \$81 million income tax benefit from enacted tax legislation.

Adjusted Net Earnings



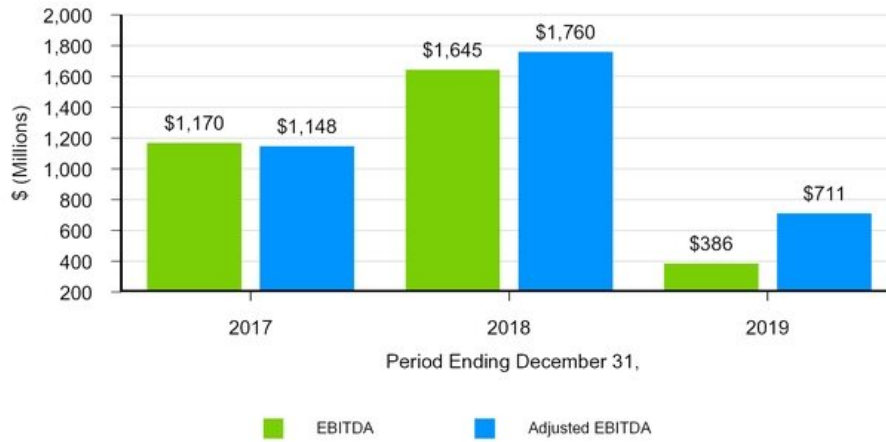
- After a significant earnings improvement in 2018, we faced a challenging year in 2019 as market conditions in the U.S. weakened in the latter half of the year. Our USSE segment faced significant market challenges from weakening economic conditions, primarily in the manufacturing sector.
- These amounts are derived starting from net (loss) earnings as shown on page 7. For a full reconciliation of adjusted net (loss) earnings see page 18.

Diluted and Adjusted Diluted (Loss) Earnings per Share



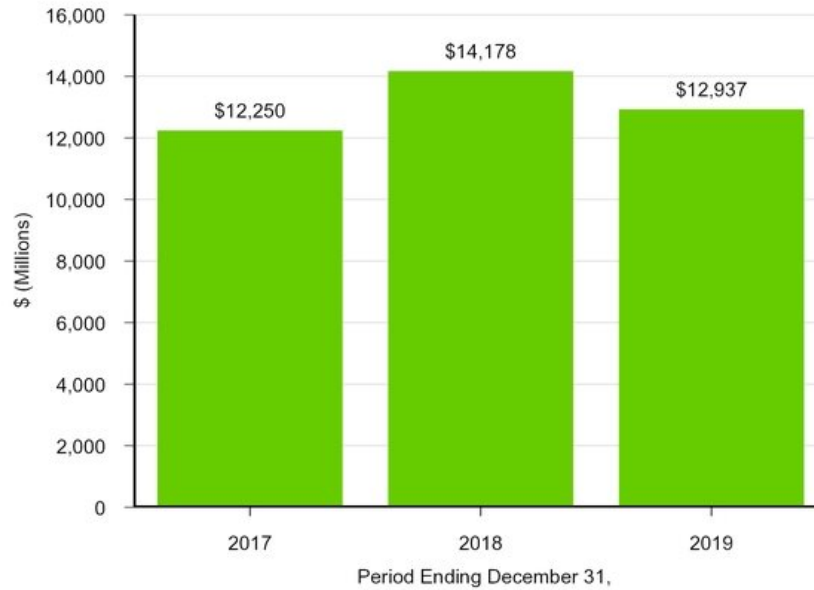
- See reconciliation from diluted net (loss) earnings per share to adjusted diluted net earnings per share on page 19.

EBITDA and Adjusted EBITDA



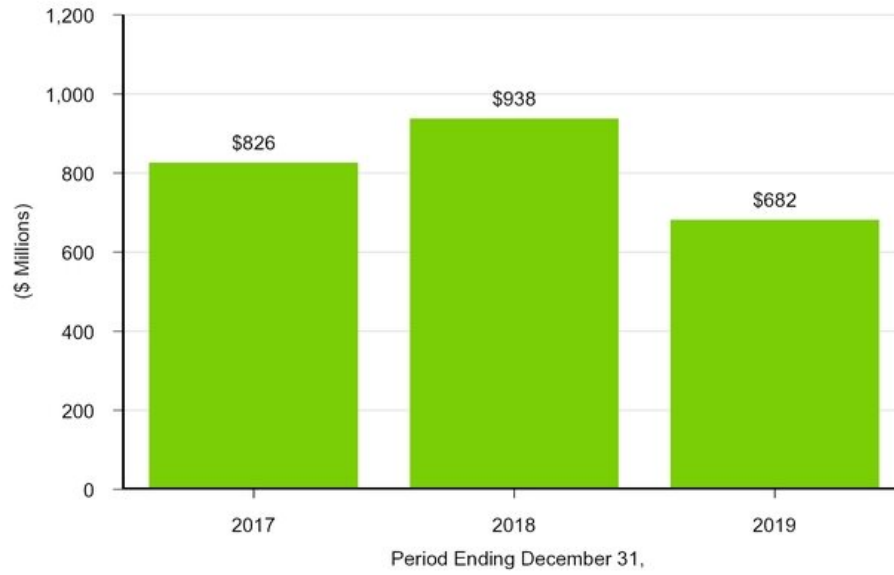
- These amounts are derived starting from net (loss) earnings as shown on page 7. For a full reconciliation of adjusted EBITDA see page 20.
- EBITDA decreased primarily in our Flat-Rolled and USSE segments in 2019. The primary driver of decreased EBITDA in our Flat-Rolled segment was lower average realized prices related to weakening demand in the latter half of 2019. Our USSE segment temporarily idled one blast furnace as it experienced reduced shipment levels and lower average realized prices as a result of significant market challenges from weakening economic conditions, primarily in the manufacturing sector, and continued high levels of imports, coupled with domestic CO₂ cost disadvantages compared to imports. Tubular results continued to be negatively impacted by high levels of imports which resulted in lower selling prices.
- EBITDA increased from 2017 to 2018 for all three reportable segments with higher average realized prices in all three segments.

Net Sales



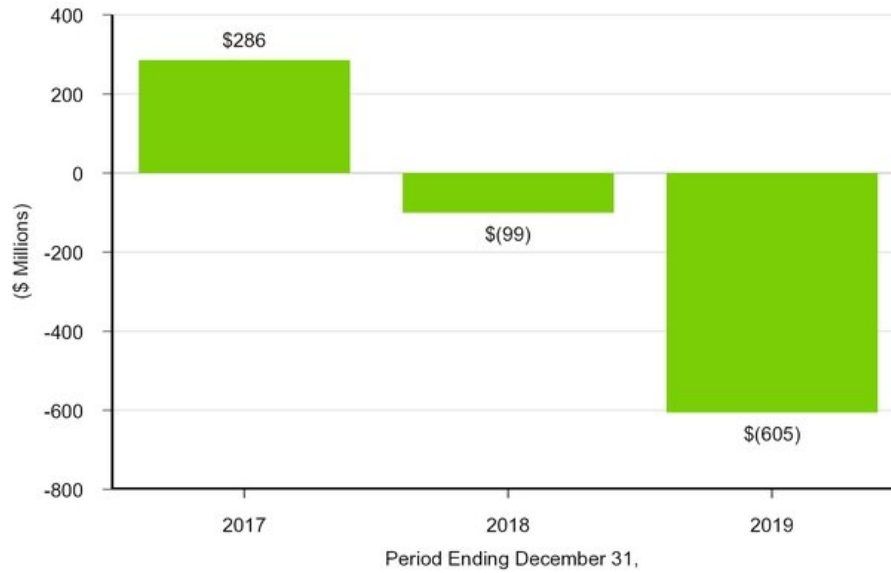
- The decrease in net sales in 2019 as compared to 2018 was primarily due to lower average realized prices in all of our reportable segments and significantly reduced shipments in our USSE segment. Lower average realized prices in our Flat-Rolled and Tubular segments reflect weakening market conditions in the latter half of 2019. Reduced shipment levels and lower average realized prices in our USSE segment were the result of significant market challenges from weakening economic conditions, primarily in the manufacturing sector, and continued high levels of imports, coupled with domestic CO₂ cost disadvantages compared to imports.
- The increase in net sales in 2018 as compared to 2017 was primarily due to higher average realized prices in all of our reportable segments and increased shipments in our Flat-Rolled and Tubular segments due to improved market conditions. Improved market conditions for our Flat-Rolled segment reflected accelerated demand for steel products in line with the recent economic growth, as well as the supply-demand balance between imported and domestic steel. The restart of the two blast furnaces at our Granite City Works during 2018 enabled us to take advantage of the improved market dynamics in 2018.

Cash Flow from Operations



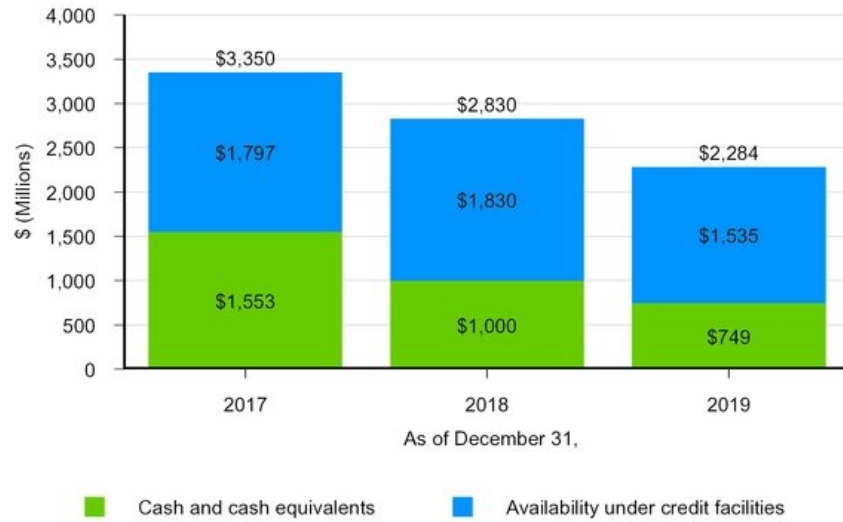
- In 2019, the positive cash flow from operations was primarily due to efficient use of working capital.
- In 2018 and 2017, improved financial performance more than offset the investment in working capital.
- Our cash conversion cycle was 30, 28 and 37 days for 2017, 2018 and 2019, respectively. See "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations – Financial Condition, Cash Flows and Liquidity – Cash Flows" for the calculation of our cash conversion cycle.

Free Cash Flow



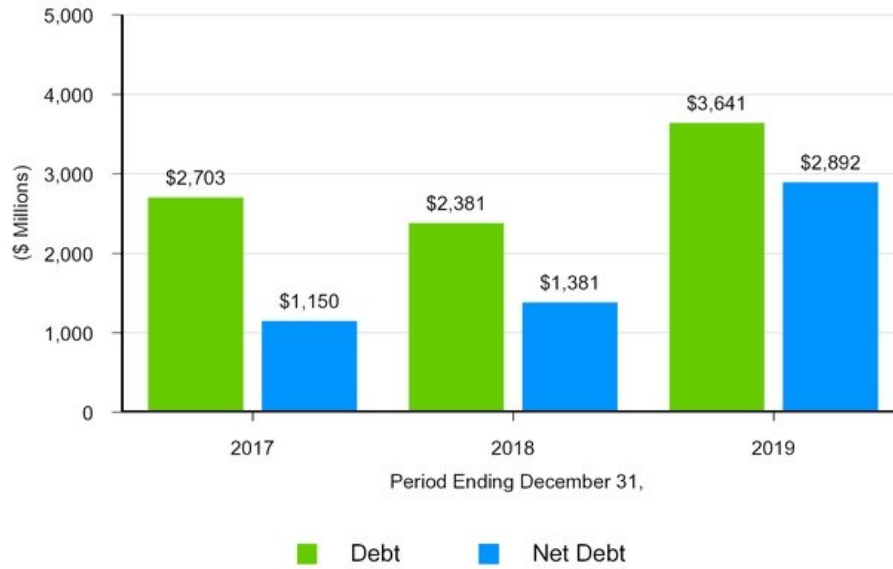
- The free cash flow shown above was derived starting from cash flow from operations as shown on page 12. For a full reconciliation of free cash flow see page 21.
- A portion of our cash from operations in 2019 was spent on major projects to pursue our strategy to become a world-competitive, "best of both" steel company. Our capital expenditures of \$1.3 billion included spending on the new endless casting and rolling facility at our Mon Valley Works and upgrades to the Gary Works hot strip mill, which are both in our Flat-Rolled segment, and spending on the new EAF in our Tubular segment.
- Capital expenditures totaled \$1.0 billion in 2018, a significant increase from 2017. Our 2018 capital expenditures included \$335 million on asset revitalization projects that were focused on delivering improvements in safety, quality, delivery and cost for critical assets in our Flat-Rolled segment.

Liquidity



- In the years leading up to 2018 and 2019, the Company undertook a focused effort to repay or refinance its debt in order to ensure a secure foundation to support execution of its strategy. Beginning with the asset revitalization program, and continuing with the "best of both" strategy, the Company has been maintaining cash in furtherance of its priorities.
- Maintaining strong cash and liquidity to support and enable execution of our strategy continues to be a priority. Our total liquidity in 2019 remained strong and supported our ability to satisfy short-term obligations, fund working capital requirements, and enable execution of key strategic priorities including the acquisition of our 49.9% ownership interest in Big River Steel, restart of construction of the electric arc furnace (EAF) at our Fairfield Tubular Operations, invest in the endless casting and rolling facility at Mon Valley Works and invest in the new Dynamo line within our USSE segment.

Debt and Net Debt



- The increase in debt in 2019 was primarily related to net drawings that totaled approximately \$760 million on our credit facilities, the \$350 million issuance of senior convertible notes and the net increase in environmental revenue bonds of \$220 million.
- Net debt was derived starting from total debt as shown in the full reconciliation on page 21.
- The increase in net debt in 2019 was primarily related to the increase in debt described above and the use of funds to purchase our 49.9% ownership interest in Big River Steel, fund the electric arc furnace construction at Fairfield Tubular Operations and finance other capital expenditures.

Pension & Other Post-employment Benefits (OPEB) Net Periodic Benefit Costs



- The increase in 2019 pension and OPEB expense from 2018 was mainly due to increased contributions to the Steelworkers' Pension Trust (SPT) in 2019 in accordance with the increase in the contribution rate per hour required under the 2018 Labor Agreements (defined below).
- The increase in 2018 pension and OPEB expense from 2017 is mainly due to a lower return on assets assumption for pension assets.
- For further details, see Note 18 to the Consolidated Financial Statements.

Funded Status of Pension/OPEB Plans



- The funded status of our pension plan improved by \$250 million in 2019 primarily due to higher asset performance and an update to our mortality assumptions partially offset by a decrease in the discount rate. The funded status of our OPEB plan improved by \$410 million in 2019 primarily due to higher asset performance, reductions in future health care costs and changes in assumptions on future participant enrollment.
- At the end of 2019, on a U.S. GAAP basis the funded status was 93% and 108% for our pension and OPEB obligations, respectively as compared to a funded status of 88% for both obligations at the end of 2018.
- Due to the improvement in our funded status, required contributions to the pension plan that were previously projected to begin in 2021 are now projected to begin in 2024.
- For further details, see Note 18 to the Consolidated Financial Statements.

NON-GAAP FINANCIAL MEASURES

Throughout this report, we present EBITDA, adjusted EBITDA, adjusted net earnings (loss) and adjusted net earnings (loss) per diluted share, free cash flow and net debt which are non-GAAP measures, as additional measurements to enhance the understanding of our operating performance, cash flow and financial position and to facilitate comparison with our competitors. See page 3 for an explanation of our use of certain non-GAAP financial measures.

RECONCILIATION TO ADJUSTED NET EARNINGS (LOSS)^(a)

(Dollars in millions)	Year Ended December 31,		
	2019	2018	2017
Reconciliation to adjusted net earnings (loss) attributable to United States Steel Corporation			
Net (loss) earnings attributable to United States Steel Corporation, as reported	\$ (630)	\$ 1,115	\$ 387
December 24, 2018 Clairton coke making facility fire	41	—	—
Restructuring and other charges ^(b)	263	—	—
Big River Steel options mark to market, net ^(c)	7	—	—
USW labor agreement signing bonus and related costs	—	81	—
Granite City Works restart and related costs	—	80	—
Tax valuation allowance	334	(374)	—
Loss on shutdown of certain tubular assets ^(b)	—	—	35
Gain associated with retained interest in U. S. Steel Canada Inc.	—	—	(72)
Granite City Works temporary idling charges	—	(8)	17
(Gain) loss on equity investee transactions	—	(38)	(2)
Loss on extinguishment of debt and other related costs	—	101	57
Effect of tax reform	—	—	(81)
Total Adjustments	645	(158)	(46)
Adjusted net (loss) earnings attributable to United States Steel Corporation	\$ 15	\$ 957	\$ 341

^(a) The 2019 adjustments included in this table have been tax effected through the third quarter of 2019 as a valuation allowance was not applied to our deferred tax assets until the end of the year. The 2018 and 2017 adjustments included in this table have not been tax effected due to the recognition of a full valuation allowance on domestic deferred tax assets, which was established in the fourth quarter of 2015.

^(b) Included in restructuring and other charges on the Consolidated Statement of Operations.

^(c) The Big River Steel options mark to market, net represents the earnings impact of the change in fair value of options related to our investment in a 49.9% ownership interest in Big River Steel. See Note 5 to the Consolidated Financial Statements for further details.

RECONCILIATION TO ADJUSTED NET EARNINGS (LOSS) PER SHARE ^(a)

	Year Ended December 31,		
	2019	2018	2017
Reconciliation to adjusted diluted net earnings (loss) per share			
Diluted net (loss) earnings per share, as reported	\$ (3.67)	\$ 6.25	\$ 2.19
December 24, 2018 Clairton coke making facility fire	0.23	—	—
Restructuring and other charges ^(b)	1.53	—	—
Big River Steel options mark to market, net ^(c)	0.04	—	—
USW labor agreement signing bonus and related costs	—	0.45	—
Granite City Works restart and related costs	—	0.45	—
Tax valuation allowance	1.96	(2.11)	—
Loss on shutdown of certain tubular assets ^(b)	—	—	0.20
Gain associated with retained interest in U. S. Steel Canada Inc.	—	—	(0.41)
Granite City Works temporary idling charges	—	(0.04)	0.10
Gain on equity investee transactions	—	(0.21)	(0.01)
Loss on extinguishment of debt and other related costs	—	0.57	0.33
Effect of tax reform	—	—	(0.46)
Total adjustments	3.76	(0.89)	(0.25)
Adjusted diluted net earnings (loss) per share	\$ 0.09	\$ 5.36	\$ 1.94

^(a) The 2019 adjustments included in this table have been tax effected through the third quarter of 2019 as a valuation allowance was not applied to our deferred tax assets until the end of the year. The 2018 and 2017 adjustments included in this table have not been tax effected due to the recognition of a full valuation allowance on domestic deferred tax assets, which was established in the fourth quarter of 2015.

^(b) Included in restructuring and other charges and cost of sales in the Consolidated Statement of Operations.

^(c) The Big River Steel options mark to market, net represents the earnings impact of the change in fair value of options related to our investment in a 49.9% ownership interest in Big River Steel. See Note 5 to the Consolidated Financial Statements for further details.

RECONCILIATION TO EBITDA AND ADJUSTED EBITDA

(Dollars in millions)	Year Ended December 31,		
	2019	2018	2017
Reconciliation to EBITDA and Adjusted EBITDA			
Net (loss) earnings attributable to United States Steel Corporation	\$ (630)	\$ 1,115	\$ 387
Income tax (benefit) provision	178	(303)	(86)
Net interest and other financial costs	222	312	368
Depreciation, depletion and amortization expense	616	521	501
EBITDA	386	1,645	1,170
December 24, 2018 Clairton coke making facility fire	50	—	—
Restructuring and other charges ^(a)	275	—	—
USW labor agreement signing bonus and related costs	—	81	—
Granite City Works restart and related costs	—	80	—
Loss on shutdown of certain tubular assets ^(a)	—	—	35
Gain associated with retained interest in U. S. Steel Canada Inc.	—	—	(72)
Granite City Works temporary idling charges	—	(8)	17
Gain on equity investee transactions	—	(38)	(2)
Adjusted EBITDA	\$ 711	\$ 1,760	\$ 1,148

^(a) Included in restructuring and other charges in the Consolidated Statement of Operations.

RECONCILIATION TO FREE CASH FLOW

(Dollars in millions)	Year Ended December 31,		
	2019	2018	2017
Reconciliation to Free Cash Flow			
Net cash provided by operating activities	682	938	826
Capital expenditures	(1,252)	(1,001)	(505)
Dividends paid	(35)	(36)	(35)
Free Cash Flow	\$ (605)	\$ (99)	\$ 286

RECONCILIATION TO TOTAL DEBT AND NET DEBT

(Dollars in millions)	Year Ended December 31,		
	2019	2018	2017
Reconciliation to Total Debt and Net Debt			
Short-term debt and current maturities of long-term debt	\$ 14	\$ 65	\$ 3
Long-term debt, less unamortized discount and debt issuance costs	3,627	2,316	2,700
Total Debt	3,641	2,381	2,703
Less: Cash and cash equivalents	\$ 749	\$ 1,000	1,553
Net Debt	\$ 2,892	\$ 1,381	\$ 1,150

PART I

Item 1. BUSINESS

United States Steel Corporation (U. S. Steel) is an integrated steel producer of flat-rolled and tubular products with major production operations in the United States and Europe. An integrated steel producer uses iron ore and coke as primary raw materials for steel production. U. S. Steel has annual raw steel production capability of 22.0 million net tons (17.0 million tons in the United States and 5.0 million tons in Europe). U. S. Steel supplies customers throughout the world primarily in the automotive, construction, consumer (packaging and appliance), electrical, industrial equipment, and energy (oil country tubular goods (OCTG) and line pipe) markets. According to the World Steel Association's latest published statistics, in 2018 U. S. Steel was the third largest steel producer in the United States and the twenty-sixth largest steel producer in the world. U. S. Steel is also engaged in other business activities consisting primarily of railroad services and real estate operations. U. S. Steel is a Delaware corporation established in 1901.

Segments

U. S. Steel has three reportable segments: North American Flat-Rolled (Flat-Rolled), U. S. Steel Europe (USSE) and Tubular Products (Tubular). The results of our 49.9% ownership interest in Big River Steel and our railroad and real estate businesses that do not constitute reportable segments are combined and disclosed in the Other Businesses category.

Flat-Rolled

The Flat-Rolled segment includes the operating results of U. S. Steel's integrated steel plants and equity investees in North America (except for Big River Steel, which is included in Other Businesses) involved in the production of slabs, strip mill plates, sheets and tin mill products, as well as all iron ore and coke production facilities in the United States. These operations primarily serve North American customers in the service center, conversion, transportation (including automotive), construction, container, and appliance and electrical markets.

Flat-Rolled has aggregate annual raw steel production capability of 17.0 million tons produced at our Gary Works, Mon Valley Works, Great Lakes Works and Granite City Works facilities. Raw steel production was 11.4 million tons in 2019, 11.9 million tons in 2018 and 10.8 million tons in 2017. Raw steel production averaged 67 percent of capability in 2019, 70 percent of capability in 2018 and 64 percent of capability in 2017. During December 2015 the Granite City Works steelmaking operations were temporarily idled. The steelmaking operations and hot strip mill were restarted during 2018 and 2017, respectively. If its production capability is excluded during the temporary idle period, Flat-Rolled production would have been 76 percent in 2017.

European Operations

The USSE segment includes the operating results of U. S. Steel Košice (USSK), U. S. Steel's integrated steel plant and coke production facilities in Slovakia, and its subsidiaries. USSE conducts its business mainly in Central and Western Europe and primarily serves customers in the European transportation (including automotive), construction, container, appliance, electrical, service center, conversion and oil, gas and petrochemical markets. USSE produces and sells slabs, strip mill plate, sheet, tin mill products and spiral welded pipe, as well as refractory ceramic materials.

USSE has annual raw steel production capability of 5.0 million tons. USSE's raw steel production was 3.9 million tons in 2019, 5.0 million tons in 2018, and 5.1 million tons in 2017. USSE's raw steel production averaged 78 percent of capability in 2019, 100 percent of capability in 2018 and 102 percent of capability in 2017.

Tubular

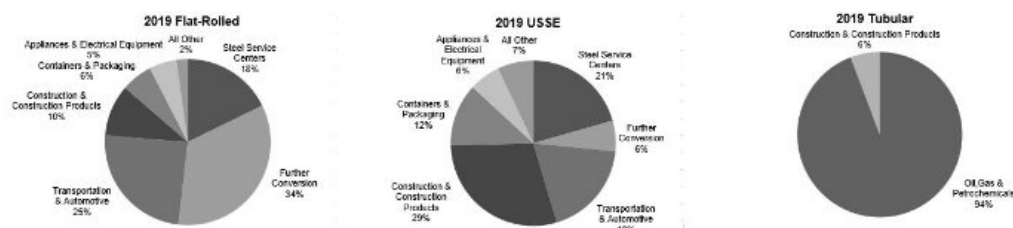
The Tubular segment includes the operating results of U. S. Steel's tubular production facilities and an equity investee in the United States. These operations produce and sell seamless and electric resistance welded (ERW) steel casing and tubing (commonly known as OCTG), and standard and line pipe and mechanical tubing and primarily serve customers in the oil, gas and petrochemical markets. Tubular's annual production capability is 1.9 million tons.

U. S. Steel Tubular Products, Inc. (USSTP), a wholly owned subsidiary of U. S. Steel, continues to design and develop a range of premium and semi-premium connections to address the growing needs for technical solutions for our end users' well site production challenges. Through its wholly owned subsidiary, U. S. Steel Oilwell Services, LLC, USSTP

also offers rig site services, which provides the technical expertise for proper installation of our tubular products and proprietary connections at the well site.

For further information, see "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" and Note 4 to the Consolidated Financial Statements.

Steel Shipments by Market and Segment



The following table except where noted in ⁽¹⁾ below does not include shipments to end customers by joint ventures and other equity investees of U. S. Steel. Shipments of materials to these entities are included in the "Further Conversion – Joint Ventures" market classification. No single customer accounted for more than 10 percent of gross annual revenue.

(Thousands of Tons)	Flat-Rolled	USSE	Tubular	Total
Major Market – 2019				
Steel Service Centers	1,902	740	—	2,642
Further Conversion – Trade Customers	2,823	214	—	3,037
– Joint Ventures ⁽¹⁾	819	—	—	819
Transportation and Automotive ⁽¹⁾	2,620	676	—	3,296
Construction and Construction Products	1,076	1,048	44	2,168
Containers and Packaging	652	440	—	1,092
Appliances and Electrical Equipment	570	220	—	790
Oil, Gas and Petrochemicals	—	—	725	725
All Other	238	252	—	490
TOTAL	10,700	3,590	769	15,059
Major Market – 2018 ⁽²⁾				
Steel Service Centers	1,904	799	—	2,703
Further Conversion – Trade Customers	2,273	287	—	2,560
– Joint Ventures ⁽¹⁾	810	—	—	810
Transportation & Automotive ⁽¹⁾	2,874	728	—	3,602
Construction and Construction Products	953	1,637	38	2,628
Containers and Packaging	768	439	—	1,207
Appliances and Electrical Equipment	599	261	—	860
Oil, Gas and Petrochemicals	—	11	742	753
All Other	329	295	—	624
TOTAL	10,510	4,457	780	15,747
Major Market – 2017 ⁽²⁾				
Steel Service Centers	1,953	761	—	2,714
Further Conversion – Trade Customers	1,738	284	—	2,022
– Joint Ventures ⁽¹⁾	715	—	—	715
Transportation and Automotive ⁽¹⁾	2,982	708	—	3,690
Construction and Construction Products	910	1,831	41	2,782
Containers and Packaging	715	438	—	1,153
Appliances and Electrical Equipment	594	247	—	841
Oil, Gas and Petrochemicals	—	10	647	657
All Other	280	306	—	586
TOTAL	9,887	4,585	688	15,160

⁽¹⁾ PRO-TEC automotive substrate shipments are included in the Transportation and Automotive category.

⁽²⁾ Shipments previously reported as Exports have been reclassified to one of the other categories to which they relate.

Safety

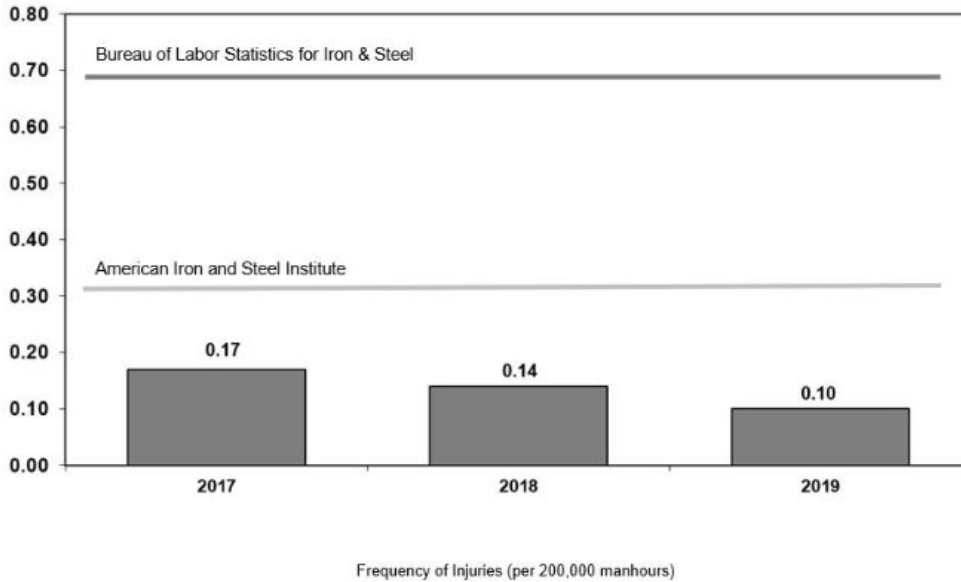
U. S. Steel has a long-standing commitment to the safety and health of the men and women who work in our facilities. Safety is our primary core value. Every employee deserves to return home safely at the end of every day, and we are working to eliminate all injuries and incidents at all of our facilities. Ensuring a safe workplace also improves productivity, quality, reliability and financial performance. By making safety and health a personal responsibility, our employees are making a daily commitment to follow safe work practices, look out for the safety of co-workers and ensure safe working conditions for everyone. A "Safety First" mindset is as essential to our success as the tools and technologies we rely on to do business.

Our objective is to attain a sustainable zero harm culture supported by leadership and owned by an engaged and highly skilled workforce, empowered with the capabilities and resources needed to assess, reduce, and eliminate workplace risks and hazards. In support of these objectives, we have developed an enhanced Safety Management System, initiated new safety communication methods and enhanced contractor safety processes.

U. S. Steel finished 2019 with a Days Away From Work Rate of 0.10, which is 86% better than the Bureau of Labor Statistics for Iron & Steel rate of 0.70 and 68% better than American Iron and Steel Institute rate of 0.31. Notably, 0.10 is a new Company record that could not have been accomplished without the dedication of our employees and strong partnership with the United Steelworkers.

The three year performance for our key safety measure Days Away From Work rates are shown in the following graph.

Global Days Away From Work Incidence Rates January 2017 through December 2019



Bureau of Labor Statistics for Iron & Steel and American Iron and Steel Institute comparisons were held constant for all periods presented and were based on the most recent publicly available information as of December 31, 2019. We believe this provides a reasonable point of comparison to U. S. Steel's performance across all periods presented.

Environmental Stewardship

U. S. Steel is committed to effective environmental stewardship. We have implemented and continue to develop business practices that are environmentally effective. We believe part of being a good corporate citizen requires a dedicated focus on how our industry affects the environment. U. S. Steel's environmental expenditures totaled \$376 million in 2019, \$350 million in 2018 and \$255 million in 2017. Overall, environmental compliance expenditures represent approximately 2 percent of U. S. Steel's total costs and expenses. For further information, see "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations – Environmental Matters." We have taken the actions described below in furtherance of that goal.

We continue to work on the promotion of cost-effective environmental strategies through the development of appropriate air, water and waste laws and regulations at the local, state, national and international levels. We are committed to reducing our emissions and are investigating, creating and implementing innovative, best practice solutions throughout our operations to improve our environmental performance and to manage and reduce energy consumption.

In 2019 alone, U. S. Steel recycled 3.7 million tons of purchased and produced steel scrap. Because of steel's physical properties, our products can be recycled at the end of their useful life without loss of quality, contributing to steel's high recycling rate and affordability.

Many of our major production facilities have Environmental Management Systems that are certified to the ISO 14001 Standard. This standard, published by the International Organization for Standardization (ISO), provides the framework for the measurement and improvement of environmental impacts of the certified facility.

By using the blast furnace and coke oven gas generated in our cokemaking and steelmaking activities to power our facilities, we avoided consuming natural gas and other fuels from 2015 to 2019 to heat more than 3.6 million households each year. In 2019, we recycled approximately 4.5 million tons of blast furnace slag and 0.6 million tons of steel slag by selling it for use as aggregate and in highway construction.

Reduction of Greenhouse Gas Emissions

This year, U. S. Steel took another step in the execution of our strategy to become the "best of both" in the steel industry with the announcement of its commitment to reduce greenhouse gas emissions intensity across its global footprint. The Company has set a goal to reduce its global greenhouse gas emissions intensity by 20 percent, as measured by the rate of carbon dioxide (CO₂) equivalents emitted per ton of finished steel shipped, by 2030 based on 2018 baseline levels. This target will apply to U. S. Steel's global operations.

These reductions are equivalent to the amount of CO₂ being generated by more than 850,000 average-sized homes each year. By creating targeted carbon reduction initiatives to accelerate our transformation toward a future of sustainable steel, we create value for all stakeholders.

U. S. Steel plans to achieve its greenhouse gas emissions intensity reduction goal through the execution of multiple initiatives. These include the use of EAF steelmaking technology at U. S. Steel's Fairfield Works and at Big River Steel (once fully acquired by the Company), the first LEED-certified steel mill in the nation. EAF steelmaking relies on scrap recycling to produce new steel products, leveraging the ability to continuously recycle steel. Further carbon intensity reductions are expected to come from the Company's introduction of state-of-the-art endless rolling and casting technology and construction of a cogeneration facility at its Mon Valley Works, as well as implementation of ongoing energy efficiency measures, continued use of renewable energy sources and other process improvements to be developed.

The carbon intensity reduction target reflects our continued commitment to improvement in production efficiency and the manufacture of products that are environmentally friendly. In addition to a commitment to reduce its own greenhouse gas emissions intensity, U. S. Steel is committed to helping its customers achieve their environmental goals. Our industry-leading XG3™ advanced high-strength steel enables automakers to manufacture lighter weight vehicles that meet federal Corporate Average Fuel Economy (CAFE) standards with reduced carbon emissions. As part of our innovation efforts, we continue to look at new steelmaking technologies including those that can further reduce carbon emissions as those technologies mature.

Business Strategy

Our strategy is to transform U. S. Steel into a world-competitive, “best of both” steel company. By bringing together the best of the integrated steelmaking model with the best of the mini mill steelmaking model, we will transform our business to drive long-term cash flow through industry cycles. We aim to offer an unparalleled product platform to serve customers, achieve world-competitive positioning in strategic, high-margin end markets, and deliver high-quality, value-added products and innovative solutions that address our customers' most challenging steel needs. To become a “best of both” company, we are enhancing our focus on operational and commercial excellence and promoting technological innovation, so we can establish a more competitive cost structure and enhance our capabilities ... two key drivers for our strategy.

Foundational to our efforts is our belief that we must operate as a principled company committed to our **S.T.E.E.L.** Principles, outlined in our Code of Ethical Business Conduct. Our core value of safety - the safety of our employees, our environment, our communities and our facilities and equipment - has served us well for much of our history and our commitment to it remains as strong as the products we make every day.

Our strategy is informed by our critical success factors, which are the bedrock of the “best of both” strategy: (1) Move Down the Cost Curve, (2) Win in Strategic Markets, and (3) Move Up the Talent Curve.

We continuously aim to **move down the cost curve**. Leading up to 2019, we improved our balance sheet in order to increase investment in key assets, such as the Gary Works hot strip mill. These investments were made to reduce costs and increase capability. Our improved financial position has also enabled investment in strategic projects, such as the EAF at our Tubular Operations in Fairfield, Alabama. The EAF is expected to reduce cost by \$90 per ton as the Company becomes self-sufficient in its rounds supply.

We are focused on **winning in strategic markets** through a customer-focused business model with an emphasis on creating differentiated, innovative and value-added solutions that will help our customers succeed. As part of this effort, in 2020 we implemented an enhanced operating model and organizational structure to accelerate the company's strategic transformation and better serve its customers. The realignment of U. S. Steel's leadership team around more nimble and efficient executive functions, notably to sharpen focus on operational and commercial excellence and promote technological innovation, will enable the company to establish a more competitive cost structure with enhanced capabilities to serve customers in strategic markets.

Core to our strategy is **moving up the talent curve**. The success of our business is driven by the efforts of our hard-working employees. We know that we must work to identify, attract and retain best-in-class diverse talent. Our goal is to build a pipeline mapping the right people to the right value-driving roles. This includes providing the training and resources they need to succeed and fostering a culture where accountability, fairness and respect are foundational, and high performance and diversity in all its forms are valued and celebrated. This type of environment incentivizes the right behavior and allows for a best talent wins environment to help us achieve our “best of both” strategy.

U. S. Steel will continue to evaluate potential strategic and organizational opportunities, which may include the acquisition, divestiture or consolidation of assets. Given the cyclicity of our industry, we are focused on strategically maintaining and spending cash, in order to invest in areas consistent with the execution of our “best of both” strategy, such as sustainable steel technologies, and are considering various possibilities, including exiting lines of business and the sale of certain assets, that we believe would ultimately result in greater stockholder value. The Company will pursue opportunities based on its long-term strategy, and what the Board of Directors determines to be in the best interests of the Company's stockholders at the time.

“Best of Both”

U. S. Steel is executing a transformational strategy to develop the “best of both” integrated and mini mill capabilities to improve competitiveness and drive through-cycle cash flow. Through a series of operational improvements, strategic investments and portfolio moves, to be completed over the next several years, U. S. Steel plans to execute a strategy focused on differentiating on the basis of cost and/or capability to improve customer focus and competitiveness and drive through-cycle cash flow generation. Execution of U. S. Steel's strategy will position the Company with a suite of world-class assets with distinct advantages to serve current and future customers with high-tech, sustainable steel solutions. The strategy is focused on commercial differentiation, which the Company currently believes can be achieved by centering its North American Flat-Rolled operations around three core market-leading, differentiated and technologically advanced assets: the investment in Big River Steel (located in Osceola, Arkansas), Mon Valley Works

(located near Pittsburgh, Pennsylvania) and Gary Works (located in Gary, Indiana). This will enhance our competitive positioning in strategic end markets to offer customers differentiated products to deliver highly competitive long-term cash flow generation through higher earnings and lower sustaining capital expenditures.

Strategic Projects and Technology Investments

On October 31, 2019, the Company completed the first step in acquiring Big River Steel in Osceola, Arkansas, through the purchase of a 49.9% ownership interest at a purchase price of approximately \$683 million in cash, with a call option to acquire the remaining 50.1% within the next four years at an agreed-upon price formula, which in years three and four is based on Big River Steel's achievement of certain metrics that include: free cash flow, product development, safety and the completion of a proposed expansion of Big River Steel's existing manufacturing line. As part of the current ownership structure, the other Big River Steel equity owners can require U. S. Steel to purchase their 50.1% ownership interest or require U. S. Steel to sell its ownership interest after U. S. Steel's call option expires under certain circumstances.

In May 2019, U. S. Steel announced that it will construct a new endless casting and rolling facility at its Edgar Thomson Plant in Braddock, Pennsylvania, and a cogeneration facility at its Clairton Plant in Clairton, Pennsylvania, both part of the Company's Mon Valley Works. This investment in state-of-the-art sustainable steel technology is expected to significantly upgrade the production capability of our lowest liquid steel cost mill in the U.S., while further reducing conversion costs through improved process efficiencies, yield and energy consumption. Since announcement, the Company identified the potential need for additional equipment at the Edgar Thomson steel shop. The Company has amended the environmental permit applications to include a new ladle metallurgy facility (LMF). In addition, the expected capital costs of achieving the Company's ambitious environmental targets from its future cogeneration facility have increased. The Company now expects the total investment for the new endless casting and rolling facility at its Edgar Thomson Plant and cogeneration facility at its Clairton Plant to be approximately \$1.5 billion, with the expected incremental run-rate EBITDA benefits of approximately \$275 million unchanged. The Company does not expect the increase in the expected cost of the new endless casting and rolling and cogeneration facilities to impact the Company's total capital spending requirements, as lower return projects will be deprioritized from the Company's total capital plans to offset this increase.

The installation of endless casting and rolling technology will allow differentiated product capabilities to serve strategic markets. With this technology the Mon Valley Works should become the principal source of substrate for the production of the Company's industry-leading XG3™ advanced high strength steel (AHSS), a market leading solution for our customers to improve fuel efficiency. The cogeneration facility, equipped with state-of-the-art emissions control systems at the Company's Clairton Plant, will convert a portion of the coke oven gas generated at its Clairton Plant into electricity to power the steelmaking and finishing facilities throughout U. S. Steel's Mon Valley operations. This project, in addition to producing sustainable AHSS, is expected to improve environmental performance, energy conservation and reduce our carbon footprint associated with Mon Valley Works. First steel production is expected in 2022, contingent upon permitting and construction.

In February 2019, U. S. Steel restarted construction of the EAF steelmaking facility at its Tubular operations in Fairfield, Alabama. The EAF is expected to strengthen our competitive position and reduce cost by \$90 per ton as the Company becomes self-sufficient in its rounds supply. The EAF is expected to begin producing steel in the second half of 2020.

The Company expects to invest approximately \$500 million, of which approximately 35 percent has already been spent, to upgrade the Gary Works hot strip mill through a series of projects focused on expanding the line's competitive advantages. The Gary Works hot strip mill will further differentiate itself as a leader in heavy-gauge products in strategic markets. We continue to be flexible as we execute the remaining investments at the Gary Works hot strip mill.

In January 2019, U. S. Steel announced the construction of a new Dynamo line at USSE. The new line, a \$130 million investment, has an annual capacity of approximately 100,000 metric tons. Construction on the Dynamo line began in mid-2019 and was targeted to be operational in the fourth quarter of 2020, but based on the current market conditions the project operational date has been extended to the fourth quarter of 2022. Upon its completion, the new line will enable production of sophisticated silicon grades of non-grain oriented (NGO) electrical steels to support increased demand in vehicles and generators.

Commercial Strategy

Beginning January 1, 2020, the Company implemented an enhanced operating model and organizational structure to accelerate its strategic transformation and better serve its customers. The new operating model is centered around

manufacturing, commercial, and technological excellence. Our former “commercial entity” structure was put into place to deepen understanding of business ownership and our relationships with customers and allowed the Company to identify the technology that would differentiate our products and processes on the basis of cost and/or capabilities. The new enhanced operating model enables us to implement our “best of both” strategy faster by making us a more nimble technologically superior customer driven company positioned to deliver the benefits of our strategy through the business cycle.

Our commercial strategy is focused on providing customer focused solutions with value-added steel products, which includes advanced high strength steels such as our newly developed grades on Gen3 steel, coated sheets for the automotive and appliance industries, electrical steel sheets for the manufacture of motors and electrical equipment, both bare and prepainted galvanized and Galvalume® sheets for construction, hot rolled skelp used in the production of energy transmitting line pipe, heavy gauge-wide hot rolled coils, tin mill products for the packaging industry and pipe, connections, accessories and rig site services for use in drilling for oil and gas.

We are responsive to our customers' changing needs by developing new steel products and uses for steel that meet the evolving market and regulatory demands imposed on them. In connection with this commitment, we have research centers in Pittsburgh, Pennsylvania, and Košice, Slovakia, an automotive center in Troy, Michigan and a Research and Development Laboratory and Test Facility for Tubular products in Houston, Texas. The focus of these centers is to develop new products and to collaborate with our customers to better provide innovative solutions to serve their needs.

For automotive markets, we are in the process of commissioning our first of its kind GEN3 hot dipped galvanize line at our PRO-TEC Coating Company (PRO-TEC) joint venture, and have embedded application engineers at original equipment manufacturers to demonstrate how to best utilize the material in body design to meet automobile passenger safety requirements while significantly reducing weight to meet future vehicle fuel efficiency standards.

In our tubular markets, we continue development of premium and semi-premium tubular connections designed for our customers operating in challenging drilling environments. These connections optimize performance and provide outstanding sealing capabilities for onshore and offshore oil and gas drilling in North America. An example is the USS-FREEDOM HTQ™, which was introduced in 2019 for customers drilling deep, high-pressure horizontal onshore natural gas and oil wells requiring superior torque capacity. Please refer to Item I. Business Strategy for further details of related strategies.

Capital Structure and Liquidity

Our primary financial goal is to enhance stockholder value by utilizing our capital structure, liquidity, and financial flexibility to deploy cash to generate stockholder value. Our cash deployment strategy is aligned with our world-competitive, “best of both” strategy and includes: executing on strategic projects and portfolio moves; maintaining a strong balance sheet and a healthy pension plan; and delivering sustainable growth with a focus on core values such as safety and environmental stewardship. Cash deployment is also performed with a customer-centric focus on improving safety, quality, delivery and cost.

Our liquidity supports our ability to satisfy short-term obligations, fund working capital requirements, and provides a foundation to execute key strategic priorities including the acquisition of our 49.9% ownership interest in Big River Steel that was completed in October 2019, the ongoing investment in the EAF within our Tubular segment and the endless casting and rolling facility at Mon Valley Works.

We are focused on maintaining a strong balance sheet, and may proactively refinance or repay our debt from time to time to protect our capital structure from unforeseen external events and re-financing risks.

In 2019, we undertook several steps to support these goals. The Company entered into a new five-year senior secured asset-based revolving credit facility in an aggregate amount of \$2.0 billion maturing in October 2024 (Fifth Credit Facility Agreement). We drew down \$700 million on the Fifth Credit Facility Agreement to fund our acquisition of our 49.9% interest in Big River Steel and subsequently repaid \$100 million of the amount drawn. In September 2019, USSK drew down €150 million (approximately \$165 million) from its €460 million (approximately \$517 million) revolving credit facility (USSK Credit Agreement), most of which was repatriated from USSK to its parent, U. S. Steel. USSK entered into a supplemental agreement that amended the USSK Credit Agreement leverage covenant and pledged certain USSK trade receivables and inventory as collateral in support of USSK's obligations. The USSK Credit Agreement financial covenants also include a minimum stockholders' equity to assets ratio. We also launched offerings

of two series of environmental revenue bonds in aggregate principal amount of approximately \$368 million, that will mature between 2024 and 2049. Proceeds of the 2019 Environmental Revenue Bonds in the amount of approximately \$93 million were used to redeem a portion of our existing outstanding environmental revenue bonds for which we issued a conditional redemption notice. Proceeds of the 2019 Environmental Revenue Bonds in the amount of \$275 million will be used to finance or refinance the acquisition, construction, equipping and installation of certain solid waste disposal facilities, including an EAF and other equipment and facilities at the Company's Fairfield Works. U. S. Steel issued an aggregate principal amount of \$350 million of 5.00% Senior Convertible Notes due November 1, 2026 (2026 Senior Convertible Notes). U. S. Steel received net proceeds of approximately \$340 million from the sale of the 2026 Senior Convertible Notes after deducting underwriting fees and offering expenses. The Company intends to use the net proceeds for general corporate purposes, including, without limitation, for previously announced strategic investments and capital expenditures.

Also, in 2019 we entered into a vendor supported Export Credit Agreement (ECA) with various financial institutions for the purpose of financing equipment for the Mon Valley Works endless casting and rolling line. The ECA will make available two loan facilities, a Covered Facility not to exceed approximately \$250 million and a Commercial Facility not to exceed approximately \$38 million. Funding of the ECA is expected to occur during the first quarter of 2020. See Note 17 to the Consolidated Financial Statements for further details.

We ended 2019 with \$2.3 billion of total liquidity.

Steel Industry Background and Competition

The global steel industry is cyclical, highly competitive and has historically been characterized by overcapacity.

U. S. Steel's competitive position may be affected by, among other things, differences among U. S. Steel's and its competitors' cost structure, labor costs, environmental remediation and compliance costs, global capacity and the existence and magnitude of government subsidies provided to competitors.

U. S. Steel competes with many North American and international steel producers. Competitors include 1) integrated producers, which, like U. S. Steel, use iron ore and coke as the primary raw materials for steel production, 2) EAF producers, which primarily use steel scrap and other iron-bearing feedstocks as raw materials and 3) slab re-rollers, who purchase mostly imported semi-finished products and convert them into sheet products. Global steel capacity has continued to increase, with notable changes in 2018 Chinese crude steel production of 928 million metric tonnes, a 6.6% increase from 2017, and estimated to be more than 57 million metric tonnes above the apparent crude steel demand in China (source: worldsteel). In addition, other materials, such as aluminum, plastics and composites, compete with steel in several applications.

EAF producers typically require lower capital expenditures for construction of facilities and may have lower total employment costs; however, these competitive advantages may be minimized or eliminated by the cost of scrap when scrap prices are high. Some EAF producers utilize thin slab casting technology to produce flat-rolled products and are increasingly able to compete directly with integrated producers in many flat-rolled product applications previously produced only by integrated steelmakers. Slab re-rollers do not incur the cost of melting steel, their input costs are driven by the market price of slabs.

U. S. Steel provides defined benefit pension and/or other post-employment benefits to approximately 85,000 current employees, retirees and their beneficiaries. Many of our competitors do not have comparable retiree obligations. Participation in U. S. Steel's main defined benefit pension plan was closed to new entrants on July 1, 2003 and benefit accruals for all non-represented participants were frozen effective December 31, 2015. Participation in U. S. Steel's retiree medical and life insurance programs for USW-represented employees were closed to employees hired or rehired (except in limited circumstances) on or after January 1, 2016. Retiree medical and life insurance benefits for non-represented employees were eliminated for those who retired after December 31, 2017.

We believe that our major North American and many European integrated steel competitors are confronted with substantially similar environmental regulatory conditions and therefore do not believe that our relative position with regard to such competitors will be materially affected by the impact of environmental laws and regulations. However, if future regulations do not recognize the fact that the integrated steel process involves a series of chemical reactions involving carbon that create carbon dioxide (CO₂) emissions without linking these emissions to steel scrap as well, our competitive position relative to mini-mills will be adversely impacted. Our competitive position compared to producers in developing nations such as China, Russia, Ukraine, Turkey, Brazil and India, will be harmed unless such nations

require commensurate reductions in CO₂ emissions or there are border adjustment tariffs for CO₂. Competing materials such as plastics may not be similarly impacted. The specific impact on each competitor will vary depending on a number of factors, including the age and location of its operating facilities and its production methods. U. S. Steel is also responsible for remediation costs related to former and present operating locations and disposal of environmentally sensitive materials. Many of our competitors, including North American producers, or their successors, that have been the subject of bankruptcy relief have no or substantially lower liabilities for such environmental remediation matters.

International Trade

U. S. Steel continues to face import competition, much of which is unfairly traded, supported by foreign governments, and fueled by massive global steel overcapacity, currently estimated to be over 440 million metric tons per year. These imports, as well as the underlying policies/practices and overcapacity, impact the Company's operational and financial performance. U. S. Steel continues to lead efforts to address these challenges that threaten the Company, our workers, our stockholders, and our country's national and economic security.

As of the date of this filing, pursuant to a series of Presidential Proclamations issued in accordance with Section 232 of the Trade Expansion Act of 1962, U.S. imports of certain steel products are subject to a 25 percent tariff, except for imports from: (1) Argentina, Brazil, and South Korea, which are subject to restrictive quotas; (2) Canada and Mexico, which are not subject to either tariffs or quotas but tariffs could be re-imposed on surging product groups after consultations; and (3) Australia, which is not subject to tariffs, quotas, or an anti-surge mechanism. A January 24, 2020, Presidential Proclamation expanded the Section 232 tariffs to cover imports of certain downstream steel products from countries subject to the Section 232 tariffs, effective February 8, 2020.

The U.S. Department of Commerce (DOC) is managing a process in which U.S. companies may request and/or oppose temporary product exclusions from the Section 232 tariffs or quotas. Over 114,000 exclusions have been requested for steel products. U. S. Steel opposes exclusion requests for products that are the same as, or substitute products for, those produced by U. S. Steel.

Several legal challenges and retaliatory trade measures have been initiated in response to the Section 232 action. The American Institute for International Steel's appeal of the March 2019 U.S. Court of International Trade (CIT) decision upholding the constitutionality of the Section 232 statute is pending before the U.S. Court of Appeals for the Federal Circuit (CAFC). There are currently six Section 232 challenges before the CIT. Multiple countries have challenged the Section 232 action at the World Trade Organization (WTO), imposed retaliatory tariffs, and/or acted to safeguard their domestic steel industries from increased steel imports. In turn, the United States has challenged the retaliation at the WTO.

Since its implementation in March 2018, the Section 232 action has supported the U.S. steel industry's and U. S. Steel's investments in advanced steel capacity, technology, and skills, which strengthens our national and economic security. The Company continues to actively defend the Section 232 action through all available tools and strategies, including by highlighting these benefits and the importance of maintaining the Section 232 action.

In February 2019, the European Commission (EC) imposed a definitive tariff rate quota safeguard on certain steel imports: 25 percent tariffs on certain steel imports that exceed quotas effective through June 2021.

Antidumping (AD) and countervailing (CVD or antisubsidy) duties apply in addition to the Section 232 tariffs and quotas and the EC's safeguard, and AD/CVD orders will last beyond the Section 232 action and EC's safeguard. Thus, U. S. Steel continues to actively defend and maintain the 54 U.S. AD/CVD orders and 11 EU AD/CVD orders covering products U. S. Steel produces in multiple proceedings before the DOC, U.S. International Trade Commission (ITC), CIT, CAFC, the EC and European courts, and the WTO.

In July 2019, the ITC voted to continue the 2001 AD/CVD orders on hot-rolled steel from China, India, Indonesia, Taiwan, Thailand, and Ukraine for another five years in the third sunset review of those orders. In August 2019, DOC self-initiated circumvention investigations of imports of corrosion-resistant steel from Costa Rica, Guatemala, Malaysia, South Africa, and the United Arab Emirates made from Chinese or Taiwanese substrate. In December 2019, DOC announced final affirmative circumvention determinations on cold-rolled and corrosion-resistant imports from Vietnam made from Korean and/or Taiwanese substrate, resulting in AD/CVD rates of 3.7 to 456 percent on such imports.

Following the 2018 investigation under Section 301 of the Trade Act of 1974, the United States began imposing a 15 to 25 percent tariff on certain imports from China, including certain steel products. Following the U.S.-China "Phase

One" Trade Agreement, effective February 14, 2020, the 15 percent tariffs will decline to 7.5 percent and the 25 percent tariffs will remain pending the negotiation of Phase Two.

In October 2019, China blocked the continuation of the Global Forum on Steel Excess Capacity at the G-20. Over thirty other countries including the United States, however, have committed to continue the Global Forum's work to reduce global steel overcapacity. The Organization for Economic Co-operation and Development Steel Committee and trilateral negotiations between the United States, EU, and Japan also continue to address global overcapacity.

U. S. Steel will continue to execute a broad, global strategy to maximize opportunities and navigate challenges presented by imports, global steel overcapacity, and international trade law and policy developments.

Facilities and Locations as of December 31, 2019

Location Overview

Flat-Rolled Segment

- 1 Gary Works
- 2 Great Lakes Works
- 3 Mon Valley Works
- 5 Granite City Works
- 6 Fairfield Sheet
- 7 Minntac
- 7 Keetac
- 7 Hibbing Taconite
- 8 USS-POSCO Industries
- 9 PRO-TEC Coating Company

- 10 Double G Coatings Company
- 11 Worthington Specialty Processing
- 1 Feralloy Processing Company
- 1 Chrome Deposit*
- 2 Automotive Center

Tubular Segment

- 6 Fairfield Tubular
- 15 Lorain Tubular
- 16 Offshore Operations Houston
- 15 Lone Star Tubular
- 17 12 Wheeling Machine Products
- 13 Patriot Premium Threading Services

USSE Segment

- 14 U. S. Steel Košice

Other Businesses

- 18 Big River Steel
- 4 Transtar*

Administrative and Research

- 4 Corporate Headquarters
- 4 Research and Technology Center
- 16 U. S. Steel Tubular Products Innovation
- 15 USSE Research



*Chrome Deposit and Transtar locations are near major steel mills and are not all reflected on the map above.

Map of Europe not drawn to scale.

Flat-Rolled

The operating results of all facilities within U. S. Steel's integrated steel plants in the U.S. are included in Flat-Rolled. These facilities include Gary Works, Great Lakes Works, Mon Valley Works and Granite City Works. The operating results of U. S. Steel's coke and iron ore pellet operations and many equity investees in North America are also included in Flat-Rolled.

Gary Works, located in Gary, Indiana, has annual raw steel production capability of 7.5 million tons. Gary Works has four blast furnaces, six steelmaking vessels, a vacuum degassing unit and four slab casters. Finishing facilities include a hot strip mill, two pickling lines, two cold reduction mills, three temper mills, a double cold reduction line, four annealing facilities and two tin coating lines. Principal products include hot-rolled, cold-rolled and coated sheets and tin mill products. Gary Works also produces strip mill plate in coil. In June 2019, one of the blast furnaces at Gary Works was temporarily idled. We restarted the idled blast furnace in December 2019.

The Midwest Plant, located in Portage, Indiana, processes hot-rolled and cold-rolled bands and produces tin mill products, hot dip galvanized, cold-rolled and electrical lamination sheets. Midwest facilities include a pickling line, two cold reduction mills, two temper mills, a double cold reduction mill, two annealing facilities, two hot dip galvanizing lines, a tin coating line and a tin-free steel line.

East Chicago Tin is located in East Chicago, Indiana and produces tin mill products. Facilities include a pickling line, a cold reduction mill, two annealing facilities, a temper mill, a tin coating line and a tin-free steel line. In the fourth quarter of 2019, East Chicago Tin was indefinitely idled.

Great Lakes Works, located in Ecorse and River Rouge, Michigan, has annual raw steel production capability of 3.8 million tons. Great Lakes facilities include three blast furnaces, two steelmaking vessels, a vacuum degassing unit, two slab casters, a hot strip mill, a pickling line, a tandem cold reduction mill, three annealing facilities, a temper mill, a recoil and inspection line, two electrolytic galvanizing lines (one being the former Double Eagle Steel Coating Company's (DESCO) line) and a hot dip galvanizing line. Principal products include hot-rolled, cold-rolled and coated sheets. In June 2019, a blast furnace at Great Lakes Works was idled and in the fourth quarter of 2019, the former DESCO line was indefinitely idled. The other electrolytic galvanizing line had previously been idled. In December of 2019, U. S. Steel announced that it would indefinitely idle a significant portion of Great Lakes Works. The company expects to begin idling the iron and steelmaking facilities on or around April 1, 2020, and the Hot Strip Mill rolling facility before the end of 2020.

Mon Valley Works consists of the Edgar Thomson Plant, located in Braddock, Pennsylvania; the Irvin Plant, located in West Mifflin, Pennsylvania; the Fairless Plant, located in Fairless Hills, Pennsylvania; and the Clairton Plant, located in Clairton, Pennsylvania. Mon Valley Works has annual raw steel production capability of 2.9 million tons. Facilities at the Edgar Thomson Plant include two blast furnaces, two steelmaking vessels, a vacuum degassing unit and a slab caster. Irvin Plant facilities include a hot strip mill, two pickling lines, a cold reduction mill, three annealing facilities, a temper mill and two hot dip galvanizing lines. The Fairless Plant operates a hot dip galvanizing line. Principal products from Mon Valley Works include hot-rolled, cold-rolled and coated sheets, as well as coke and coke by-products produced at the Clairton Plant.

The Clairton Plant is comprised of ten coke batteries with an annual coke production capacity of 4.3 million tons. Almost all of the coke we produce is consumed by U. S. Steel facilities. From time to time, we may swap coke with other domestic steel producers or sell on the open market. Coke by-products are sold to the chemicals and raw materials industries.

Granite City Works, located in Granite City, Illinois, has annual raw steel production capability of 2.8 million tons. Granite City's facilities includes two blast furnaces, two steelmaking vessels, two slab casters, a hot strip mill, a pickling line, a tandem cold reduction mill, a hot dip galvanizing line and a hot dip galvanizing/Galvalume® line. Principal products include hot-rolled and coated sheets. Gateway Energy and Coke Company LLC (Gateway) constructed a coke plant to supply Granite City Works with coke under a 15-year supply agreement that expires on December 31, 2024. U. S. Steel owns and operates a cogeneration facility that utilizes by-products from the Gateway coke plant to generate heat and power.

Fairfield Works, located in Fairfield, Alabama, consists of the #5 coating line.

U. S. Steel owns a Research and Technology Center located in Munhall, Pennsylvania, (near Pittsburgh) where we carry out a wide range of applied research, development and technical support functions.

U. S. Steel also owns an automotive technical center in Troy, Michigan. This facility brings automotive sales, service, distribution and logistics services, product technology and applications research into one location. Much of U. S. Steel's work in developing new grades of steel to meet the demands of automakers for high-strength, light-weight and formable materials is carried out at this location.

U. S. Steel has iron ore pellet operations located at Mt. Iron (Minntac) and Keewatin (Keetac), Minnesota, with annual iron ore pellet production capability of 22.4 million tons. During 2019, 2018 and 2017, these operations produced 20.2 million, 21.8 million and 21.1 million tons of iron ore pellets, respectively.

Joint Ventures Within Flat-Rolled

U. S. Steel participates in a number of joint ventures that are included in Flat-Rolled, most of which are conducted through subsidiaries. All of these joint ventures are accounted for under the equity method. The significant joint ventures and other investments are described below. For information regarding joint ventures and other investments, see Note 12 to the Consolidated Financial Statements.

U. S. Steel has a 14.7 percent ownership interest in Hibbing Taconite Company (Hibbing), which is based in Hibbing, Minnesota. Hibbing's rated annual production capability is 9.0 million tons of iron ore pellets, of which our share is about 1.3 million tons.

U. S. Steel and POSCO of South Korea participate in a 50-50 joint venture, USS-POSCO Industries (UPI), located in Pittsburg, California. The joint venture markets sheet and tin mill products, principally in the western United States. UPI produces hot rolled pickled and oiled, cold-rolled sheets, galvanized sheets and tin mill products from hot bands principally provided by U. S. Steel. UPI's annual production capability is approximately 1.5 million tons. On January 23, 2020, U. S. Steel and POSCO-California Corporation, a subsidiary of POSCO (POSCAL), entered into an agreement under which U. S. Steel will acquire POSCAL's 50% ownership interest in UPI. The closing of the transaction is expected to occur sometime during the first quarter of 2020, subject to customary closing terms and conditions.

U. S. Steel and Kobe Steel, Ltd. of Japan participate in a 50-50 joint venture, PRO-TEC Coating Company (PRO-TEC). PRO-TEC owns and operates two hot dip galvanizing lines and a continuous annealing line (CAL) in Leipsic, Ohio, which primarily serve the automotive industry. PRO-TEC's annual production capability is approximately 1.5 million tons. U. S. Steel's domestic production facilities supply PRO-TEC with cold-rolled sheets and U. S. Steel markets all of PRO-TEC's products. The CAL produces high-strength, lightweight steels that are an integral component in automotive manufacturing as vehicle emission and safety requirements become increasingly stringent. On September 25, 2017, U. S. Steel and Kobe Steel, Ltd. announced their agreement to begin construction of a new continuous galvanizing line (CGL) at PRO-TEC, in response to increased demand for advanced high-strength steels (AHSS). The new CGL is being financed by the joint venture and will have a yearly capacity of 500,000 tons. This line, which will utilize a proprietary process, will be capable of coating steel that will help automakers manufacture economically lightweight vehicles to meet increasing fuel efficiency requirements while maintaining exceptionally high safety standards. Construction began in the fourth quarter of 2017, commissioning started in 2019, and first commercial coils are expected in early 2020.

U. S. Steel and ArcelorMittal participate in the Double G Coatings Company, L.P. a 50-50 joint venture (Double G), which operates a hot dip galvanizing and Galvalume[®] facility located near Jackson, Mississippi, and primarily serves the construction industry. Double G processes steel supplied by each partner and each partner markets the steel it has processed by Double G. Double G's annual production capability is approximately 315,000 tons.

U. S. Steel and Worthington Industries, Inc. participate in Worthington Specialty Processing (Worthington), a joint venture with locations in Jackson, Canton, and Taylor, Michigan, in which U. S. Steel has a 49 percent interest. Worthington slits, cuts to length, and presses blanks from steel coils to desired specifications. Worthington's annual production capability is approximately 890,000 tons.

Chrome Deposit Corporation (CDC), a 50-50 joint venture between U. S. Steel and Court Holdings, reconditions finishing work rolls, which require grinding, chrome plating and/or texturing. The rolls are used on rolling mills to provide superior finishes on steel sheets. CDC has seven locations across the United States, with all locations near major steel plants.

U. S. Steel holds a 49 percent interest in Feralloy Processing Company (FPC), a joint venture between U. S. Steel and Feralloy Corporation, which converts coiled hot strip mill plate into sheared and flattened plates. The plant, located in Portage, Indiana, has annual production capability of approximately 275,000 tons.

USSE

USSE operates an integrated facility in Košice, Slovakia, which has annual raw steel production capability of 5.0 million tons. This facility has two coke batteries, four sintering strands, three blast furnaces, four steelmaking vessels, a vacuum degassing unit, two dual strand casters, a hot strip mill, two pickling lines, two cold reduction mills, four annealing facilities, a temper mill, a temper/double cold reduction mill, three hot dip galvanizing lines, two tin coating lines, a dynamo line, a color coating line and two spiral welded pipe mills. USSE also has multiple slitting, cutting and other finishing lines for flat products. Principal products include hot-rolled, cold-rolled and coated sheets, tin mill products and spiral welded pipe. USSE also has facilities for manufacturing refractory ceramic materials and has a power plant for internal steam and electricity generation. In June 2019, one of the blast furnaces at USSE was temporarily idled and currently remains idled.

In addition, USSE has a research laboratory, which, in conjunction with our Research and Technology Center, supports efforts in coke making, electrical steels, design and instrumentation, and ecology.

Tubular

Tubular manufactures seamless and welded OCTG, standard pipe, line pipe and mechanical tubing.

Seamless products are produced at Fairfield Tubular Operations in Fairfield, Alabama, and Lorain Tubular Operations located in Lorain, Ohio. The Fairfield Tubular Operations has annual production capability of 750,000 tons and has historically been supplied with steel rounds from Flat-Rolled's former Fairfield Works. Subsequent to the shutdown of the hot end at the Fairfield Works in August 2015, the facility is currently purchasing rounds from third parties. The Fairfield Tubular Operations has the capability to produce outer diameter (O.D.) sizes from 4.5 to 9.875 inches and has quench and temper, hydrotester, threading and coupling and inspection capabilities. On February 11, 2019, U. S. Steel announced plans to restart the delayed electric arc furnace (EAF) capital project located in Fairfield, Alabama. The new EAF will have an annual capacity of approximately 1.6 million tons. The EAF is expected to commence startup in the second half of 2020. The slab and rounds casters of the former Fairfield Works remain capable of operation and are now part of the Fairfield Tubular Operations. The Lorain plant consists of the #3 facility and has historically consumed steel rounds supplied by Fairfield Works and external sources. Subsequent to the shutdown of the hot end at the Fairfield Works, the Company is sourcing rounds from third parties. Lorain #3 facility has the capability to produce 380,000 tons annually in O.D. sizes from 10.125 to 26 inches and has quench and temper, hydrotester, cutoff and inspection capabilities. In March 2017, U. S. Steel made the strategic decision to permanently shutdown the Lorain No. 6 Quench & Temper Mill.

Welded products are produced at Lone Star Tubular Operations #2 facility in Lone Star, Texas, and it has the capability to produce O.D. sizes from 1.088 to 7.15 inches. The Lone Star #2 facility has annual production capability of 390,000 tons. In June 2019, U. S. Steel restarted the #1 Electric-Weld Pipe mill at Lone Star Tubular Operations that had been idle since 2016. The #1 mill has annual production capability of 400,000 tons. Lone Star Tubular Operations also has quench and temper, hydrotester, threading and coupling and inspection capabilities.

Wheeling Machine Products manufactures couplings used to connect individual sections of oilfield casing and tubing. It produces sizes ranging from 2.375 to 20 inches at two locations: Pine Bluff, Arkansas, and Hughes Springs, Texas.

Tubular Processing, located in Houston, Texas, provides quench and temper and end-finishing services for oilfield production tubing. Offshore Operations, also located in Houston, Texas, provides threading and coupling, inspection, accessories and storage services to the OCTG market. Tubular Processing has been temporarily idled since 2015.

We have a Research and Development Laboratory and Test Facility in Houston, Texas where our engineers develop and test new steel products, including premium connections.

Joint Ventures Within Tubular

U. S. Steel and Butch Gilliam Enterprises LLC participate in a 50-50 joint venture, Patriot Premium Threading Services, LLC located in Midland, Texas, which provides oil country threading, accessory threading, repair services and rig site services to exploration and production companies located principally in the Permian Basin.

Other Businesses

U. S. Steel's Other Businesses include the operating results relating to our 49.9% ownership interest in Big River Steel and our railroad services and real estate operations.

U. S. Steel owns 49.9% of Big River Steel, located in Osceola, Arkansas, which has annual raw steel capacity of approximately 1.65 million tons. Big River Steel has an EAF, a Ruhrstahl Heraeus degasser and slab caster. Finishing facilities include a hot strip mill, a pickle line, a cold reduction mill and a galvanizing line. Principle products include hot-rolled, cold-rolled, coated sheets and electrical. For information regarding joint ventures and other investments, see Note 12 to the Consolidated Financial Statements.

U. S. Steel owns the following railroads through its transportation subsidiary, Transtar: Gary Railway Company in Indiana, Lake Terminal Railroad Company and Lorain Northern Company in Ohio, Union Railroad Company, LLC in Pennsylvania, Fairfield Southern Company, Inc. in Alabama, Delray Connecting Railroad Company in Michigan and Texas & Northern Railway Company in Texas.

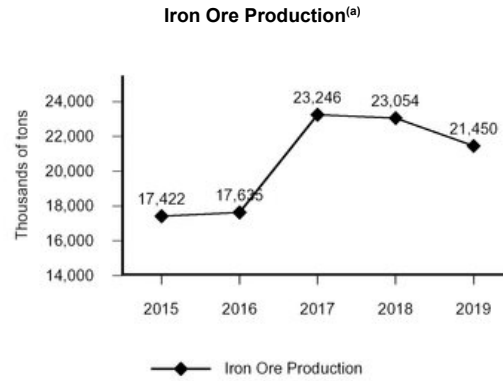
U. S. Steel owns, develops and manages various real estate assets, which include approximately 50,000 acres of surface rights primarily in Alabama, Michigan, Minnesota, Pennsylvania and Illinois. In addition, U. S. Steel holds ownership interests in a joint venture that is developing real estate projects in Alabama.

Raw Materials and Energy

As an integrated producer, U. S. Steel's primary raw materials are iron units in the form of iron ore pellets and sinter ore, carbon units in the form of coal and coke (which is produced from coking coal) and steel scrap. U. S. Steel's raw materials supply strategy consists of acquiring and expanding captive sources of certain primary raw materials and entering into flexible supply contracts for certain other raw materials at competitive market prices which are subject to fluctuations based on market conditions at the time.

The amounts of such raw materials needed to produce a ton of steel will fluctuate based upon the specifications of the final steel products, the quality of raw materials and, to a lesser extent, differences among steel producing equipment. In broad terms, U. S. Steel consumes approximately 1.4 tons of coal to produce one ton of coke and then it consumes approximately 0.3 tons of coke, 0.3 tons of steel scrap (54 percent of which is internally generated) and 1.3 tons of iron ore pellets to produce one ton of raw steel. At normal operating levels, we also consume approximately 6 mmbtu's of natural gas per ton produced. While we believe that these estimated consumption amounts are useful for planning purposes, and are presented to give a general sense of raw material and energy consumption related to steel production, substantial variations may occur.

Iron Ore



^(a) Includes our share of production from Hibbing through December 31, 2019 and Tilden to September 29, 2017. U. S. Steel's ownership interest in Tilden was sold on September 29, 2017. The increase in iron ore production in 2017 is primarily related to the restarted production at our Keetac facility which was idled in 2014.

The iron ore facilities at Minntac and Keetac contain an estimated 782 million short tons of recoverable reserves and our share of recoverable reserves at the Hibbing joint venture is 5 million short tons. Recoverable reserves are defined as the tons of product that can be used internally or delivered to a customer after considering mining and beneficiation or preparation losses. Minntac and Keetac's annual capability and our share of annual capability for the Hibbing joint venture total approximately 24 million tons. Through our wholly owned operations and our share of our joint venture, we have iron ore pellet production capability that exceeds our steelmaking capability in the U.S.

We sold iron ore pellets in 2019, 2018 and 2017 to third parties. The Company has agreements to supply iron ore pellets to third-party customers over the next several years.

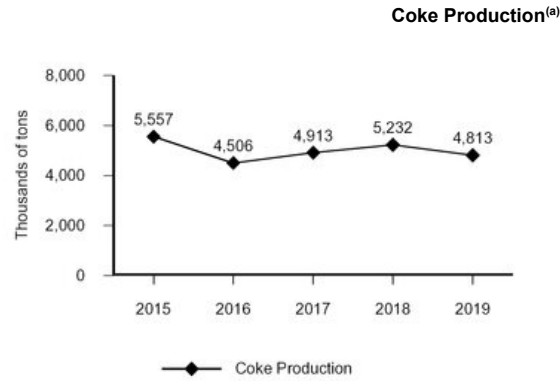
Substantially all of USSE's iron ore requirements are purchased from outside sources, primarily Russian and Ukrainian mining companies. Prices are determined in long-term contracts with strategic suppliers or as spot prices negotiated monthly or quarterly. In certain prior years, USSE also received iron ore from U. S. Steel's iron ore facilities in North America. We believe that supplies of iron ore adequate to meet USSE's needs are available at competitive market prices.

Coking Coal

All of U. S. Steel's coal requirements for our cokemaking facilities are purchased from outside sources. Pricing for Flat-Rolled's coking coal contracts are typically negotiated on a yearly basis, and from time to time we have entered into multi-year agreements for a portion of our coking coal requirements.

Prices for European contracts are negotiated quarterly, annually or determined as index-based prices.

We believe that supplies of coking coal adequate to meet our needs are available from outside sources at competitive market prices. The main source of coking coal for Flat-Rolled is the United States, and sources for USSE include Poland, the Czech Republic, Russia, Ukraine, Canada, Mozambique and the United States.

Coke

^(a) The decrease in 2016 coke production from 2015 was due to decreased internal steel production and depletion of existing coke inventory.

In North America, the Flat-Rolled segment operates a cokemaking facility at the Clairton Plant of Mon Valley Works. At our Granite City Works, we also have a 15-year coke supply agreement with Gateway that expires on December 31, 2024. Blast furnace injection of coal, and self-generated coke oven gas is also used to reduce coke usage.

With Flat-Rolled's cokemaking facilities and the Gateway long-term supply agreement, it has the capability to be nearly self-sufficient with respect to its annual coke requirements at normal operating levels. Coke from time to time has been purchased from, sold to, or swapped with suppliers and other end-users to adjust for production needs and reduce transportation costs.

In Europe, the USSE segment operates cokemaking facilities at USSK. While USSE is self-sufficient for coke at normal operating levels, it periodically purchases coke from Polish and Czech coke producers to meet production needs. Volume and price are negotiated quarterly.

Steel Scrap and Other Materials

We believe that supplies of steel scrap, alloys and coating materials adequate to meet our needs to support Flat-Rolled and USSE are readily available from outside sources at competitive market prices. Generally, approximately 50 percent of our steel scrap requirements are internally generated through normal operations.

Limestone

All of Flat-Rolled's and USSE's limestone requirements are purchased from outside sources. We believe that supplies of limestone adequate to meet our needs are readily available from outside sources at competitive market prices.

Zinc and Tin

We believe that supplies of zinc and tin required to fulfill the requirements for Flat-Rolled and USSE are available from outside sources at competitive market prices. For Flat-Rolled, the main sources of zinc are Canada, Peru and Mexico and the main sources of tin are Bolivia and Peru. For USSE, the main sources of zinc are Sweden, the Slovak Republic, Germany and Poland and the main sources of tin are Bolivia and Indonesia.

During 2019, Flat-Rolled protected approximately 30% and 87% of its operation's zinc and tin purchases, respectively, with financial swap derivatives to manage exposure to zinc and tin price fluctuations. During 2019, USSE protected approximately 45% of its operation's zinc purchases with forward physical contracts to manage exposure to zinc price fluctuations. Also during 2019, USSE protected approximately 43% of its operation's tin purchases with forward physical contracts and 16% of its operation's tin purchases with financial swaps to manage our exposure to tin price fluctuations. For further information, see Note 16 to the Consolidated Financial Statements.

Natural Gas

All of U. S. Steel's natural gas requirements are purchased from outside sources.

We believe that adequate supplies to meet Flat-Rolled's and Tubular's needs are available at competitive market prices. For 2019, approximately 74 percent of our natural gas purchases in Flat-Rolled were based on bids solicited on a monthly basis from various vendors; the remainder were made daily or with term agreements.

We believe that adequate natural gas supplies to meet USSE's needs are available at competitive market prices. During 2019, we routinely executed fixed-price forward physical purchase contracts for natural gas to partially manage our exposure to natural gas price increases. For 2019, approximately 52 percent of our natural gas purchases in USSE were made with fixed-price forward physical purchase contracts; the remainder were based on bids solicited on a quarterly, monthly or a daily basis from various vendors.

Both Flat-Rolled and USSE use self-generated coke oven and blast furnace gas to reduce consumption of natural gas. USSE also captures and consumes converter gas from its four steelmaking vessels.

Industrial Gases

U. S. Steel purchases industrial gas in the U.S. under long-term contracts with various suppliers. USSE owns and operates its own industrial gas facilities, but also may purchase industrial gases from time to time.

Commercial Sales of Product

U. S. Steel characterizes sales as contract sales if sold pursuant to an agreement with a defined volume and pricing and a duration of longer than three months, and as spot if sold without a defined volume and pricing agreement. In 2019, approximately 77 percent, 63 percent and 36 percent of sales by Flat-Rolled, USSE and Tubular, respectively, were contract sales. Some contract pricing agreements include fixed prices while others are adjusted periodically based upon published prices of steel products or cost components.

Environmental Matters, Litigation and Contingencies

Some of U. S. Steel's facilities were in operation before 1900. Although the Company believes that its environmental practices have either led the industry or at least been consistent with prevailing industry practices, hazardous materials have been and may continue to be released at current or former operating sites or delivered to sites operated by third parties.

Our U.S. facilities are subject to environmental laws applicable in the U.S., including the Clean Air Act (CAA), the Clean Water Act (CWA), the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as well as state and local laws and regulations.

U. S. Steel has incurred and will continue to incur substantial capital, operating, and maintenance and remediation expenditures as a result of environmental laws and regulations, related to release of hazardous materials, which in recent years have been mainly for process changes to meet CAA obligations and similar obligations in Europe.

EU Environmental Requirements and Slovak Operations

Under the Emissions Trading Scheme (ETS), USSK's final allocation of allowances for the Phase III period, which covers the years 2013 through 2020 is 48 million allowances. Based on projected total production levels, we started to purchase allowances in the third quarter of 2017 to meet the annual compliance submission in the future. As of December 31, 2019, we have purchased approximately 11.7 million European Union Allowances (EUA) totaling €132 million (approximately \$148 million) to cover the estimated shortfall of emission allowances. We estimate that the total shortfall will be approximately 12.5 million allowances for the Phase III period. The full cost of complying with the ETS regulations will depend on future production levels and future emissions intensity levels.

The EU's Industrial Emissions Directive requires implementation of EU determined best available techniques (BAT) for Iron and Steel production to reduce environmental impacts as well as compliance with BAT associated emission levels. Our most recent estimate of total capital expenditures for projects to comply with or go beyond BAT requirements is €138 million (approximately \$155 million) over the 2017 to 2020 program period. These costs may be mitigated if USSK complies with certain financial covenants, which are assessed annually. USSK complied with these covenants as of December 31, 2019. If we are unable to meet these covenants in the future, USSK might be required to provide

additional collateral (e.g. bank guarantee) to secure the full value of estimated expenditures. There could be increased operating costs associated with these projects, such as increased energy and maintenance costs. We are currently unable to reliably estimate what the increase in operating costs will be as many projects are in the development stage.

For further discussion of laws applicable in Slovakia and the EU and their impact on USSK, see Note 26 to the Consolidated Financial Statements, "Contingencies and Commitments - Environmental Matters, EU Environmental Requirements."

New and Emerging Environmental Regulations

United States and European Greenhouse Gas Emissions Regulations

Future compliance with CO₂ emission requirements may include substantial costs for emission allowances, restriction of production and higher prices for coking coal, natural gas and electricity generated by carbon based systems. Because we cannot predict what requirements ultimately will be imposed in the U.S. and Europe, it is difficult to estimate the likely impact on U. S. Steel, but it could be substantial. On March 28, 2017, President Trump signed Executive Order 13783 instructing the United States Environmental Protection Agency (U.S. EPA) to review the Clean Power Plan. On October 16, 2017, the U.S. EPA proposed to repeal the Clean Power Plan after reviewing the plan pursuant to President Trump's executive order. Any repeal and/or replacement of the Clean Power Plan is likely to be challenged by various proponents of the plan, such as environmental groups and certain states. Any impacts to our operations as a result of any future greenhouse gas regulations are not estimable at this time since the matter is unsettled. In any case, to the extent expenditures associated with any greenhouse gas regulation, as with all costs, are not ultimately reflected in the prices of U. S. Steel's products and services, operating results will be reduced.

There have been no material changes in U. S. Steel's exposure to European Greenhouse Gas Emissions regulations since December 31, 2018.

United States - Air

The CAA imposes stringent limits on air emissions with a federally mandated operating permit program and civil and criminal enforcement sanctions. The CAA requires, among other things, the regulation of hazardous air pollutants through the development and promulgation of National Emission Standards for Hazardous Air Pollutants (NESHAP) and Maximum Achievable Control Technology (MACT) Standards. The U.S. EPA has developed various industry-specific MACT standards pursuant to this requirement. The CAA requires the U.S. EPA to promulgate regulations establishing emission standards for each category of Hazardous Air Pollutants. The U.S. EPA also must conduct risk assessments on each source category that is already subject to MACT standards and determine if additional standards are needed to reduce residual risks.

While our operations are subject to several different categories of NESHAP and MACT standards, the principal impact of these standards on U. S. Steel operations includes those that are specific to coke making, iron making, steel making and iron ore processing.

The U.S. EPA is currently in the process of completing a Residual Risk and Technology Review of the Integrated Iron and Steel MACT regulations, Coke MACT regulations, and Taconite Iron Ore Processing MACT regulations as required by the CAA. The U.S. EPA is under a court order to complete the Residual Risk and Technology Review of the Integrated Iron and Steel regulations no later than March 13, 2020; and to complete the Residual Risk and Technology Review of the Taconite Iron Ore Processing Regulations by June 30, 2020.

On August 16, 2019, U.S. EPA published a proposed Residual Risk and Technology Review (RTR) rule for the Integrated Iron and Steel MACT category in the *Federal Register*. Based on the results of U.S. EPA's risk review, the Agency proposed that risks due to emissions of air toxics from the Integrated Iron and Steel category are acceptable and that the current regulations provided an ample margin of safety to protect public health. Under the technology review, U.S. EPA proposed that there are no developments in practices, processes or control technologies that necessitate revision of the standards. U.S. EPA accepted comments on the proposed rule until November 7, 2019. Based upon our analysis of the integrated iron and steel proposed rule, the Company does not expect any material impact if the rule is finalized as proposed. For the Taconite Iron Ore Processing category, based on the results of the Agency's risk review, U.S. EPA is proposing that risks from emissions of air toxics from this source category are acceptable and that the existing standards provide an ample margin of safety. Furthermore, under the technology review, the Agency identified no cost-effective developments in controls, practices, or processes to achieve further emissions reductions. Therefore, U.S.

EPA is proposing no revisions to the existing standards based on the RTRs. U.S. EPA accepted comments on the taconite proposed rule until October 25, 2019. Based upon our analysis of the proposed taconite rule, the Company does not expect any material impact if the rule is finalized as proposed. Because the U.S. EPA has not completed its review of the Coke MACT regulations, any impacts related to the U.S. EPA's review of the coke standards cannot be estimated at this time.

On March 12, 2018, the New York State Department of Environmental Conservation (DEC), along with other petitioners, submitted a CAA Section 126(b) petition to the U.S. EPA. In the petition, the DEC asserts that stationary sources from the following nine states are interfering with attainment or maintenance of the 2008 and 2015 ozone National Ambient Air Quality Standards (NAAQS) in New York: Illinois, Indiana, Kentucky, Maryland, Michigan, Ohio, Pennsylvania, Virginia, and West Virginia. DEC is requesting the U.S. EPA to require sources of nitrogen oxides in the nine states to reduce such emissions. In a final rule promulgated in the October 18, 2019, Federal Register, EPA denied the petition. On October 29, 2019, New York, New Jersey, and the City of New York petitioned the United States Court of Appeals for the District of Columbia Circuit for review of U. S. EPA's denial of the petition. The matter remains before the Court.

The CAA also requires the U.S. EPA to develop and implement NAAQS for criteria pollutants, which include, among others, particulate matter (PM) - consisting of PM₁₀ and PM_{2.5}, lead, carbon monoxide, nitrogen dioxide, sulfur dioxide (SO₂), and ozone.

In June 2010, the U.S. EPA significantly lowered the primary NAAQS for SO₂ from 140 parts per billion (ppb) on a 24-hour basis to an hourly standard of 75 ppb. Subsequently, U.S. EPA designated the areas in which Great Lakes Works and Mon Valley Works facilities are located as nonattainment with the 2010 standard for the SO₂ NAAQS. The non-attainment designation requires the region to implement operational and/or capital improvements to demonstrate attainment with the 2010 standard. U. S. Steel worked with the Allegheny County Health Department (ACHD) in developing a State Implementation Plan (SIP) for the Allegheny County portion of the Pennsylvania SIP that includes reductions of SO₂ and improved dispersion from U. S. Steel sources. On November 19, 2018, U.S. EPA published a proposed rule to approve the SIP. Pursuant to a consent decree in *Center for Biological Diversity, et al., v. Wheeler*, No. 4:18-cv-03544 (N.D. Cal.), EPA has agreed to take final action on the SIP submittal no later than April 30, 2020. In addition, as noted in the Legal Proceedings section, U. S. Steel continues to work with the regulatory authorities to address the Wayne County, Michigan (where Great Lakes Works is located) nonattainment status. The operational and financial impacts of the SO₂ NAAQS are not estimated to be material at this time.

In October 2015, the U.S. EPA lowered the NAAQS for ozone from 75 ppb to 70 ppb. On November 6, 2017, the U.S. EPA designated most areas in which we operate as attainment with the 2015 standard. In a separate ruling, on June 4, 2018, the U.S. EPA designated other areas in which we operate as "marginal nonattainment" with the 2015 ozone standard. On December 6, 2018, U.S. EPA published a final rule regarding implementation of the 2015 ozone standard. Because no state regulatory or permitting actions to bring the ozone nonattainment areas into attainment have yet to be proposed or developed for U. S. Steel facilities, the operational and financial impact of the ozone NAAQS cannot be reasonably estimated at this time.

On December 14, 2012, the U.S. EPA lowered the annual standard for PM_{2.5} from 15 micrograms per cubic meter (ug/m³) to 12 ug/m³, and retained the PM_{2.5} 24-hour and PM₁₀ NAAQS rules. In December 2014, the U.S. EPA designated some areas in which U. S. Steel operates as nonattainment with the 2012 annual PM_{2.5} standard. On April 6, 2018, the U.S. EPA published a notice that Pennsylvania, California and Idaho failed to submit a SIP to demonstrate attainment with the 2012 fine particulate standard by the deadline established by the CAA. As a result of the notice, Pennsylvania, a state in which we operate, is required to submit a SIP to the U.S. EPA no later than November 7, 2019 to avoid sanctions. On April 29, 2019, the ACHD published a draft SIP for the Allegheny County nonattainment area which demonstrates that all of Allegheny County will meet its reasonable further progress requirements and be in attainment with the 2012 PM_{2.5} annual and 24-hour NAAQS by December 31, 2021 with the existing controls that are in place. On September 12, 2019, the Allegheny County Board of Health unanimously approved the draft SIP. The draft SIP was then sent to the Pennsylvania Department of Environmental Protection (PADEP). PADEP submitted the SIP to U.S. EPA for approval on November 1, 2019. To date, U.S. EPA has not taken action on PADEP's submittal.

In July 2018, the ACHD provided U. S. Steel, ACHD Regulation Subcommittee members and interested parties with draft regulations that would modify the existing air regulations applicable to coke plants in Allegheny County. While ACHD currently has some of the most stringent air regulations in the country governing coke plants, which apply to U. S. Steel's coke plant in Clairton, Pennsylvania (the only remaining coke plant in Allegheny County and one of two remaining in Pennsylvania), the draft regulations would reduce the current allowable emissions from coke plant operations and would be more stringent than the Federal Best Available Control Technology and Lowest Achievable

Emission Rate requirements. In various meetings with ACHD, U. S. Steel has raised significant objections, in particular, that ACHD has not demonstrated that continuous compliance with the draft rule is economically and technologically feasible. While U. S. Steel continues to meet with ACHD regarding the draft rule, U. S. Steel believes that any rule promulgated by ACHD must comply with its statutory authority. If the draft rule or similar rule is adopted, the financial and operational impacts to U. S. Steel could be material. To assist in developing rules objectively and with adequate technical justification, the June 27, 2019, Settlement Agreement, establishes procedures that would be used when developing a new rule. For further details on the June 27, 2019 Settlement Agreement with ACHD see "Item 1. Legal Proceedings - Environmental Proceedings - Mon Valley Works."

Environmental Remediation

In the United States, U. S. Steel has been identified as a potentially responsible party (PRP) at seven sites under CERCLA as of December 31, 2019. Of these, there are three sites for which information requests have been received or there are other indications that U. S. Steel may be a PRP under CERCLA, but sufficient information is not presently available to confirm the existence of liability or to make a reasonable estimate with respect to any potential liabilities. There are also 18 additional sites for which U. S. Steel may be liable for remediation costs in excess of \$100,000 under other environmental statutes, both federal and state, or where private parties are seeking to impose liability on U. S. Steel for remediation costs through discussions or litigation. At many of these sites, U. S. Steel is one of a number of parties involved and the total cost of remediation, as well as U. S. Steel's share, is frequently dependent upon the outcome of ongoing investigations and remedial studies. U. S. Steel accrues for environmental remediation activities when the responsibility to remediate is probable and the amount of associated costs is reasonably estimable. As environmental remediation matters proceed toward ultimate resolution or as remediation obligations arise, charges in excess of those previously accrued may be required.

For further discussion of relevant environmental matters, see "Item 3. Legal Proceedings - Environmental Proceedings."

Workforce

At U. S. Steel, we are committed to attracting, developing, and retaining a workforce of talented and diverse people — all working together to deliver superior results for our Company, stockholders, customers and communities. We regularly review our human capital needs.

As of December 31, 2019, U. S. Steel had approximately 17,000 employees in the U.S. and approximately 10,500 employees in Europe.

Most hourly employees of U. S. Steel's flat-rolled, tubular, cokemaking and iron ore pellet facilities in the United States are covered by collective bargaining agreements with the USW effective September 1, 2018 (the 2018 Labor Agreements) that expire on September 1, 2022. The 2018 Labor Agreements provide for wage, pension and other benefit adjustments. Workers at some of our North American facilities and at our transportation operations are covered by agreements with the USW or other unions that have various expiration dates.

In Europe, excluding U.S. expatriates, most employees at USSK are represented by the OZ KOVO union and all employees are covered by an agreement that expires at the end of March 2020.

Property, Plant and Equipment Additions

For property, plant and equipment additions, including finance leases, see "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations – Financial Condition, Cash Flows and Liquidity – Cash Flows" and Note 13 to the Consolidated Financial Statements.

Available Information

U. S. Steel's Internet address is www.ussteel.com. We post our Annual Report on Form 10-K, our quarterly reports on Form 10-Q, our proxy statement and our interactive data files to our website free of charge as soon as reasonably practicable after such reports are filed with the Securities and Exchange Commission (SEC). We also post all press releases and earnings releases to our website.

All other filings with the SEC are available via a direct link on the U. S. Steel website to the SEC's website, www.sec.gov.

Also available on the U. S. Steel website are U. S. Steel's Corporate Governance Principles, Code of Ethical Business Conduct and the charters of the Audit Committee, the Compensation & Organization Committee and the Corporate Governance & Sustainability Committee of the Board of Directors. These documents and the Annual Report on Form 10-K and proxy statement are also available in print to any stockholder who requests them. Such requests should be sent to the Office of the Corporate Secretary, United States Steel Corporation, 600 Grant Street, Suite 1500, Pittsburgh, Pennsylvania, 15219-2800 (telephone: 412-433-1121).

U. S. Steel does not incorporate into this document the contents of any website or the documents referred to in the immediately preceding paragraphs.

Other Information

Information on net sales, depreciation, capital expenditures, earnings (loss) before interest and income taxes and assets by reportable segment and for Other Businesses and on net sales and assets by geographic area are set forth in Note 4 to the Consolidated Financial Statements.

For significant operating data for U. S. Steel for each of the last five years, see "Five-Year Operating Summary (Unaudited)" within this document.

Item 1A. RISK FACTORS

Operational Risk Factors

Our Investments in New Technologies May Not Be Fully Successful

Execution of our strategy depends, in part, on the success of a number of investments we have made in new technologies. All of our investments are expected to deliver an enhanced “best of both” business model that delivers cost and/or capability differentiation for our stakeholders. Our intent to eventually acquire 100% of Big River Steel, like our other investments in state-of-the-art sustainable steel technologies including, but not limited to, the endless casting and rolling line at Mon Valley Works and XG3 at our PRO-TEC joint venture, is a significant element of our strategy. If our investment in Big River Steel fails to provide the benefits we expect or our financial condition is constrained, we may choose not to exercise our option to acquire its remaining outstanding ownership interests. In addition, if Big River Steel does not achieve the expected financial performance, we still may be required to acquire the remaining ownership interests at a discounted purchase price. Additionally, like with any significant construction project, we may be subject to changing market conditions and demand for our completed projects, delays and cost overruns, work stoppages, labor shortages, engineering issues, weather interferences, changes required by governmental authorities, delays or the inability to acquire required permits or licenses, the ability to finance the projects or disruption of existing operations, any of which could have an adverse impact on our operational and financial results. Furthermore, new product development or modification is costly, involves significant research, development, time and expense and may not necessarily result in the successful commercialization of any new products, or new technologies may not perform as intended or expected. Unsuccessful execution of these strategic projects or underperformance of any of these assets could adversely affect our business, results of operations and financial condition.

Our operational footprint, unplanned equipment outages and other unforeseen disruptions may adversely impact our results of operations.

U. S. Steel has adjusted its operating configuration in response to market conditions, including global overcapacity and unfairly traded imports, by idling and restarting production at certain facilities. Due to our operational footprint, the Company may not be able to respond in an efficient manner to fully realize the benefits from changing market conditions that are favorable to integrated steel producers.

Our steel production depends on the operation of critical structures and pieces of equipment, such as blast furnaces, steel shops, casters, hot strip mills and various structures and operations that support them. While we are implementing initiatives focused on proactive maintenance of key machinery and equipment at our production facilities, we may experience prolonged periods of reduced production and increased maintenance and repair costs due to equipment failures at our facilities or those of our key suppliers.

It is also possible that operations may be disrupted due to other unforeseen circumstances such as power outages, explosions, fires, floods, accidents, severe weather conditions, and changes in U.S., European Union and other foreign tariffs, free trade agreements, trade regulations, laws, and policies. We are also exposed to similar risks involving major customers and suppliers such as force majeure events of raw materials suppliers that have occurred and may occur in the future. Availability of raw materials and delivery of products to customers could be affected by logistical disruptions, such as shortages of barges, ocean vessels, rail cars or trucks, or unavailability of rail lines or of the locks on the Great Lakes or other bodies of water. To the extent that lost production could not be compensated for at unaffected facilities and depending on the length of the outage, our sales and our unit production costs could be adversely affected.

U. S. Steel continues to incur certain costs when production capacity is idled, increased costs to resume production at idled facilities, or costs to idle facilities.

Our decisions concerning which facilities to operate and at what levels are made based upon our customers’ orders for products as well as the capabilities and cost performance of our locations. During periods of depressed market conditions, we may concentrate production operations at several plant locations and not operate others in response to customer demand, and as a result we will incur idle facility costs.

When we restart idled facilities, we incur certain costs to replenish raw material inventories, prepare the previously idled facilities for operation, perform the required repair and maintenance activities and prepare employees to return to work safely and resume production responsibilities. The amount of any such costs can be material, depending on

a variety of factors, such as the period of time during which the facilities remained idle, necessary repairs and available employees, and is difficult to project.

U. S. Steel has been and continues to be adversely affected by unfairly traded imports and global overcapacity, which may cause downward pricing pressure, lost sales and revenue, market share, decreased production, investment, and profitability.

Currently, global steel production capacity significantly exceeds global steel demand, which adversely affects U.S. and global steel prices. Global overcapacity continues to result in high levels of dumped and subsidized steel imports into the markets we serve. Domestic and international trade laws provide mechanisms to address the injury caused by such imports to domestic industries. Excessive imports of steel products into the U.S. has resulted and may continue to result in downward pricing pressure and lost sales and revenue, which adversely impacts our business, results of operations, financial condition and cash flows. Additional planned capacity in the U.S. could increase this overcapacity and further negatively impact U.S. steel prices.

Though U. S. Steel currently benefits from 54 U.S. antidumping and countervailing duty (AD/CVD) orders and 11 European Union (EU) AD/CVD orders, petitions for trade relief are not always successful or effective. When received, such relief is generally subject to periodic reviews and challenges, which can result in revocation of the AD/CVD order or reduction of the AD/CVD duties. There can be no assurance that any relief will be obtained or continued in the future or that such relief will adequately combat unfairly traded imports.

The current Section 232 national security tariffs and quotas on steel imports into the U.S. also provide U. S. Steel and other domestic steel producers relief from imports. Likewise, the EU's retaliatory 25 percent tariffs on certain U.S. steel imports and safeguard measures on steel provide USSE and other European steel producers some degree of relief from imports. The duration of the Section 232 tariffs and quotas, the outcome of outstanding product exclusion requests before the U.S. Department of Commerce, and the EU retaliatory and safeguard relief is not known.

Faced with significant imports into the U.S. and overcapacity in various markets, we will continue to evaluate potential strategic and organizational opportunities, which may include exiting lines of business and the sale of certain assets, temporary shutdowns or closures of facilities.

We face risks relating to changes in U.S. and foreign tariffs, trade agreements, laws, and policies

Through a series of Presidential Proclamations pursuant to Section 232 of the Trade Expansion Act of 1962, U.S. imports of certain steel products are subject to a 25 percent tariff, except for imports from: (1) Argentina, Brazil, and Korea, which are subject to restrictive quotas; (2) Canada and Mexico, which are currently not subject to either tariffs or quotas, but tariffs could be re-imposed on surging product groups after consultations; and (3) Australia, which is not subject to tariffs, quotas or an anti-surge mechanism. The Section 232 national security tariffs and quotas on steel imports currently provide U. S. Steel and other domestic steel producers critical relief from imports. With no scheduled end date, the duration of the Section 232 relief is not known. Further, the U.S. government may negotiate alternatives to the Section 232 tariffs for certain countries. The U.S. Department of Commerce continues to administer its Section 232 product exclusion process. The Section 232 action on aluminum and steel imports, potential Section 232 action on other products, and recent and potential additional U.S. import tariffs imposed under Section 301 of the Trade Act of 1974 have resulted in the possibility of tariffs being applied to materials and/or items we purchase from subject countries or regions as part of our manufacturing process, and may result in additional, retaliatory action by foreign governments on U.S. exports of a range of products, including products produced by our customers. In February 2019, the European Commission imposed a definitive safeguard on global steel imports in the form of tariff rate quotas (TRQs; 25 percent tariffs on steel imports that exceed the quota) effective through June 2021. All of the above factors present a degree of uncertainty to our financial and operational performance, our customers, and overall economic conditions, all of which could impact steel demand and our performance.

The steel industry is highly cyclical, which may have an adverse effect on our results of operations.

Steel consumption is highly cyclical and generally follows economic and industrial conditions both worldwide and in regional markets. This volatility makes it difficult to balance the procurement of raw materials and energy with global steel prices, our steel production and customer product demand. U. S. Steel has implemented strategic initiatives to produce more stable and consistent results, even during periods of economic and market downturns, but this may not be enough to mitigate the effect that the volatility inherent in the steel industry has on our results of operations.

Additionally, our business is reliant on certain other industries that are cyclical in nature. We sell to the automotive, service center, converter, energy and appliance and construction-related industries. Some of these industries exhibit a great deal of sensitivity to general economic conditions and may also face meaningful fluctuations in demand based on a number of factors outside of our control, including regulatory factors, economic conditions, and raw material and energy costs. As a result, downturns or volatility in any of the markets we serve could adversely affect our financial position, results of operations and cash flows.

We face increased competition from alternative materials and risks concerning innovation, new technologies, products and increasing customer requirements.

As a result of increasingly stringent regulatory requirements, designers, engineers and industrial manufacturers, especially those in the automotive industry, are increasing their use of lighter weight and alternative materials, such as aluminum, composites, plastics, and carbon fiber. Use of such materials could reduce the demand for steel products, which may reduce our profitability and cash flow.

Additionally, technologies such as direct iron reduction, EAF production, oxygen-coal injection and experimental technologies such as molten oxide electrolysis and hydrogen flash smelting may be more cost effective than our current production methods. However, we may not have sufficient capital to invest in such technologies and may incur difficulties adapting and fully integrating these technologies into our existing operations. We may also encounter production restrictions, or not realize the cost benefit from such capital intensive technology adaptations to our current production processes. Customers, such as those in the automotive industry, are demanding stronger and lighter products. Tubular customers are increasingly requesting pipe producers to supply connections and other ancillary parts as well as inspection and other services. We may not be successful in meeting these technological challenges.

Limited availability, or volatility in prices of raw materials and energy may constrain operating levels and reduce profit margins.

U. S. Steel and other steel producers have periodically faced problems obtaining sufficient raw materials and energy in a timely manner due to delays, defaults, severe weather conditions, or force majeure events, shortages or transportation problems (such as shortages of barges, ore vessels, rail cars or trucks, or disruption of rail lines, waterways, or natural gas transmission lines), resulting in production curtailments. As a result, we may be exposed to risks concerning pricing and availability of raw materials from third parties as well as logistics constraints moving our own raw materials to our plants. USSE purchases substantially all of its iron ore and coking coal requirements from outside sources. USSE is also dependent upon availability of natural gas produced in Russia and transported through Ukraine. Any curtailments or escalated costs may further reduce profit margins.

U. S. Steel has agreed, and may continue to agree, to purchase raw materials and energy at prices that have been, and may be, above future market prices or in greater volumes than required in the future. Additionally, any future decreases in iron ore, scrap, natural gas and oil prices may place downward pressure on steel prices. If steel prices decline, our profit margins on indexed contracts and spot business could be reduced.

Changes in the global economic environment and prolonged periods of slow economic growth could have an adverse effect on our industry and business, as well as those of our customers and suppliers.

Overall economic conditions in the U.S. and globally, including Europe, significantly impact our business. Periods of economic downturn or continued uncertainty, including the significant decline of market conditions in Europe, could result in difficulty increasing or maintaining our level of sales or profitability and we may experience an adverse effect on our business, results of operations, financial condition and cash flows.

Our U.S. operations are subject to economic conditions, including credit and capital market conditions, and political factors in the U.S., which if changed could negatively affect our results of operations, cash flows and liquidity. Political factors include, but are not limited to, taxation, inflation, increased regulation, limitations on exports of energy and raw materials, and trade remedies. Actions taken by the U.S. government could affect our results of operations, cash flows and liquidity.

USSE is subject to economic conditions and political factors associated with the EU, Slovakia and neighboring countries, and the euro currency. Changes in any of these economic conditions or political factors could negatively affect our results of operations, cash flows and liquidity. Political factors include, but are not limited to, taxation, nationalization, inflation, government instability, civil unrest, increased regulation and quotas, tariffs and other protectionist measures.

Our Flat-Rolled and Tubular segments may also be particularly impacted by unfavorable market conditions in the oil and gas industries. Declines in oil prices, and the correlating reduction in drilling activity, as well as high levels of inventory in the supply chain, may reduce demand for tubular products and could have adverse impacts on our results of operations and cash flows.

Additionally, we are also exposed to risks associated with the business success and creditworthiness of our suppliers and customers. If our customers or suppliers are negatively impacted by a slowdown in economic markets, we may face the reduction, delay or cancellation of customer orders, delays or interruptions of the supply of raw materials, and bankruptcy of customers or suppliers. The occurrence of any of these events may adversely affect our business, results of operations, financial condition and cash flows.

Shortages of skilled labor, increased labor costs, or our failure to attract and retain other highly qualified personnel in the future could disrupt our operations and adversely affect our financial results.

We depend on skilled labor for the manufacture of our products. Our continued success depends on the active participation of our key employees. Some of our facilities are located in areas where demand for skilled labor often exceeds supply. Shortages of some types of skilled labor, such as electricians and qualified maintenance technicians, could restrict our ability to maintain or increase production rates, lead to production inefficiencies and increase our labor costs. Our shift to the "best of both" strategy would also require a set of job skills that is different from our prior needs. The competitive nature of the labor markets in which we operate, the cyclical nature of the steel industry and the resulting employment needs increase our risk of not being able to recruit, train and retain the employees we require at efficient costs and on reasonable terms, particularly when the economy expands, production rates are high or competition for such skilled labor increases. Many companies, including U. S. Steel, have had employee lay-offs as a result of reduced business activities in an industry downturn. The loss of our key people or our inability to attract new key employees could adversely affect our operations. Additionally, layoffs or other adverse actions could result in an adverse relationship with our workforce or third party labor providers. If we are unable to recruit, train and retain adequate numbers of qualified employees and third party labor providers on a timely basis or at a reasonable cost or on reasonable terms, our business and results of operations could be adversely affected.

Our 2018 Labor Agreements with the USW contain provisions that may impact certain business activities.

Our 2018 Labor Agreements with the USW contain provisions that grant the USW a limited right to bid on the Company's sale of a facility (or sale of a controlling interest in an entity owning a facility) covered by the 2018 Labor Agreements, excluding public equity offerings and/or the transfer of assets between U. S. Steel and its wholly owned subsidiaries. These agreements also require a minimum level of capital expenditures (subject to approval of the Board of Directors) to maintain the competitive status of the covered facilities, and place certain limited restrictions on our ability to replace product produced at a covered facility with product produced at other than Company facilities or affiliates or U.S. or Canadian facilities with employee protections similar to the protections found in the 2018 Labor Agreements when the Company is operating covered facilities below capacity. These provisions could favorably or unfavorably impact certain business activities including pricing, operating costs, margins, and/or our competitiveness in the marketplace.

A failure of our information technology infrastructure and cybersecurity threats may adversely affect our business operations.

Despite efforts to protect confidential business information, personal data of employees and contractors, and the control systems of manufacturing plants, U. S. Steel systems and those of our third-party service providers have been and may be subject to cyber-attacks or system breaches. System breaches can lead to theft, unauthorized disclosure, modification or destruction of proprietary business data, personally identifiable information (PII), or other sensitive information, and to defective products, production downtime and damage to production assets, with a resulting impact to our reputation, competitiveness and operations. We have experienced cybersecurity attacks that have resulted in unauthorized persons gaining access to our information technology systems and networks, and we could in the future experience similar attacks. To date, no cybersecurity attack has had a material impact on our financial condition, results of operations or liquidity.

While the Company continually works to safeguard our systems and mitigate potential risks, there can be no assurance that such actions will be sufficient to prevent cyber-attacks or security breaches or mitigate all potential risks to our systems, networks and data. The potential consequences of a material cybersecurity attack include reputational damage, litigation with third parties, disruption to our systems, unauthorized release of confidential, personally

identifiable, or otherwise protected information, corruption of data, diminution in the value of our investment in research, development and engineering, and increased cybersecurity protection and remediation costs, which in turn could adversely affect our competitiveness, results of operations and financial condition. The amount of insurance coverage we maintain may be inadequate to cover claims or liabilities resulting from a cybersecurity attack.

We depend on third parties for transportation services, and increases in costs or the availability of transportation may adversely affect our business and operations.

Our business depends on the transportation of a large number of products, both domestically and internationally. We rely primarily on third parties for transportation of the products we manufacture as well as delivery of our raw materials. Any increase in the cost of the transportation of our raw materials or products, as a result of increases in fuel or labor costs, higher demand for logistics services, consolidation in the transportation industry or otherwise, may adversely affect our results of operations as we may not be able to pass such cost increases on to our customers.

If any of these providers were to fail to deliver raw materials to us in a timely manner, we may be unable to manufacture and deliver our products in response to customer demand. In addition, if any of these third parties were to cease operations or cease doing business with us, we may be unable to replace them at a reasonable cost.

In addition, such failure of a third-party transportation provider could harm our reputation, negatively affect our customer relationships and have a material adverse effect on our financial position and results of operations.

Benefits from our "best of both" stockholder value creation strategy and asset revitalization program may be limited or may not be fully realized.

U. S. Steel is pursuing a stockholder value creation strategy focused on delivering an enhanced "best of both" business model that delivers cost and/or capability differentiation for our customers. This includes investing in new assets and technologies to leverage the advantages of integrated and mini mill capabilities. This strategy builds on our asset revitalization program, launched in 2017, which covers investments in our existing assets, and involves investments beyond routine capital and maintenance spending. Asset revitalization projects have delivered, and are expected to deliver, both operational and commercial benefits, but such benefits may be limited to the assets that are revitalized. Business conditions, our ability to implement such initiatives, and factors beyond our control may limit the benefits associated with certain identified projects and limit the economic benefits of our stockholder value creation strategy or asset revitalization program. Our goal remains to deliver high-quality, value-added products on time every time and to collaborate with our customers to develop innovative solutions that address their most challenging needs.

We participate in joint ventures, which may not be successful.

We participate in a number of joint ventures and we may enter into additional joint ventures or other similar arrangements in the future. Our joint venture partners, as well as any future partners, may have interests that are different from ours which could result in conflicting views as to the conduct of the business of the joint venture. In the event that we have a disagreement with a joint venture partner as to the resolution of a particular issue, or as to the management or conduct of the business of the joint venture in general, we may not be able to resolve such disagreement in our favor. In addition, our joint venture partners may, as a result of financial or other difficulties or because of other reasons, be unable or unwilling to fulfill their obligations under the joint venture, such as contributing capital to expansion or maintenance projects or approving dividends or other distributions or payments to us. Any significant downturn or deterioration in the business, financial condition or results of operations of a joint venture could adversely affect our results of operations in a particular period. There can be no assurance that our joint ventures will be beneficial to us.

Financial Risk Factors

Our business requires substantial expenditures for debt service obligations, capital investments, operating leases and maintenance that we may be unable to fund.

We have approximately \$3.6 billion of total debt (see Note 17 to the Consolidated Financial Statements), including \$600 million of outstanding borrowings under our Fifth Amended and Restated Credit Agreement and \$393 million of outstanding borrowings under our USSK Credit Agreement. If our cash flows and capital resources are insufficient to fund our debt service obligations, we may face substantial liquidity problems and may be forced to reduce or delay investments and capital expenditures or to dispose of material assets or operations, or issue additional debt or equity. We may not be able to take such actions, if necessary, on commercially reasonable terms or at all. Our inability to

generate sufficient cash flows to satisfy our debt obligations, or to refinance our indebtedness on commercially reasonable terms or at all, would materially and adversely affect our financial position and results or operations and may place us at a competitive disadvantage with competitors who may have less indebtedness and other obligations or greater access to financing.

Our ability to service or refinance our debt or fund investments and capital expenditures required to maintain or expand our business operations depends on our financial condition and operating performance, which are subject to prevailing economic and competitive conditions and to certain financial, business, legislative, regulatory and other factors beyond our control. We may not be able to maintain a level of cash flows from operating activities sufficient to permit us to satisfy our liquidity needs. In addition, the availability under our Fifth Amended and Restated Credit Agreement may be reduced if we have insufficient collateral, or if we do not meet a customary fixed charge coverage test. Availability under the USSK Credit Agreement could be limited if USSK does not meet certain financial covenants. See the Liquidity section in "Item 7. Management's Discussion and Analysis" and Note 17 to the Consolidated Financial Statements for further details.

Our business and execution of our strategic priorities require us to raise capital which could be difficult if we face depressed market conditions, lower earnings or credit rating downgrades by ratings agencies.

Executing on our strategic priorities will require us to raise additional capital, which we may seek through debt financing or the public or private sale of debt or equity securities, or a combination of the foregoing. We cannot guarantee that we will be able to secure sources of financing at a particular time or on particular or favorable terms. Additionally, we may seek to raise funds through the divestiture or monetization of certain non-core assets. We cannot be assured that we will be able to find an attractive or acceptable partner for such transactions, or if we do, that we will be able to reach agreement on favorable or mutually satisfactory terms. Any decline in our operating results or downgrades in our credit ratings may make raising capital or entering into any business transaction more difficult, lead to reductions in the availability of credit or increased cost of credit, adversely affect the terms of future borrowings, and may limit our ability to take advantage of potential business opportunities.

We have significant retiree health care, retiree life insurance and pension plan costs, which may negatively affect our results of operations and cash flows.

We maintain retiree health care and life insurance and defined benefit pension plans covering many of our domestic employees and former employees upon their retirement. Some of these benefit plans are not fully funded, and thus will require cash funding in future years. Minimum contributions to domestic qualified pension plans (other than contributions to the Steelworkers Pension Trust (SPT) described below) are regulated under the Employee Retirement Income Security Act of 1974 (ERISA) and the Pension Protection Act of 2006 (PPA).

The level of cash funding for our defined benefit pension plans in future years depends upon various factors, including voluntary contributions that we may make, future pension plan asset performance, actual interest rates under the law, and the impacts of business acquisitions or divestitures, union negotiated benefit changes and future government regulations, many of which are not within our control. In addition, assets held by the trusts for our pension plan and our trust for retiree health care and life insurance benefits are subject to the risks, uncertainties and variability of the financial markets. Future funding requirements could also be materially affected by differences between expected and actual returns on plan assets, actuarial data and assumptions relating to plan participants, the discount rate used to measure the pension obligations and changes to regulatory funding requirements. See "Item 7. Management's Discussion and Analysis" and Note 18 to the Consolidated Financial Statements for a discussion of assumptions and further information associated with these benefit plans.

U. S. Steel contributes to a domestic multiemployer defined benefit pension plan, the SPT, for USW-represented employees formerly employed by National Steel and represented employees hired after May 2003. We have legal requirements for future funding of this plan should the SPT become significantly underfunded or we decide to withdraw from the plan. Either of these scenarios may negatively impact our future cash flows. The 2018 Labor Agreements increased the contribution rate for most steelworker employees. Collectively bargained company contributions to the plan could increase further as a result of future changes agreed to by the Company and the USW.

The accounting treatment of equity method investments and other long-lived assets could result in future asset impairments, which would reduce our earnings.

We periodically test our equity method investments and other long-lived assets to determine whether their estimated fair value is less than their value recorded on our balance sheet. The results of this testing for potential impairment may be adversely affected by uncertain market conditions for the global steel industry and general economic conditions. If we determine that the fair value of any of these assets is less than the value recorded on our balance sheet, and, in the case of equity method investments the decline is other than temporary, we would likely incur a non-cash impairment loss that would negatively impact our results of operations.

We are subject to foreign currency risks, which may negatively impact our profitability and cash flows.

The financial condition and results of operations of USSE are reported in euros and then translated into U.S. dollars at the applicable exchange rate for inclusion in our financial statements. The appreciation of the U.S. dollar against the euro negatively affects our Consolidated Results of Operations. International cash requirements have been and in the future may be funded by intercompany loans, which may create intercompany monetary assets and liabilities in currencies other than the functional currencies of the entities involved, which can have a non-cash impact on income when they are remeasured at the end of each period.

In addition, foreign producers, including foreign producers of subsidized or unfairly traded steel with foreign currency denominated costs may gain additional competitive advantages or target our home markets if the U.S. dollar or euro exchange rates strengthen relative to those producers' currencies. Volatility in the markets and exchange rates for foreign currencies and contracts in foreign currencies could have a significant impact on our reported financial results and condition.

Financial regulatory frameworks introduced by U.S. and EU regulators may limit our financial flexibility or increase our costs.

We use swaps, forward contracts and similar agreements to mitigate our exposure to volatility, which entails a variety of risks. The Commodity Future Trading Commission's Dodd Frank and the EU's European Market Infrastructure Regulation and other government agencies' regulatory frameworks can limit the Company's ability to hedge interest rate, foreign exchange (FX), or commodity pricing exposures, which could expose us to increased economic risk. These frameworks may introduce additional compliance costs or liquidity requirements. Some counterparties may cease hedging as a result of increased regulatory cost burdens, which in turn may reduce U. S. Steel's ability to hedge its interest rate, FX, or commodity exposures.

We are a party to various legal proceedings, the resolution of which could negatively affect our profitability and cash flows in a particular period.

We are involved at any given time in various litigation matters, including administrative and regulatory proceedings, governmental investigations, environmental matters, and commercial disputes. Our profitability and cash flows in a particular period could be negatively affected by an adverse ruling or settlement in any legal proceeding or investigation that is pending against us or filed against us in the future. While we believe that we have taken appropriate actions to mitigate and reduce these risks, due to the nature of our operations, these risks will continue to exist and additional legal proceedings or investigations may arise from time to time.

Additionally, we may be subject to product liability claims that may have an adverse effect on our financial position, results of operations and cash flows. Events such as well failures, line pipe leaks, blowouts, bursts, fires and product recalls could result in claims that our products or services were defective and caused death, personal injury, property damage or environmental pollution. The insurance we maintain may not be adequate, available to protect us in the event of a claim, or its coverage may be limited, canceled or otherwise terminated, or the amount of our insurance may be less than the related impact on our enterprise value after a loss. We establish reserves based on our assessment of contingencies, including contingencies for claims asserted against us in connection with litigation, arbitrations and environmental issues. Adverse developments in litigation, arbitrations, environmental issues or other legal proceedings may affect our assessment and estimates of the loss contingency recorded as a reserve and require us to make payments in excess of our reserves, which could negatively affect our operations, financial results and cash flows. See "Item 3. Legal Proceedings" and Note 26 to the Consolidated Financial Statements for further details.

Regulatory Risk Factors

Compliance with existing and new environmental regulations, environmental permitting and approval requirements may result in delays or other adverse impacts on planned projects, our results of operations and cash flows.

Steel producers in the U.S., along with their customers and suppliers, are subject to numerous federal, state and local laws and regulations relating to the protection of the environment. These laws and regulations concern the generation, storage, transportation, disposal, emission or discharge of pollutants, contaminants and hazardous substances into the environment, the reporting of such matters, and the general protection of public health and safety, natural resources, wildlife and the environment. Steel producers in the EU are subject to similar laws. These laws continue to evolve and are becoming increasingly stringent. The ultimate impact of complying with such laws and regulations is not always clearly known or determinable because regulations under some of these laws have not yet been promulgated or are undergoing revision. Additionally, compliance with certain of these laws and regulations, such as the CAA and similar state and local requirements, governing SO₂ and other emissions, could result in substantially increased capital requirements and operating costs. Compliance with current or future regulations could entail substantial costs for emission based systems, and could have a negative impact on our results of operations and cash flows. Failure to comply with the requirements may result in administrative, civil and criminal penalties, revocation of permits to conduct business or construct certain facilities, substantial fines or sanctions, enforcement actions (including orders limiting our operations or requiring corrective measures), natural resource damages claims, cleanup and closure costs, and third-party claims for property damage and personal injury as a result of violations of, or liabilities under, environmental laws, regulations, codes and common law. The amount and timing of environmental expenditures is difficult to predict, and, in some cases, liability may be imposed without regard to contribution or to whether we knew of, or caused, the release of hazardous substances.

In addition, the Company must obtain, maintain and comply with numerous permits, leases, approvals, consents and certificates from various governmental authorities in connection with the construction and operation of new production facilities or modifications to existing facilities. In connection with such activities, the Company may need to make significant capital and operating expenditures to detect, repair and/or control air emissions, to control water discharges or to perform certain corrective actions to meet the conditions of the permits issued pursuant to applicable environmental laws and regulations.

There can be no assurance that future approvals, licenses and permits will be granted or that we will be able to maintain and renew the approvals, licenses and permits we currently hold. Failure to do so could have a material adverse effect on our results of operations and cash flows. Furthermore, compliance with the environmental permitting and approval requirements may be costly and time consuming and could result in delays or other adverse impacts on planned projects, our results of operations and cash flows.

We have significant environmental remediation costs that negatively affect our results of operations and cash flows.

Some of U. S. Steel's current and former facilities were in operation before 1900. Hazardous materials associated with those facilities have been and may continue to be released at current or former operating sites or delivered to sites operated by third parties.

U. S. Steel is involved in numerous remediation projects at currently operating facilities, facilities that have been closed or sold to unrelated parties and other sites where material generated by U. S. Steel was deposited. In addition, there are numerous other former operating or disposal sites that could become the subject of remediation, which may negatively affect our results of operations and cash flows.

Increasing pressure to reduce greenhouse gas (GHG) emissions from steelmaking operations to comply with EU regulations as well as societal expectations could increase costs to manufacture future materials or reduce the amount of materials being manufactured.

Iron and steel producers around the world are facing mounting pressure to reduce greenhouse gas emissions from operations. The majority of greenhouse gas emissions from the production of iron and steel are caused by the combustion of fossil fuels, the use of electrical energy, and the use of coal, lime, and iron ore as feedstock. The two main production processes are the integrated route of blast furnace ironmaking in combination with basic oxygen furnace steelmaking (BOF) and the alternative route of electric arc furnace steelmaking. Both routes generate greenhouse gas emissions with the latter process, involving the electric arc melting of a majority of steel scrap, generating less than half that, or less, of the traditional integrated steelmaking process.

Additionally, the European Union has established aggressive CO₂ reduction targets of 40% by 2030, against a 1990 baseline, and full carbon neutrality by 2050. An emission trading system (ETS) was established to encourage compliance with set emissions reduction targets. These aggressive targets require drastic measures within the steel industry to comply. The price of CO₂ emission allowances is currently at 24 euro per metric ton and forecasts call for potential price increase to 40 euro per metric ton. The transition to EAF technology, as well as incremental gains in energy reduction, use of renewable energy and continued asset and process improvements (including EAF steelmaking), are expected to reduce our GHG footprint. However, the development of breakthrough technologies are likely required to continue the path of low to no carbon footprint in the steel industry. Implementation of new technologies will most likely require significant amounts of capital and an abundant source of low cost hydrogen and/or green power, most likely leading to an increase in the cost of future steelmaking. In addition, the cost of emission allowances is forecast to increase, along with the number of allowances decreasing in the next several years.

Our activities are subject to complex regulatory and compliance frameworks.

The need to comply with complex laws and regulations that apply to our international activities, including, but not limited to, the Foreign Corrupt Practices Act, economic sanctions, and other import and export laws and regulations, may increase our cost of doing business and expose the Company and its employees to elevated risk. The Company's subsidiaries and joint ventures may face similar risks. Although we have implemented policies and processes designed to comply with these laws and regulations, failure by our employees, contractors, or agents to comply with these laws and regulations can result in possible administrative, civil, or criminal liability, as well as reputational harm to the Company and its employees.

New and changing data privacy laws and cross-border transfer requirements could have a negative impact on our business and operations.

Our business depends on the processing and transfer of data between our affiliated entities, to and from our business partners, and with third-party service providers, which may be subject to data privacy laws and cross-border transfer restrictions. In North America and Europe, new legislation and changes to the requirements or applicability of existing laws, as well as evolving standards and judicial and regulatory interpretations of such laws, may impact U. S. Steel's ability to effectively process and transfer data across borders in support of our business operations and/or keep pace with specific requirements regarding safeguarding personal information. While U. S. Steel takes steps to comply with these legal requirements, non-compliance could lead to possible administrative, civil, or criminal liability, as well as reputational harm to the Company and its employees. For example, the European Union's General Data Protection Regulation (GDPR), which went into effect in May 2018, created a range of new compliance obligations for subject companies and increases financial penalties for non-compliance. The costs of compliance with privacy laws such as the GDPR and the potential for fines and penalties in the event of a breach may have a negative impact on our business and operations.

Item 1B. UNRESOLVED STAFF COMMENTS

None.

Item 2. PROPERTIES

The following tables list U. S. Steel's main properties, their locations and their products and services:

North American Operations			
Property	Segment	Location	Products and Services
Gary Works	Flat-Rolled	Gary, Indiana	Slabs; Sheets; Tin mill; Strip mill plate
Midwest Plant	Flat-Rolled	Portage, Indiana	Sheets; Tin mill
East Chicago Tin ^(d)	Flat-Rolled	East Chicago, Indiana	Sheets; Tin mill
Granite City Works ^(a)	Flat-Rolled	Granite City, Illinois	Slabs; Sheets
Great Lakes Works	Flat-Rolled	Ecorse and River Rouge, Michigan	Slabs; Sheets
Great Lakes Works EGL at Dearborn ^(d)	Flat-Rolled	Dearborn, Michigan	Galvanized sheets
Mon Valley Works			
Irvin Plant	Flat-Rolled	West Mifflin, Pennsylvania	Sheets
Edgar Thomson Plant	Flat-Rolled	Braddock, Pennsylvania	Slabs
Fairless Plant	Flat-Rolled	Fairless Hills, Pennsylvania	Galvanized sheets
Clairton Plant	Flat-Rolled	Clairton, Pennsylvania	Coke
Southern Coatings			
Fairfield Sheet	Flat-Rolled	Fairfield, Alabama	Galvanized Sheets
Double G Coatings Company, L.P. ^(b)	Flat-Rolled	Jackson, Mississippi	Galvanized and Galvalume® sheets
Chrome Deposit Corporation ^(b)	Flat-Rolled	Various	Roll processing
Feralloy Processing Company ^(b)	Flat-Rolled	Portage, Indiana	Steel processing
PRO-TEC Coating Company ^(b)	Flat-Rolled	Leipsic, Ohio	Galvanized and high strength annealed sheets
USS-POSCO Industries ^(b)	Flat-Rolled	Pittsburg, California	Sheets; Tin mill
Worthington Specialty Processing ^(b)	Flat-Rolled	Jackson, Canton and Taylor, Michigan	Steel processing
Keetac Iron Ore Operations	Flat-Rolled	Keewatin, Minnesota	Iron ore pellets
Minntac Iron Ore Operations	Flat-Rolled	Mt. Iron, Minnesota	Iron ore pellets
Hibbing Taconite Company ^(b)	Flat-Rolled	Hibbing, Minnesota	Iron ore pellets
Fairfield Tubular Operations	Tubular	Fairfield, Alabama	Seamless Tubular Pipe
Lorain Tubular Operations	Tubular	Lorain, Ohio	Seamless Tubular Pipe
Lone Star Tubular	Tubular	Lone Star, Texas	Welded Tubular Pipe
Offshore Operations	Tubular	Houston, Texas	Tubular threading, inspection, accessories and storage services and premium connections
Tubular Processing ^(c)	Tubular	Houston, Texas	Tubular processing
Wheeling Machine Products	Tubular	Pine Bluff, Arkansas and Hughes Springs, Texas	Tubular couplings
Patriot Premium Threading Services ^(b)	Tubular	Midland, Texas	Tubular threading, accessories and premium connections
Transtar, LLC	Other Businesses	Alabama, Indiana, Michigan, Ohio, Pennsylvania, Texas	Railroad operations
Big River Steel ^(b)	Other Businesses	Osceola, Arkansas	Sheets; Coated Sheets; Electrical

^(a) Hot end idled in 2015, restarted in the 2nd quarter of 2018, ^(b) Equity investee, ^(c) Temporarily Idled & ^(d) Indefinitely Idled

Property	Segment	Location	Products and Services
U. S. Steel Košice	USSE	Košice, Slovakia	Slabs; Sheets; Tin mill; Strip mill plate; Tubular; Coke; Refractories

U. S. Steel and its predecessors have owned their properties for many years with no material adverse title claims asserted. In the case of Great Lakes Works, Granite City Works, the Midwest Plant and Keetac iron ore operations, U. S. Steel or its subsidiaries are the beneficiaries of bankruptcy laws and orders providing that properties are held free and clear of past liens and liabilities. In addition, U. S. Steel or its predecessors obtained title insurance, local counsel opinions or similar protections when significant properties were initially acquired or since acquisition.

At the Midwest Plant in Indiana, U. S. Steel has a supply agreement for various utility services with a company that owns a cogeneration facility located on U. S. Steel property. The Midwest Plant agreement expires in 2028.

U. S. Steel leases its headquarters office space in Pittsburgh, Pennsylvania.

For property, plant and equipment additions, including finance leases, see "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations – Financial Condition, Cash Flows and Liquidity – Cash Flows" and Note 13 to the Consolidated Financial Statements.

Item 3. LEGAL PROCEEDINGS

U. S. Steel is the subject of, or a party to, a number of threatened or pending legal actions, contingencies and commitments involving a variety of matters, including laws and regulations relating to the environment, certain of which are discussed in Note 26 to the Consolidated Financial Statements. The ultimate resolution of these contingencies could, individually or in the aggregate, be material to the U. S. Steel financial statements. However, management believes that U. S. Steel will remain a viable and competitive enterprise even though it is possible that these contingencies could be resolved unfavorably to U. S. Steel.

General Litigation

On April 11, 2017, there was a process waste water release at our Midwest Plant (Midwest) in Portage, Indiana, that impacted a water outfall that discharges to Burns Waterway near Lake Michigan. U. S. Steel identified the source of the release and made the necessary repairs. We determined that all repairs were safely working as intended and, on April 14, 2017, resumed operations in a controlled, phased and highly monitored approach with extensive input from participating government agencies. The Company has since implemented substantial operational, process and notification improvements at Midwest. The Company has been presented with cost reimbursements, loss of use and penalty requests from the involved governmental agencies. In January of 2018, The Surfrider Foundation and the City of Chicago initiated suits in the Northern District of Indiana alleging Clean Water Act (CWA) and Permit violations at Midwest. On April 2, 2018, the U.S. EPA and the State of Indiana initiated a separate action against the Company and lodged a Consent Decree negotiated between U. S. Steel and the relevant governmental agencies consisting of all material terms to resolve the CWA and National Pollutant Discharge Elimination System violations at the Midwest Plant. A public comment period for the Consent Decree ensued. The suits that the Surfrider Foundation and the City of Chicago filed are currently stayed. The Surfrider Foundation and the City of Chicago also filed motions, which were granted, to intervene in the Consent Decree case. The United States Department of Justice (DOJ) filed a revised Consent Decree and a motion with the Court to enter the Consent Decree as final on November 20, 2019. Surfrider Foundation, City of Chicago and other non-governmental organizations filed objections to the revised Consent Decree. The DOJ and U. S. Steel made filings in support of the revised Consent Decree.

On November 30, 2018, the Minnesota Pollution Control Agency (MPCA) issued a new Water Discharge Permit for the Minntac Tailings Basin waters. The Permit contains new sulfate limitations applicable to water in the Tailings Basin and groundwater flowing from U. S. Steel's property. The MPCA also acted on the same date, denying the Company's requests for variances from ground and surface water standards and request for a contested case hearing. U. S. Steel filed appeals with the Minnesota Court of Appeals challenging the actions taken by the MPCA. Separate appeals were filed by a Minnesota Native American Tribe (Fond du Lac Band) and a nonprofit environmental group (Water Legacy).

All cases were consolidated. On December 9, 2019, the court issued a favorable ruling to U. S. Steel, removing the sulfate limitations for the Tailings Basin and groundwater. The opposing parties filed appeals with the Minnesota Supreme Court on January 8, 2020 which is currently being briefed.

On October 2, 2017, an Amended Shareholder Class Action Complaint was filed in Federal Court in the Western District of Pennsylvania consolidating previously-filed actions. Separately, five related shareholder derivative lawsuits were filed in State and Federal courts in Pittsburgh, Pennsylvania and the Delaware Court of Chancery. The underlying consolidated class action lawsuit alleges that U. S. Steel, certain current and former officers, an upper level manager of the Company and the financial underwriters who participated in the August 2016 secondary public offering of the Company's common stock (collectively, Defendants) violated federal securities laws in making false statements and/or failing to discover and disclose material information regarding the financial condition of the Company. The lawsuit claims that this conduct caused a prospective class of plaintiffs to sustain damages during the period from January 27, 2016 to April 25, 2017 as a result of the prospective class purchasing the Company's common stock at artificially inflated prices and/or suffering losses when the price of the common stock dropped. The derivative lawsuits generally make the same allegations against the same officers and also allege that certain current and former members of the Board of Directors failed to exercise appropriate control and oversight over the Company and were unjustly compensated. The plaintiffs seek to recover losses that were allegedly sustained. The class action Defendants moved to dismiss plaintiffs' claims. On September 29, 2018 the Court ruled on those motions granting them in part and denying them in part. On March 18, 2019, the plaintiffs withdrew the claims against the Defendants related to the 2016 secondary offering. As a result, the underwriters are no longer parties to the case. The Company and the individual defendants are vigorously defending the remaining claims. On December 31, 2019, the Court granted Plaintiffs' motion to certify the proceeding as a class action. The Company is pursuing an appeal of that decision.

Asbestos Litigation

As of December 31, 2019, U. S. Steel was a defendant in approximately 800 active cases involving approximately 2,390 plaintiffs. The vast majority of these cases involve multiple defendants. About 1,540, or approximately 65 percent, of these plaintiff claims are currently pending in jurisdictions which permit filings with massive numbers of plaintiffs. As of December 31, 2018, U. S. Steel was a defendant in approximately 755 cases involving approximately 2,320 plaintiffs. Based upon U. S. Steel's experience in such cases, it believes that the actual number of plaintiffs who ultimately assert claims against U. S. Steel will likely be a small fraction of the total number of plaintiffs.

The following table shows the activity with respect to asbestos litigation:

Period ended	Opening Number of Claims	Claims Dismissed, Settled and Resolved ^(a)	New Claims	Closing Number of Claims
December 31, 2017	3,340	275	250	3,315
December 31, 2018	3,315	1,285	290	2,320
December 31, 2019	2,320	195	265	2,390

(a) The period ending December 31, 2018 includes approximately 1,000 dismissed cases previously pending in the State of Texas.

Historically, asbestos-related claims against U. S. Steel fall into three groups: (1) claims made by persons who allegedly were exposed to asbestos on the premises of U. S. Steel facilities; (2) claims made by persons allegedly exposed to products manufactured by U. S. Steel; and (3) claims made under certain federal and maritime laws by employees of former operations of U. S. Steel.

The amount U. S. Steel accrues for pending asbestos claims is not material to U. S. Steel's financial condition. However, U. S. Steel is unable to estimate the ultimate outcome of asbestos-related claims due to a number of uncertainties, including: (1) the rates at which new claims are filed, (2) the number of and effect of bankruptcies of other companies traditionally defending asbestos claims, (3) uncertainties associated with the variations in the litigation process from jurisdiction to jurisdiction, (4) uncertainties regarding the facts, circumstances and disease process with each claim, and (5) any new legislation enacted to address asbestos-related claims.

Further, U. S. Steel does not believe that an accrual for unasserted claims is required. At any given reporting date, it is probable that there are unasserted claims that will be filed against the Company in the future. In 2018 and 2019, the Company engaged an outside valuation consultant to assist in assessing its ability to estimate an accrual for unasserted claims. This assessment was based on the Company's settlement experience, including recent claims trends. The analysis focused on settlements made over the last several years as these claims are likely to best represent future claim characteristics. After review by the valuation consultant and U. S. Steel management, it was determined that the Company could not estimate an accrual for unasserted claims.

Despite these uncertainties, management believes that the ultimate resolution of these matters will not have a material adverse effect on U. S. Steel's financial condition.

ENVIRONMENTAL PROCEEDINGS

The following is a summary of the proceedings of U. S. Steel that were pending or contemplated as of December 31, 2019, under federal and state environmental laws. Information about specific sites where U. S. Steel is or has been engaged in significant clean up or remediation activities is also summarized below. Except as described herein, it is not possible to accurately predict the ultimate outcome of these matters.

CERCLA Remediation Sites

Claims under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) have been raised with respect to the cleanup of various waste disposal and other sites. Under CERCLA, potentially responsible parties (PRPs) for a site include current owners and operators, past owners and operators at the time of disposal, persons who arranged for disposal of a hazardous substance at a site, and persons who transported a hazardous substance to a site. CERCLA imposes strict and joint and several liabilities. Because of various factors, including the

ambiguity of the regulations, the difficulty of identifying the responsible parties for any particular site, the complexity of determining the relative liability among them, the uncertainty as to the most desirable remediation techniques, and the amount of damages and cleanup costs and the time period during which such costs may be incurred, we are unable to reasonably estimate U. S. Steel's ultimate liabilities under CERCLA.

As of December 31, 2019, U. S. Steel has received information requests or been identified as a PRP at a total of seven CERCLA sites, three of which have liabilities that have not been resolved. Based on currently available information, which is in many cases preliminary and incomplete, management believes that U. S. Steel's liability for CERCLA cleanup and remediation costs at the other four sites will be between \$100,000 and \$1 million for three of the sites, and over \$5 million for one site as described below.

Duluth Works

The former U. S. Steel Duluth Works site was placed on the National Priorities List under CERCLA in 1983 and on the State of Minnesota's Superfund list in 1984. Liability for environmental remediation at the site is governed by a Response Order by Consent executed with the MPCA in 1985 and a Record of Decision signed by MPCA in 1989. U. S. Steel has partnered with the Great Lakes National Program Office (GLNPO) of U.S. EPA Region 5 to address contaminated sediments in the St. Louis River Estuary and several other Operable Units that could impact the Estuary if not addressed. An amendment to the Project Agreement between U. S. Steel and GLNPO was executed during the second quarter of 2018 to recognize the costs associated with implementing the proposed remedial plan at the site.

While work continues on completion of the remedial design, permitting and educating the public and key stakeholders on the details of the plan, there has been no material change in the status of the project during the twelve months ended December 31, 2019. Additional study, investigation, design, oversight costs, and implementation of U. S. Steel's preferred remedial alternatives on the upland property and Estuary are currently estimated as of December 31, 2019 at approximately \$45 million.

Resource Conservation Recovery Act (RCRA) and Other Remediation Sites

U. S. Steel may be liable for remediation costs under other environmental statutes, both federal and state, or where private parties are seeking to impose liability on U. S. Steel for remediation costs through discussions or litigation. There are 18 such sites where remediation is being sought involving amounts in excess of \$100,000. Based on currently available information, which is in many cases preliminary and incomplete, management believes that liability for cleanup and remediation costs in connection with eight sites have potential costs between \$100,000 and \$1 million per site, five sites may involve remediation costs between \$1 million and \$5 million per site and five sites are estimated to or could have, costs for remediation, investigation, restoration or compensation in excess of \$5 million per site.

For more information on the status of remediation activities at U. S. Steel's significant sites, see the discussions related to each site below.

Gary Works

On October 23, 1998, the U.S. EPA issued a final Administrative Order on Consent (Order) addressing Corrective Action for Solid Waste Management Units (SWMU) throughout Gary Works. This Order requires U. S. Steel to perform a RCRA Facility Investigation (RFI), a Corrective Measures Study (CMS) and Corrective Measure Implementation. Evaluations are underway at six groundwater areas on the east side of the facility and it is likely that corrective measures will be required, but it is not possible at this time to define a scope or estimate costs for what may be required by the U.S. EPA. Until the remaining Phase I work and Phase II field investigations are completed, it is not possible to assess what additional expenditures will be necessary for Corrective Action projects at Gary Works. In total, the accrued liability for Corrective Action projects is approximately \$25 million as of December 31, 2019, based on our current estimate of known remaining costs. Significant additional costs associated with the six groundwater areas at this site are possible and are referenced in Note 26 to the Consolidated Financial Statements "Contingencies and Commitments - Environmental Matters - Remediation Projects - Projects with Ongoing Study and Scope Development."

Geneva Works

At U. S. Steel's former Geneva Works, liability for environmental remediation, including the closure of three hazardous waste impoundments and facility-wide corrective action, has been allocated between U. S. Steel and the current property owner pursuant to an agreement and a permit issued by the Utah Department of Environmental Quality

(UDEQ). Having completed the investigation on a majority of the remaining areas identified in the permit, U. S. Steel has determined the most effective means to address the remaining impacted material is to manage those materials in a previously approved on-site Corrective Action Management Unit (CAMU). U. S. Steel awarded a contract for the implementation of the CAMU project during the fourth quarter of 2018. Construction, waste stabilization and placement along with closure of the CAMU are scheduled to be complete in 2020. U. S. Steel has an accrued liability of approximately \$48 million as of December 31, 2019, for our estimated share of the remaining costs of remediation.

USS-POSCO Industries (UPI)

A joint venture in Pittsburg, California between subsidiaries of U. S. Steel and POSCO, UPI's facilities were previously owned and operated solely by U. S. Steel which retains primary responsibility for the existing environmental conditions. U. S. Steel continues to monitor the impacts of the remedial plan implemented in 2016 to address groundwater impacts from trichloroethylene at SWMU 4. Evaluations continue for the SWMUs known as the Northern Boundary Group and it is likely that corrective measures will be required, but it is not possible at this time to define a scope or estimate costs for what may be required by the California Department of Toxic Substances Control. As such, there has been no material change in the status of the project during the twelve months ended December 31, 2019. As of December 31, 2019, approximately \$1 million has been accrued for ongoing environmental studies, investigations and remedy monitoring. Significant additional costs associated with this site are possible and are referenced in Note 26 to the Consolidated Financial Statements "Contingencies and Commitments - Environmental Matters - Remediation Projects - Projects with Ongoing Study and Scope Development."

Fairfield Works

A consent decree was signed by U. S. Steel, the U.S EPA and the U.S. Department of Justice and filed with the United States District Court for the Northern District of Alabama (United States of America v. USX Corporation) in December 1997. In accordance with the consent decree, U. S. Steel initiated a RCRA corrective action program at the Fairfield Works facility. The Alabama Department of Environmental Management, with the approval of the U.S EPA, assumed primary responsibility for regulation and oversight of the RCRA corrective action program at Fairfield Works. While work continues on different aspects of the program, there has been no material change in the status of the project during the twelve months ended December 31, 2019. In total, the accrued liability for remaining work under the Corrective Action Program, was approximately \$245,000 at December 31, 2019. Significant additional costs associated with this site are possible and are referenced in Note 26 to the Consolidated Financial Statements "Contingencies and Commitments - Environmental Matters - Remediation Projects - Projects with Ongoing Study and Scope Development."

Fairless Plant

In April 1993, U. S. Steel entered into a consent order with the U.S. EPA pursuant to RCRA, under which U. S. Steel would perform Interim Measures (IM), an RFI and CMS at our Fairless Plant. A Phase I RFI Final Report was submitted in September of 1997. With U.S EPA's agreement, in lieu of conducting subsequent phases of the RFI and the CMS, U. S. Steel has been working through the Pennsylvania Department of Environmental Protection Act 2 Program to characterize and remediate facility parcels for redevelopment. While work continues on these items, there has been no material change in the status of the project during the twelve months ended December 31, 2019. As of December 31, 2019, the accrued liability to maintain the interim measures, and clear properties through the Act 2 process is approximately \$44,000. Significant additional costs associated with this site are possible and are referenced in Note 26 to the Consolidated Financial Statements "Contingencies and Commitments - Environmental Matters - Remediation Projects - Projects with Ongoing Study and Scope Development."

Lorain Tubular Operations

In September 2006, U. S. Steel and the Ohio Environmental Protection Agency (OEPA) commenced discussions about RCRA Corrective Action at Lorain Tubular Operations. A Phase I RFI on the identified SWMUs and Areas of Contamination was submitted in March 2012. While discussions continue with OEPA on drafting the Statement of Basis identifying potential remedies to address areas documented in the Phase II RFI, there has been no material change in the status of the project during the twelve months ended December 31, 2019. As of December 31, 2019, costs to complete additional projects are estimated to be approximately \$79,000. Significant additional costs associated with this site are possible and are referenced in Note 26 to the Consolidated Financial Statements "Contingencies and Commitments - Environmental Matters - Remediation Projects - Projects with Ongoing Study and Scope Development."

Joliet Works

The 50-acre parcel at the former Joliet Works is enrolled in the Illinois Environmental Protection Agency's (IEPA) voluntary Site Remediation Program (the Program). The Program requires investigation and establishment of cleanup objectives followed by submission/approval of a Remedial Action Plan to meet those objectives. The 50-acre parcel was divided into four subareas with remedial activities completed in 2015 for three of the subareas. While work continues to define the requirements for further investigation of the remaining subarea, there has been no material change in the status of the project during the twelve months ended December 31, 2019. U. S. Steel has an accrued liability of \$266,000 as of December 31, 2019. Significant additional costs associated with this site are possible and are referenced in Note 26 to the Consolidated Financial Statements "Contingencies and Commitments - Environmental Matters - Remediation Projects - Projects with Ongoing Study and Scope Development."

Cherryvale (KS) Zinc

In April 2003, U. S. Steel and Salomon Smith Barney Holdings, Inc. (SSB) entered into a Consent Order with the Kansas Department of Health & Environment (KDHE) concerning a former zinc smelting operation in Cherryvale, Kansas. Remediation of the site proper was essentially completed in 2007. The Consent Order was amended on May 3, 2013, to require investigation (but not remediation) of potential contamination beyond the boundary of the former zinc smelting operation. On November 22, 2016, KDHE approved a State Cooperative Final Agency Decision Statement that identified the remedy selected to address potential contamination beyond the boundary of the former zinc smelting site. The Removal Action Design Plan was approved during the second quarter of 2018. The Waste Deposition Area design and the Interim Risk Management Plan (which includes institutional controls) were approved by KDHE during the fourth quarter of 2018. An amended consent order for remediation was signed in May 2019 and a remediation contract was executed in June 2019. U. S. Steel has an accrued liability of approximately \$10 million as of December 31, 2019, for our estimated share of the cost of remediation.

South Works

On August 29, 2017, U. S. Steel was notified by the U.S. Coast Guard of a sheen on the water in the North Vessel Slip at our former South Works in Chicago, Illinois. U. S. Steel has been working with the IEPA under their voluntary Site Remediation Program since 1993 to evaluate the condition of the property including the North Vessel Slip. The result of this cooperative effort has been the issuance of a series of "No Further Remediation" (NFR) notices to U. S. Steel including one specific to the North Vessel Slip. U. S. Steel has notified the IEPA of the potential changed condition and is working closely with the IEPA and the U. S. Coast Guard to determine the source of the sheen and options to address the issue. U. S. Steel has an accrued liability of \$174,000 as of December 31, 2019.

Air Related Matters

Great Lakes Works

In June 2010, the EPA significantly lowered the primary (NAAQS) for SO₂ from 140 ppb on a 24-hour basis to an hourly standard of 75 ppb. Based upon the 2009-2011 ambient air monitoring data, the U.S. EPA designated the area in which Great Lakes Works is located as nonattainment with the 2010 SO₂ NAAQS.

As a result, pursuant to the CAA, the Michigan Department of Environment, Great Lakes and Energy (EGLE) was required to submit a SIP to the U.S. EPA that demonstrates that the entire nonattainment area (and not just the monitor) would be in attainment by October 2018 by using conservative air dispersion modeling. To develop the SIP, U. S. Steel

met with EGLE on multiple occasions and had offered reduction plans to EGLE but the parties could not agree to a plan. EGLE, instead promulgated Rule 430 which was solely directed at U. S. Steel. The Company challenged Rule 430 before the Michigan Court of Claims who by Order dated October 4, 2017, granted the Company's motion for summary disposition voiding Rule 430 finding that it violated rule-making provisions of the Michigan Administrative Procedures Act and Michigan Constitution. Since Rule 430 has been invalidated and EGLE's SIP has not been approved, U.S. EPA has indicated that it would promulgate a Federal Implementation Plan (FIP) pursuant to its obligations and authority under the CAA. Because development of the FIP is in the early stages, the impacts of the nonattainment designation to the Company are not estimable at this time.

On January 17, 2019, U. S. Steel and EGLE met to discuss resolution of violations that were alleged to have occurred intermittently in 2017 and 2018 regarding opacity from: the D4 Blast Furnace slag pit, D4 Blast Furnace backdraft stack, B2 Blast Furnace casthouse roof monitor, B2 Blast Furnace backdraft stack, and Basic Oxygen Furnace Shop Roof Monitor; and exceedances of applicable limits at the pickle line. More recently, EGLE advised U. S. Steel that it was assessing a civil penalty of approximately \$380,000 for these alleged violations. U. S. Steel and EGLE continue to negotiate resolution.

Granite City Works

In October 2015, Granite City Works received a Violation Notice from IEPA in which the IEPA alleges that U. S. Steel violated the emission limits for nitrogen oxides (NOx) and volatile organic compounds from the Basic Oxygen Furnace Electrostatic Precipitator Stack. In addition, the IEPA alleges that U. S. Steel exceeded its natural gas usage limit at its CoGeneration Boiler. U. S. Steel responded to the notice and is currently discussing resolution of the matter with IEPA.

Although discussions with IEPA regarding the foregoing alleged violations are ongoing and the resolution of these matters is uncertain at this time, it is not anticipated that the result of those discussions will be material to U. S. Steel.

Minnesota Ore Operations

On February 6, 2013, the U.S. EPA published a FIP that applies to taconite facilities in Minnesota. The FIP establishes and requires emission limits and the use of low NOx reduction technology on indurating furnaces as Best Available Retrofit Technology (BART). While U. S. Steel installed low NOx burners on three furnaces at Minntac and is currently obligated to install low NOx burners on the two other furnaces at Minntac pursuant to existing agreements and permits, the rule would require the installation of a low NOx burner on the one furnace at Keetac for which U. S. Steel did not have an otherwise existing obligation. U. S. Steel estimates expenditures associated with the installation of low NOx burners of as much as \$25 million to \$30 million. In 2013, U. S. Steel filed a petition for administrative reconsideration to the U.S. EPA and a petition for judicial review of the 2013 FIP and denial of the Minnesota SIP to the Eighth Circuit. In April 2016, the EPA promulgated a revised FIP with the same substantive requirements for U. S. Steel. In June 2016, U. S. Steel filed a petition for administrative reconsideration of the 2016 FIP to the U.S. EPA and a petition for judicial review of the 2016 FIP before the Eighth Circuit Court of Appeals. While the proceedings regarding the petition for judicial review of the 2013 FIP remained stayed, oral arguments regarding the petition for judicial review of the 2016 FIP were heard by the Eighth Circuit Court of Appeals on November 15, 2017. Thus, both petitions for judicial review remain with the Eighth Circuit. On December 4, 2017, U.S. EPA published a notification in the *Federal Register* in which the U.S. EPA denied U. S. Steel's administrative petitions for reconsideration and stay of the 2013 FIP and 2016 FIP. On February 1, 2018, U. S. Steel filed a petition for judicial review of U.S. EPA's denial of the administrative petitions for reconsideration to the Eighth Circuit Court of Appeals. U.S. EPA and U. S. Steel reached a settlement regarding the five indurating lines at Minntac. Notice of a 30-day comment period of the settlement agreement was published in the September 11, 2019, *Federal Register*. The comment period expired on October 11, 2019. U. S. Steel will work with U.S. EPA to address any comments. U. S. Steel and U.S. EPA continue to negotiate resolution for Keetac.

Mon Valley Works

On November 9, 2017, U.S. EPA Region III and the Allegheny County Health Department (ACHD) jointly issued a Notice of Violation (NOV) regarding the Company's Edgar Thomson facility in Braddock, PA. In addition, on November 20, 2017, ACHD issued a separate, but related NOV to the Company regarding the Edgar Thomson facility. In the NOV's, based upon their inspections and review of documents collected throughout the last two years, the agencies allege that the Company has violated the CAA by exceeding the allowable visible emission standards from certain operations during isolated events. In addition, the agencies allege that the Company has violated certain maintenance,

reporting, and recordkeeping requirements. U. S. Steel met with U.S. EPA Region III and ACHD several times. ACHD, U.S. EPA Region III and U. S. Steel continue to negotiate a potential resolution of the matter.

On June 27, 2019, U. S. Steel and ACHD entered into a Settlement Agreement that is now in effect resolving four appeals of four separate Enforcement Orders issued by the ACHD in 2018 and 2019. A comment period expired on July 31, 2019 after a public hearing that was held on July 30, 2019. The Settlement Agreement requires that U. S. Steel pay a civil penalty and create a Community Benefit Trust totaling \$2,732,504, with 90% of this value going into the trust; and 10% going into ACHD's Clean Air Fund. In addition, U. S. Steel agreed to complete several actions which are aimed at reducing emissions including: complete refractory repairs on Batteries 1, 2, 3 and 15; enhance training for certain coke plant employees; have third-party audits conducted; complete projects on B Battery to reduce the potential for fugitive emissions, and complete upgrades on the Pushing Emission Control devices for Batteries 13-15; and 19-20. U. S. Steel is working with ACHD in responding to comments.

On December 24, 2018, U. S. Steel's Clairton Plant experienced a fire, affecting portions of the facility involved in desulfurization of the coke oven gas generated during the coking process. With the desulfurization process out of operation as a result of the fire, U. S. Steel was not able to certify compliance with Clairton Plant's Title V permit levels for sulfur emissions. U. S. Steel promptly notified ACHD, which has regulatory jurisdiction for the Title V permit, and updated the ACHD regularly on our efforts to mitigate any potential environmental impacts until the desulfurization process was returned to normal operations. Of the approximately 2,400 hours between the date of the fire and April 4, 2019, when the Company resumed desulfurization, there were ten intermittent hours where average SO₂ emissions exceeded the hourly NAAQS for SO₂ at the Allegheny County regional air quality monitors located in Liberty and North Braddock boroughs which are near U. S. Steel's Mon Valley Works facilities. On February 13, 2019, PennEnvironment and Clean Air Council, both environmental, non-governmental organizations, sent U. S. Steel a 60-day notice of intent to sue letter pursuant to the CAA. The letter alleges Title V permit violations at the Clairton, Irvin, and Edgar Thomson facilities as a result of the December 24, 2018 Clairton Plant fire. The 60-day notice letter also alleged that the violations caused adverse public health and welfare impacts to the communities surrounding the Clairton, Irvin, and Edgar Thomson facilities. PennEnvironment and Clean Air Council subsequently filed a Complaint in Federal Court in the Western District of Pennsylvania on April 29, 2019 to which U. S. Steel has responded. On May 3, 2019, ACHD filed a motion to intervene in the lawsuit which was granted by the Court. On June 25, 2019, ACHD filed its Complaint in Intervention, seeking injunctive relief and civil penalties regarding the alleged Permit violations following the December 24, 2018 fire. The parties are currently engaged in discovery.

Following up to its May 2, 2019, notice of intent to sue U. S. Steel, on August 26, 2019 the Environmental Integrity Project, the Breathe Project and Clean Air Council, environmental, non-governmental organizations, filed a complaint in the Western District Court of Pennsylvania alleging that the Company did not report releases of reportable quantities of hydrogen sulfide, benzene, and coke oven emissions from the Clairton, Edgar Thomson and Irvin facilities as would be required under CERCLA because of the fire. The Company will vigorously defend against these claims.

On April 24, 2019, U. S. Steel was served with a class action complaint that was filed in the Allegheny Court of Common Pleas related to the December 24, 2018 fire at Clairton. The complaint asserts common law nuisance and negligence claims and seeks compensatory and punitive damages that allegedly were the result of U. S. Steel's conduct that resulted in the fire and U. S. Steel's operations subsequent to the fire. The parties are currently engaged in discovery. U. S. Steel is vigorously defending the matter.

Item 4. MINE SAFETY DISCLOSURE

The information concerning mine safety violations and other regulatory matters required by Section 150 of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K is included in Exhibit 95 to this Form 10-K.

EXECUTIVE OFFICERS OF THE REGISTRANT

The executive officers of U. S. Steel and their ages as of February 1, 2020, are as follows:

Name	Age	Title	Executive Officer Since
Christine S. Breves	63	Senior Vice President & Chief Financial Officer	April 27, 2017
James E. Bruno	54	Senior Vice President - European Solutions and President - USSK	December 1, 2014
Scott D. Buckiso	52	Senior Vice President and Chief Manufacturing Officer North American Flat-Rolled	May 31, 2015
David B. Burritt	64	President & Chief Executive Officer	September 1, 2013
Kimberly D. Fast	46	Acting Controller	April 1, 2019
Richard L. Fruehauf	52	Senior Vice President - Strategic Planning and Chief Strategy and Development Officer	March 1, 2019
Duane D. Holloway	47	Senior Vice President, General Counsel, Chief Ethics & Compliance Officer and Corporate Secretary	April 16, 2018
Douglas R. Matthews	54	Senior Vice President and Chief Commercial and Technology Officer, Tubular and Mining Solutions	July 2, 2012
A. Barry Melnkovic	62	Senior Vice President and Chief Human Resources Officer	March 1, 2018

Messrs. Buckiso, Burritt, Bruno and Matthews and Ms. Breves have held responsible management or professional positions with U. S. Steel or its subsidiaries for more than the past five years. Ms. Fast joined U. S. Steel in 2007 as manager - external reporting, and progressed through roles of increasing responsibility before being named assistant corporate controller in December 2014. She was named Acting Controller and the Company's principal accounting officer on April 1, 2019. Mr. Fruehauf joined U. S. Steel in September 2014 as assistant general counsel - commercial and progressed through roles of increasing responsibility in the legal department, ultimately being named Interim General Counsel in December 2017. He was named vice president - strategic planning and corporate development in April 2018 and advanced to senior vice president in March 2019. Effective January 1, 2020, he has been appointed senior vice president - strategic planning and chief strategy & development officer. Prior to joining U. S. Steel in 2018, Mr. Holloway served as executive vice president and general counsel at Ascena Retail Group Inc., the largest women's specialty retail and fashion company in the U.S. During his time at Ascena, Mr. Holloway served as global chief legal, compliance, sustainability and diversity officer. Prior to his work at Ascena, Mr. Holloway served as vice president and deputy general counsel for CoreLogic Inc., the leading global residential property information, analytics and data-enabled solutions provider. Prior to joining CoreLogic, Mr. Holloway spent nine years at Caesars Entertainment Corp., where he progressed through increasingly responsible roles in the legal department before being named senior vice president and chief counsel, operations and litigation. Prior to joining U. S. Steel in 2017, Mr. Melnkovic served as executive vice president and chief human capital officer, labor relations, diversity and lean enterprise solutions for National Railroad Passenger Corporation / Amtrak. Prior to joining Amtrak, Mr. Melnkovic served as the top human resources leader at Lilly Industries, Motor Coach Industries and Holland America Line. He also held senior corporate leadership and officer roles at Owens Corning, including vice president - human resources, vice president - talent management and organizational effectiveness, and interim chief operating officer for one of the company's business units.

PART II

Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Common Stock Information

The principal market on which United States Steel Corporation (U. S. Steel) common stock is traded is the New York Stock Exchange, where the common stock trades under trading symbol "X". U. S. Steel common stock is also traded on the Chicago Stock Exchange under the symbol "X".

As of February 10, 2020, there were 12,048 registered holders of U. S. Steel common stock.

The Board of Directors currently intends to declare and pay dividends on shares of U. S. Steel common stock based on the financial condition and results of operations of U. S. Steel out of legally available funds and in accordance with the requirements set forth by applicable law. Quarterly dividends were declared by U. S. Steel in 2019 and 2018 in the amount of \$0.05 per share. In December 2019 the Company announced a change in its dividend policy, that it intends to reduce its quarterly dividend to \$0.01 per share beginning in 2020.

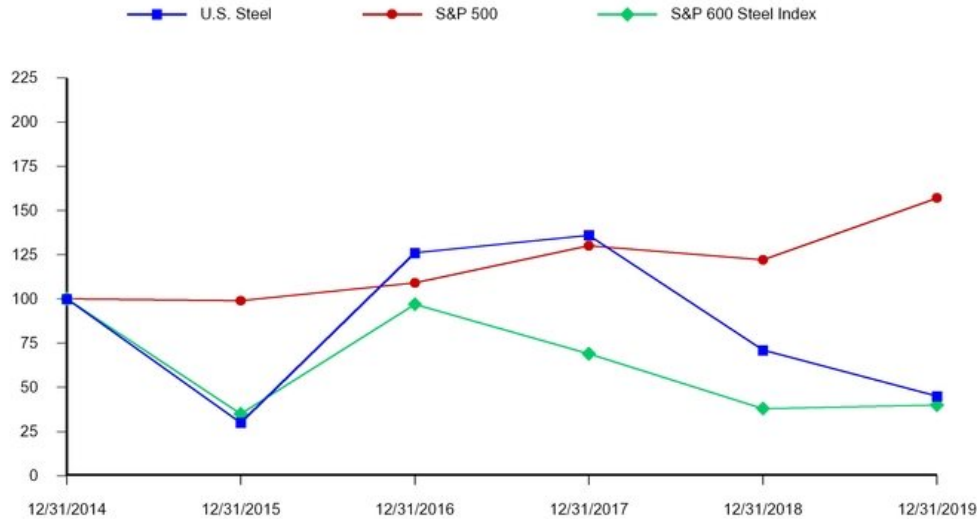
Purchases of Equity Securities by the Issuer and the Affiliated Purchasers

On November 1, 2018, the Company announced that its Board of Directors authorized a stock repurchase program to repurchase up to \$300 million of its outstanding common stock over a two-year period at the discretion of management, of which \$163 million was utilized. There were no stock repurchases during the fourth quarter of 2019 and on December 19, 2019 U. S. Steel announced that it formally terminated this program. The Company's stock repurchase program did not obligate it to acquire any specific number of shares. Under this program, the shares were purchased from time to time at prevailing market prices, through open market or privately negotiated transactions, depending upon market conditions.

Stockholder Return Performance

The graph below compares the yearly change in cumulative total stockholder return of our common stock with the cumulative total return of the Standard & Poor's (S&P's) 500 Stock Index and the S&P 600 Steel Index.

**Comparison of Cumulative Total Return
on \$100 Invested in U. S. Steel Stock on December 31, 2014
vs
S&P 500 and S&P 600 Steel Index^(a)**



^(a) U. S. Steel was removed from the S&P 500 Index effective July 1, 2014. Consequently, U. S. Steel is now part of the S&P 600 Steel Index instead of the S&P 500 Steel Index, which is a subset of the S&P 500. Therefore, current year results may not be comparable to prior years.

For information on securities authorized for issuance under our equity compensation plans, see "Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters."

Unregistered Sales of Securities

On November 18, 2019, the Company issued Performance Share Awards ("PSUs") with an aggregate grant-date fair market value of approximately \$425,000 to certain employees of Big River Steel ("Big River Steel Employees"). The PSUs were issued as consideration for entry into a retention agreement between the Company and the Big River Steel Employees. Generally, all of the PSUs will vest and be settled in shares of the Company's common stock (or cash equivalent to the value of the common stock) upon the earlier of (i) the Company's acquisition of full ownership of Big River Steel or (ii) December 29, 2023 (either occurrence of subclause (i) or subclause (ii), the "Vesting Date"), subject to the recipient's continued service with the Company through the Vesting Date. If the recipient is terminated without cause and a Vesting Date occurs within six months after the date of such termination, then all of the PSUs will vest. The issuance of the PSUs was exempt from the registration requirements of the Securities Act of 1933, as amended (the "Securities Act"), pursuant to the exemption provided by Rule 506 of Regulation D and/or Section 4(a)(2), based on representations and warranties provided by the recipients of the PSUs.

Item 6. SELECTED FINANCIAL DATA

<i>Dollars in millions (except per share data)^(a)</i>	2019	2018	2017	2016	2015
Statement of Operations Data:					
Net sales	\$ 12,937	\$ 14,178	\$ 12,250	\$ 10,261	\$ 11,574
(Loss) earnings before interest and income taxes ^(b)	(230)	1,124	669	(201)	(1,142)
(Loss) net earnings attributable to United States Steel Corporation	(630)	1,115	387	(440)	(1,642)
Per Common Share Data:					
(Loss) net earnings attributable to United States Steel Corporation ^(c)					
– basic	(3.67)	6.31	2.21	(2.81)	(11.24)
– diluted	(3.67)	6.25	2.19	(2.81)	(11.24)
Dividends per share declared and paid	0.20	0.20	0.20	0.20	0.20
Balance Sheet Data – December 31:					
Total assets ^(d)	\$ 11,608	\$ 10,982	\$ 9,862	\$ 9,160	\$ 9,167
Capitalization:					
Debt ^(d)	\$ 3,641	\$ 2,381	\$ 2,703	\$ 3,031	\$ 3,138
United States Steel Corporation stockholders' equity	\$ 4,092	4,202	3,320	2,274	2,436
Total capitalization	\$ 7,733	\$ 6,583	\$ 6,023	\$ 5,305	\$ 5,574

(a) For discussion of changes between the years, see Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations."

(b) 2015, 2016 and 2017 amounts have been adjusted as a result of the adoption of Accounting Standards Update 2017-07, *Compensation - Retirement Benefits* on January 1, 2018.

(c) See Note 8 to the Consolidated Financial Statements for the basis of calculating earnings per share.

(d) 2015 amounts have been adjusted to retroactively adopt Accounting Standards Update 2015-03, *Interest-Imputation of Interest (Subtopic 835-30) - Simplifying the Presentation of Debt Issuance Costs*, which requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of the debt liability.

Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion should be read in conjunction with the Consolidated Financial Statements and related notes that appear elsewhere in this document. Please refer to Item 7 of our 2018 Form 10-K for further discussion and analysis of our 2017 financial condition and results of operations.

Overview

According to World Steel Association's latest published statistics, U. S. Steel was the twenty-sixth largest steel producer in the world in 2018. Also in 2018 according to World Steel Association's latest published statistics, U. S. Steel was the third largest steel producer in the United States. U. S. Steel has a broad and diverse mix of products and customers. We use iron ore, coal, coke, steel scrap, zinc, tin, and other metallic additions to produce a wide range of flat-rolled and tubular steel products, concentrating on value-added steel products for customers with demanding technical applications in the transportation, appliance, container, industrial machinery, construction and oil, gas, and petrochemical industries. In addition to our facilities in the United States, U. S. Steel has significant operations in Eastern Europe through U. S. Steel Košice (USSK), located in Slovakia.

We are proud to report the following accomplishments achieved in 2019:

- Set a safety performance record with a 2019 Days Away from Work rate of 0.10, which is seven times better than the industry average reported by the U.S. Bureau of Labor Statistics.
- Articulating and executing on the transformative 'best of both' strategy, including acquiring a 49.9% interest in Big River Steel with an option to acquire the remaining 50.1% within four years and beginning process of constructing a world-class endless casting and rolling line at Mon Valley Works.
- Positive operating cash flow of \$682 million in 2019.
- Strong year-end liquidity of approximately \$2.3 billion, including \$749 million of cash, to support the execution of our strategy.
- Successfully raised approximately \$1.1 billion in incremental capital through debt offerings and an increase in our U.S. credit facility by \$500 million, providing for future financial flexibility.
- Continued executing investments in our assets, including strategic investments in the electric arc furnace at Fairfield Tubular Operations, Gary Works hot strip mill upgrades and the dynamo line at USSE.
- Announced industry-leading GHG emissions intensity reduction goal aligned to our strategy.
- Named to the Forbes Global 2000 World's Best Employers list for 2019.
- Awarded a perfect "100" score on the Human Rights Campaign Corporate Equality Index.

Our disciplined and balanced capital strategy has positioned our balance sheet to support investments in our business. We continue to take steps to improve and secure our long-term position as an industry leader by reducing our vulnerabilities during down cycles, accentuating our advantages in up cycles, and enabling the creation of value - and the related rewards - for all U. S. Steel stakeholders through business cycles.

We aim to achieve our vision by successfully executing on our world-competitive, "best of both" strategy. By bringing together the best of the integrated steelmaking model with the best of the mini mill steelmaking model, we will transform our business to drive long-term cash flow through industry cycles. We aim to offer an unparalleled product platform to serve customers, achieve world-competitive positioning in strategic, high-margin end markets, and deliver high-quality, value-added products and innovative solutions that address our customers' most challenging steel needs. To become a "best of both" company, we are enhancing our focus on operational and commercial excellence and promoting technological innovation, so we can establish a more competitive cost structure and enhance our capabilities ... two key drivers for our strategy.

Critical Accounting Estimates

Management's discussion and analysis of U. S. Steel's financial condition and results of operations is based upon U. S. Steel's financial statements, which have been prepared in accordance with accounting standards generally accepted in the United States (U.S. GAAP). The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at year-end and the reported amount of revenues and expenses during the year. Management regularly evaluates these estimates, including those related to employee benefits liabilities and assets held in trust relating to such liabilities; the carrying value of property, plant and equipment; intangible assets; valuation allowances for receivables, inventories and deferred income tax assets; liabilities for deferred income taxes; potential tax deficiencies; environmental obligations; potential litigation claims and settlements and put and call option assets and liabilities. Management's estimates are based on historical experience, current business and market conditions, and various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ materially from current expectations under different assumptions or conditions.

Management believes that the following are the more significant judgments and estimates used in the preparation of the financial statements.

Inventories – Inventories are carried at the lower of cost or market for last-in, first-out (LIFO) inventories and lower of cost and net realizable value for first-in, first-out (FIFO) method inventories. LIFO is the predominant method of inventory costing for inventories in the United States and FIFO is the predominant method used in Europe. The LIFO method of inventory costing was used on 75 percent and 74 percent of consolidated inventories at December 31, 2019 and 2018, respectively. Since the LIFO inventory valuation methodology is an annual calculation, interim estimates of the annual LIFO valuation are required. We recognize the effects of the LIFO inventory valuation method on an interim basis by estimating the year end inventory amounts. The projections of annual LIFO inventory amounts are updated quarterly. Changes in U.S. GAAP rules or tax law, such as the elimination of the LIFO method of accounting for inventories, could negatively affect our profitability and cash flow.

Equity method investments – Investments in entities over which U. S. Steel has significant influence are accounted for using the equity method of accounting and are carried at U. S. Steel's share of net assets plus loans, advances and our share of earnings less distributions. Differences in the basis of the investment and the underlying net asset value of the investee, if any, are amortized into earnings over the remaining useful life of the associated assets.

Income from investees includes U. S. Steel's share of income from equity method investments, which is generally recorded a month in arrears, except for significant and unusual items which are recorded in the period of occurrence. Gains or losses from changes in ownership of unconsolidated investees are recognized in the period of change. Intercompany profits and losses on transactions with equity investees have been eliminated in consolidation subject to lower of cost or market inventory adjustments.

U. S. Steel evaluates impairment of its equity method investments whenever circumstances indicate that a decline in value below carrying value is other than temporary. Under these circumstances, we would adjust the investment down to its estimated fair value, which then becomes its new carrying value.

Financial Instruments – U. S. Steel's purchase of a 49.9% equity ownership interest in Big River Steel on October 31, 2019 included certain call and put options. U. S. Steel marks these options to fair value each reporting period using a Monte Carlo simulation which is considered a Level 3 valuation technique. Level 3 valuation techniques include inputs to the valuation methodology that are considered unobservable and significant to the fair value measurement. See Note 5 and Note 20 to the Consolidated Financial Statements for further details.

Pensions and Other Benefits – The recording of net periodic benefit costs for defined benefit pensions and Other Benefits is based on, among other things, assumptions of the expected annual return on plan assets, discount rate, mortality, escalation or other changes in retiree health care costs and plan participation levels. Changes in the assumptions or differences between actual and expected changes in the present value of liabilities or assets of U. S. Steel's plans could cause net periodic benefit costs to increase or decrease materially from year to year as discussed below.

U. S. Steel's investment strategy for its U.S. pension plan assets provides for a diversified mix of high quality bonds, public equities and selected smaller investments in private equities, timber and mineral interests. For its U.S. pension plan, U. S. Steel has a target allocation for plan assets of 45 percent in corporate bonds, government bonds and

mortgage and asset-backed securities. The balance is invested in equity securities, timber, private equity and real estate partnerships. U. S. Steel believes that returns on equities over the long term will be higher than returns from fixed-income securities as actual historical returns from U. S. Steel's trusts have shown. Returns on bonds tend to offset some of the short-term volatility of stocks. Both equity and fixed-income investments are made across a broad range of industries and companies (both domestic and foreign) to provide protection against the impact of volatility in any single industry as well as company specific developments. U. S. Steel will use a 6.50 percent assumed rate of return on assets for the development of net periodic cost for the main defined benefit pension plan in 2020. The 2020 assumed rate of return was determined by taking into account the intended asset mix and some moderation of the historical premiums that fixed-income and equity investments have yielded above government bonds. Actual returns since the inception of the plans have exceeded this 6.50 percent rate and while recent annual returns have been volatile, it is U. S. Steel's expectation that rates will achieve this level in future periods.

For its Other Benefits plan assets, U. S. Steel employs a liability driven investment strategy. The plan assets are allocated to match the plan cash flows with maturing investments. To achieve this strategy, U. S. Steel has a target allocation for plan assets of 90 percent in high quality bonds with the balance primarily invested in equity securities, timber, private equity and real estate partnerships. U. S. Steel will use a 4.25 percent assumed rate of return on assets for the development of net periodic cost for its Other Benefits plans. The 2020 assumed rate of return has been conservatively set, taking into account the intended asset mix.

The expected long-term rate of return on plan assets is applied to the market value of assets as of the beginning of the period less expected benefit payments and considering any planned contributions.

To determine the discount rate used to measure our pension and Other Benefit obligations for U.S. plans we utilize a bond matching approach to select specific bonds that would satisfy our projected benefit payments. At December 31, 2019, the weighted average discount rate used for our pension and Other Benefit obligations was determined to be 3.35 percent and 3.43 percent, respectively, compared to the weighted average discount rate used of 4.41 percent and 4.47 percent, respectively, at December 31, 2018. The discount rate reflects the current rate at which we estimate the pension and Other Benefits liabilities could be effectively settled at the measurement date.

U. S. Steel reviews its actual historical rate experience and expectations of future health care cost trends to determine the escalation of per capita health care costs under U. S. Steel's benefit plans. Approximately three quarters of our costs for the domestic United Steelworkers (USW) participants' retiree health benefits in the Company's main domestic benefit plan are limited to a per capita dollar maximum calculation based on 2006 base year actual costs incurred under the main U. S. Steel benefit plan for USW participants (cost cap). The full effect of the cost cap is expected to be realized around 2028. After 2028, the Company's costs for a majority of USW retirees and their dependents are expected to remain fixed and as a result, the cost impact of health care escalation for the Company is projected to be limited for this group (See Note 18 to the Consolidated Financial Statements). For measurement of its domestic retiree medical plans where health care cost escalation is applicable, U. S. Steel has assumed an initial escalation rate of 6.50 percent for 2020. This rate is assumed to decrease gradually to an ultimate rate of 4.50 percent in 2028 and remain at that level thereafter.

Net periodic pension cost, including multiemployer plans, is expected to total approximately \$141 million in 2020 compared to \$179 million in 2019. Excluding settlement and special termination losses totaling \$11 million in 2019, the decrease in expected pension expense in 2020 is primarily due the 2019 asset performance and a change in mortality assumptions, partially offset by the decrease in discount rates. Total Other Benefits income in 2020 is expected to be approximately \$29 million, compared to \$57 million of expense in 2019. The expected improvement in the 2020 Other Benefit expense (income) is primarily due to the expiration of a prior service cost from the 2008 labor agreement and projected decreases in future healthcare costs and assumed participant enrollments.

The tables below project the incremental effect of a hypothetical one percentage point change in significant assumptions used in determining the funded status and expense for pension and Other Benefits:

(In millions)	At December 31, 2019	
	Hypothetical Rate Change	
	1%	(1)%
Discount rates and interest rates		
Incremental change in:		
Pension & other benefits obligations, increase/(decrease)	\$ (671)	\$ 799
Fixed Income Assets, (increase)/decrease	433	(524)
Net impact on funded status, increase/(decrease)	\$ 238	\$ (275)

The fixed income asset sensitivity shown above excludes other fixed income return components (e.g. changes in credit spreads, bond coupon and active management excess returns), and growth asset returns. Fixed income sensitivity reflects the asset allocation and investment policy effective December 31, 2019. Other factors that impact net funded status (e.g., contributions) are not reflected.

Discount rates and the expected long-term return on assets have a material impact on pension and other benefit expense. The table below estimates the impact to expense of a hypothetical one percentage point change in rates:

(In millions)	Hypothetical Rate Increase (Decrease)	
	1%	(1)%
Expected return on plan assets		
Incremental (decrease) increase in:		
Net periodic pension & other benefits costs for 2020	\$ (68)	\$ 68
Discount rates		
Incremental (decrease) increase in:		
Net periodic pension & other benefits costs for 2020	\$ (16)	\$ 17

Changes in the assumptions for expected annual return on plan assets and the discount rate used for accounting purposes do not impact the funding calculations used to derive minimum funding requirements for the pension plan. However, the discount rate required for minimum funding purposes is also based on corporate bond related indices and as such, the same general sensitivity concepts as above can be applied to increases or decreases to the funding obligations of the plans assuming the same hypothetical rate changes. (See Note 18 to the Consolidated Financial Statements for a discussion regarding legislation enacted in November of 2015 that impacts the discount rate used for funding purposes.) For further cash flow discussion see "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations – Financial Condition, Cash Flows and Liquidity – Liquidity."

Long-lived assets – U. S. Steel evaluates long-lived assets, primarily property, plant and equipment for impairment whenever changes in circumstances indicate that the carrying amounts of those productive assets exceed their recoverable amount as determined by the asset group's projected undiscounted cash flows. We evaluate the impairment of long-lived assets at the asset group level. Our primary asset groups are Flat-Rolled, welded tubular, seamless tubular and U. S. Steel Europe (USSE).

During 2019, steel market challenges in the U.S. and Europe, the idling of certain Flat-Rolled facilities and recent losses in the welded tubular asset group were considered triggering events for the Flat-Rolled, USSE and welded tubular asset groups. U. S. Steel completed a quantitative analysis of its long-lived assets for these asset groups and determined that the assets were not impaired. The percentage excess of estimated future cash flows over the net assets was greater than 30 percent for our welded tubular asset group. The key assumptions used to estimate the recoverable amounts for the welded tubular asset group were estimates of future commercial prices, commercial program management and efficiency improvements over the 12-year remaining useful life of the primary welded tubular assets. The percentage excess of estimated future cash flows over the net assets was greater than 75 percent for both the Flat-Rolled and USSE asset groups.

In 2019, there were no triggering events for the seamless tubular asset group that required long-lived assets to be evaluated for impairment and in 2018 none of the asset groups had a triggering event that required long-lived assets to be evaluated for impairment.

Taxes - U. S. Steel records a valuation allowance to reduce deferred tax assets to the amount that is more likely than not to be realized. A valuation allowance is recorded if, based on the weight of all available positive and negative evidence, it is more likely than not that some portion, or all, of a deferred tax asset will not be realized. Each quarter U. S. Steel analyzes the likelihood that our deferred tax assets will be realized.

At December 31, 2019, after weighing all the positive and negative evidence, U. S. Steel determined that it was more likely than not that the net domestic deferred tax asset (excluding a portion of a deferred tax liability related to an asset with an indefinite life, as well as a deferred tax asset related to refundable AMT credits) may not be realized. As a result, U. S. Steel recorded a \$334 million non-cash charge to tax expense. In the future, if we determine that it is more likely than not that we will be able realize all or a portion of our deferred tax assets, the valuation allowance will be reduced, and we will record a benefit to earnings. See Note 11 to the Consolidated Financial Statements for further details.

At December 31, 2018, U. S. Steel determined that a partial valuation allowance was required for only certain of its domestic deferred tax assets that have expiration dates which may limit their realizability, including state net operating losses (NOLs), state income tax credits, foreign tax credits, general business credits (GBCs) and capital losses. Accordingly, we reversed a portion of the valuation allowance, which resulted in a \$374 million non-cash benefit to earnings. That determination was based in part, on U. S. Steel's cumulative income from the past three years and projections of income in future years. In addition, U. S. Steel had seven consecutive quarters of positive pretax income.

At the end of both 2019 and 2018, U. S. Steel did not have any undistributed foreign earnings and profits for which U.S. deferred taxes have not been provided.

U. S. Steel records liabilities for uncertain tax positions. These liabilities are based on management's judgment of the risk of loss for items that have been or may be challenged by taxing authorities. If U. S. Steel determines that tax-related items would not be considered uncertain tax positions or that items previously not considered to be potential uncertain tax positions could be considered potential uncertain tax positions (as a result of an audit, court case, tax ruling or other authoritative tax position), an adjustment to the liability would be recorded through income in the period such determination was made.

Environmental remediation - U. S. Steel has been identified as a potentially responsible party (PRP) at seven sites under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) as of December 31, 2019. Of these, there are three sites where information requests have been received or there are other indications that U. S. Steel may be a PRP under CERCLA, but where sufficient information is not presently available to confirm the existence of liability or to make a reasonable estimate with respect to any potential liabilities. There are also 18 additional sites where U. S. Steel may be liable for remediation costs in excess of \$100,000 under other environmental statutes, both federal and state, or where private parties are seeking to impose liability on U. S. Steel for remediation costs through discussions or litigation. At many of these sites, U. S. Steel is one of a number of parties involved and the total cost of remediation, as well as U. S. Steel's share, is frequently dependent upon the outcome of ongoing investigations and remedial studies. U. S. Steel accrues for environmental remediation activities when the responsibility to remediate is probable and the amount of associated costs is reasonably determinable. As environmental remediation matters proceed toward ultimate resolution or as remediation obligations arise, charges in excess of those previously accrued may be required.

U. S. Steel's accrual for environmental liabilities for U.S. and international facilities as of December 31, 2019 and 2018 was \$186 million and \$187 million, respectively. These amounts exclude liabilities related to asset retirement obligations, disclosed in Note 19 to the Consolidated Financial Statements.

U. S. Steel is the subject of, or a party to, a number of pending or threatened legal actions, contingencies and commitments involving a variety of matters, including laws and regulations relating to the environment. The ultimate resolution of these contingencies could, individually or in the aggregate, be material to the Consolidated Financial Statements.

For discussion of relevant environmental items, see "Part I. Item 3. Legal Proceedings—Environmental Proceedings."

Segments

U. S. Steel has three reportable segments: North American Flat-Rolled (Flat-Rolled), U. S. Steel Europe (USSE) and Tubular Products (Tubular). The results of our 49.9% ownership interest in Big River Steel and our railroad and real estate businesses that do not constitute reportable segments are combined and disclosed in the Other Businesses category.

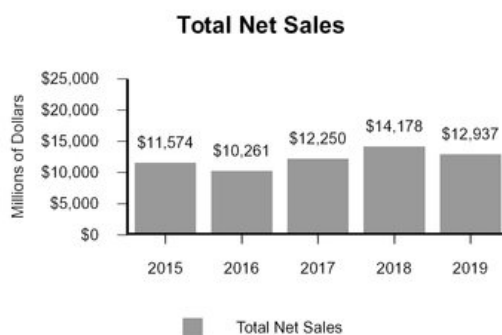
The Flat-Rolled segment includes the operating results of U. S. Steel's integrated steel plants and equity investees in North America (except for Big River Steel, which is included in Other Businesses) involved in the production of slabs, strip mill plates, sheets and tin mill products, as well as all iron ore and coke production facilities in the United States. These operations primarily serve North American customers in the service center, conversion, transportation (including automotive), construction, container, and appliance and electrical markets.

The USSE segment includes the operating results of U. S. Steel Košice (USSK), U. S. Steel's integrated steel plant and coke production facilities in Slovakia, and its subsidiaries. USSE conducts its business mainly in Central and Western Europe and primarily serves customers in the European transportation (including automotive), construction, container appliance, electrical, service center, conversion and oil, gas and petrochemical markets. USSE produces and sells slabs, strip mill plate, sheet, tin mill products and spiral welded pipe, as well as refractory ceramic materials.

The Tubular segment includes the operating results of U. S. Steel's tubular production facilities and an equity investee in the United States. These operations produce and sell seamless and electric resistance welded (ERW) steel casing and tubing (commonly known as oil country tubular goods or OCTG), standard and line pipe and mechanical tubing and primarily serve customers in the oil, gas and petrochemical markets.

For further information, see Note 4 to the Consolidated Financial Statements.

Net Sales



Net Sales by Segment

(Dollars in millions, excluding intersegment sales)

	2019	2018	2017
Flat-Rolled	\$ 9,279	\$ 9,681	\$ 8,297
USSE	2,417	3,205	2,949
Tubular	1,188	1,231	944
Total sales from reportable segments	12,884	14,117	12,190
Other Businesses	53	61	60
Net sales	\$ 12,937	\$ 14,178	\$ 12,250

Management's analysis of the percentage change in net sales for U. S. Steel's reportable business segments is set forth in the following tables:

Year Ended December 31, 2019 versus Year December 31, 2018

	Steel Products ^(a)				Coke, Pellets & Other ^(c)	Net Change
	Volume	Price	Mix	FX ^(b)		
Flat-Rolled	1 %	(5)%	(1)%	— %	1 %	(4)%
USSE	(19)%	(3)%	3 %	(5)%	(1)%	(25)%
Tubular	(1)%	(1)%	(1)%	— %	— %	(3)%

(a) Excludes intersegment sales

(b) Foreign currency translation effects

(c) Includes sales of scrap inventory

The decrease in 2019 sales for the Flat-Rolled segment primarily reflects lower average realized prices (decrease of \$58 per ton) and a less favorable product mix. In 2019 to adjust production to declining customer demand a blast furnace at Gary Works was temporarily idled (subsequently restarted in December 2019) and a blast furnace at Great Lakes Works was temporarily idled (subsequently to be indefinitely idled in early 2020 along with remainder of the iron and steel making facilities at Great Lake Works).

The decrease in 2019 sales for the USSE segment was primarily due to decreased shipments (decrease of 867 thousand net tons) and lower average realized prices (decrease of \$41 per net ton) in most product categories due to increased import competition, flat to declining demand and the weakening of the Euro versus the U.S. dollar.

The decrease in 2019 sales for the Tubular segment resulted from lower average realized prices (decrease of \$33 per net ton) and decreased net shipments (decrease of 11 thousand net tons) from lower demand for tubular products.

Operating Expenses

Union profit-sharing costs

(Dollars in millions)	Year Ended December 31,	
	2019	2018
Allocated to segment results	\$ 12	\$ 92

Profit-based amounts are calculated and paid on a quarterly basis as a percentage of consolidated earnings (loss) before interest and income taxes based on 7.5 percent of profit between \$10 and \$50 per ton and 15 percent of profit above \$50 per ton.

The amounts above represent profit-sharing amounts paid to active USW-represented employees and are included in cost of sales on the Consolidated Statement of Operations.

Pension and other benefits costs

Pension and other benefit costs (other than service cost) are reflected within net interest and other financial costs and the service cost component is reflected within cost of sales in the Consolidated Statements of Operations.

Defined benefit and multiemployer pension plan costs included in cost of sales totaled \$121 million in 2019 and \$109 million in 2018.

Other benefit expense included in cost of sales totaled \$13 million in 2019 and \$17 million in 2018.

Costs related to defined contribution plans totaled \$48 million in 2019 and \$44 million in 2018.

Selling, general and administrative expenses

Selling, general and administrative expenses were \$289 million in 2019 and \$336 million in 2018. The decrease from 2018 to 2019 is primarily related to decreased variable compensation.

Operating configuration adjustments

Over the past three years, the Company has adjusted its operating configuration in response to changing market conditions including global overcapacity, unfair trade practices and increases in domestic demand as a result of tariffs on imports by indefinitely and temporarily idling and then re-starting production at certain of its facilities. U. S. Steel will continue to adjust its operating configuration in order to maximize its strategy of combining the "best of both" leading integrated and mini mill technology.

In December 2019, U. S. Steel announced that it would indefinitely idle a significant portion of Great Lakes Works. The Company expects to begin idling the iron and steelmaking facilities on or around April 1, 2020, and the hot strip mill rolling facility before the end of 2020. The carrying value of the Great Lakes Works facilities that we intend to indefinitely idle was approximately \$385 million as of December 31, 2019.

In December 2019, the Company completed the indefinite idling of its East Chicago Tin (ECT) operations within its Flat-Rolled segment. ECT was indefinitely idled primarily due to increased tin import levels in the U.S. Additionally, U. S. Steel indefinitely idled its finishing facility in Dearborn, Michigan (which operates an electrolytic galvanizing line), during the fourth quarter of 2019. The carrying value of these facilities was approximately \$20 million as of December 31, 2019.

In October 2019, the Company announced that it is implementing an enhanced operating model and organizational structure to accelerate the Company's strategic transformation and better serve its customers. The new operating model was effective January 1, 2020 and is centered around manufacturing, commercial, and technological excellence. Our former "commercial entity" structure was put into place to deepen understanding of business ownership and our relationships with customers and allowed the Company to identify the technology that would differentiate our products and processes on the basis of cost and/or capabilities. The new enhanced operating model is a logical next step in the execution of the Company's strategy and will make us a more nimble company positioned to deliver the benefits of our strategy through the cycle.

In July 2019, U. S. Steel began implementing a labor productivity strategy at USSK so that it could better compete in the European steel market, which has experienced softening demand as well as a significant increase in imports. It is anticipated that the labor productivity strategy will result in total headcount reductions, including contractors, of approximately 2,500 by the end of 2021. As of December 31, 2019, approximately 1,900 positions, including approximately 400 contractors, were eliminated.

In June 2019, U. S. Steel idled two blast furnaces in the U.S. and one blast furnace in Europe to better align global production with its order book. As a result, monthly blast furnace production capacity was reduced by approximately 200,000 - 225,000 tons in the U.S. and 125,000 tons in Europe. In December 2019, for the U.S., we restarted one of the idled blast furnaces and announced the indefinite idling on or around April 1, 2020 of the other. The production at the idled blast furnace in Europe may resume when market conditions improve.

In June 2019, U. S. Steel restarted the No. 1 Electric-Weld Pipe Mill (No. 1 Pipe Mill) at its Lone Star Tubular Operations to enable the Company to support increased demand for high-quality electric-welded pipe produced in the United States. The No. 1 Pipe Mill produces 7-16 inch welded pipe and is complementing our current Tubular product offerings. It had been idled since 2016.

In February 2019, U. S. Steel restarted construction of the electric arc furnace (EAF) capital project located in Fairfield, Alabama. Construction had previously been delayed.

In 2018 and 2017, the Granite City Works steelmaking operations and hot strip mill, respectively, were restarted after they were temporarily idled in 2015.

Depreciation, depletion and amortization

Depreciation, depletion and amortization expenses were \$616 million in 2019 and \$521 million in 2018. The increases from 2018 to 2019 are primarily due to increased capital spending in recent years.

Earnings from investees

Earnings from investees were \$79 million in 2019 and \$61 million in 2018. The increase from 2018 to 2019 is primarily due to increased earnings from our iron ore investee and our PRO-TEC joint venture, partially offset by an equity loss related to our investment in Big River Steel.

Restructuring and Other Charges

During 2019, U. S. Steel recorded restructuring and other charges of \$275 million, which consists of charges of \$25 million at USSK for headcount reductions and plant exit costs, \$227 million for the indefinite idling of ECT, our finishing facility in Dearborn, Michigan, and the intended indefinite idling of a significant portion of Great Lakes Works and \$23 million for Company-wide headcount reductions.

Charges for restructuring and ongoing cost reduction initiatives are recorded in the period U. S. Steel commits to a restructuring or cost reduction plan, or executes specific actions contemplated by the plan and all criteria for liability recognition have been met. Charges related to restructuring and cost reductions are reported in restructuring and other charges in the Consolidated Statements of Operations.

Earnings (loss) before interest and income taxes by Segment ^(a)

<i>(Dollars in Millions)</i>	Year Ended December 31,	
	2019	2018
Flat-Rolled	\$ 196	\$ 883
USSE	(57)	359
Tubular	(67)	(58)
Total earnings (loss) from reportable segments	72	1,184
Other Businesses	23	55
Segment earnings (loss) before interest and income taxes	95	1,239
Other items not allocated to segments:		
December 24, 2018 Clairton coke making facility fire	(50)	—
Restructuring and other charges ^(b)	(275)	—
USW labor agreement signing bonus and related costs	—	(81)
Granite City Works restart and related costs	—	(80)
Granite City Works temporary idling charges	—	8
Gain on equity investee transactions (Note 12)	—	38
Total (loss) earnings before interest and income taxes	\$ (230)	\$ 1,124

(a) See Note 4 to the Consolidated Financial Statements for reconciliations and other disclosures required by Accounting Standards Codification Topic 280.

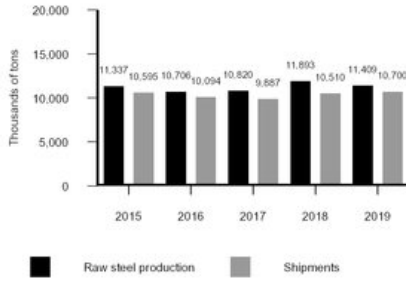
(b) Included in restructuring and other charges on the Consolidated Statements of Operations. See Note 25 to the Consolidated Financial Statements.

Gross Margin by Segment

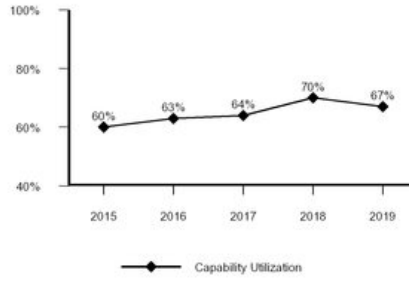
	Year Ended December 31,	
	2019	2018
Flat-Rolled	8 %	15%
USSE	3 %	15%
Tubular	(1)%	1%

Segment results for Flat-Rolled

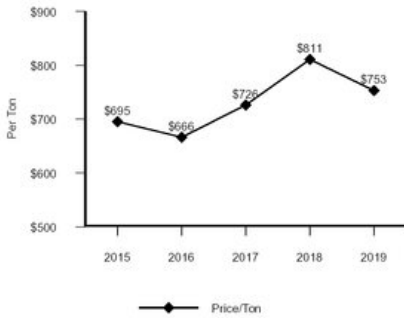
Raw Steel Production and Shipments



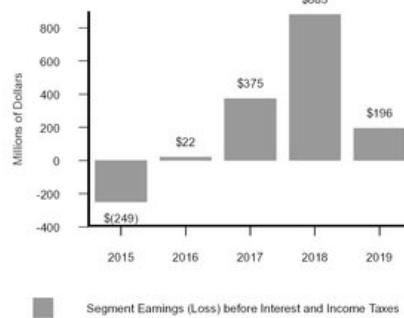
Raw Steel Capability Utilization



Average Realized Price Per Ton



Segment Earnings (Loss) before Interest and Income Taxes

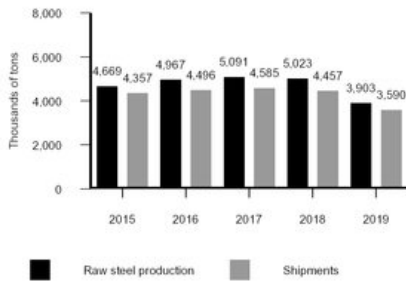


The Flat-Rolled segment had earnings of \$196 million for the year ended December 31, 2019 compared to earnings of \$883 million for the year ended December 31, 2018. The decrease in Flat-Rolled results for 2019 compared to 2018 resulted primarily from lower average realized prices (approximately \$570 million), increased spending on operating and maintenance costs (approximately \$110 million), higher raw material costs (approximately \$65 million) and increased other operating costs, primarily depreciation (approximately \$90 million). These charges were partially offset by decreased other costs which was primarily related to decreased variable compensation (approximately \$135 million) and lower energy costs (approximately \$15 million).

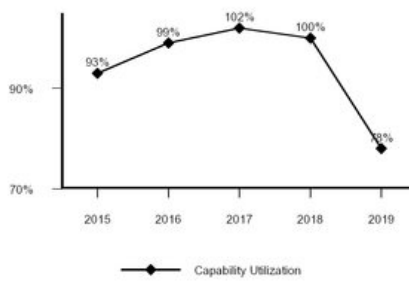
Gross margin for 2019 as compared to 2018 decreased primarily as a result of lower average prices due to lower spot prices and adjustable, spot market index-based contract prices, both of which consistently decreased throughout 2019.

Segment results for USSE

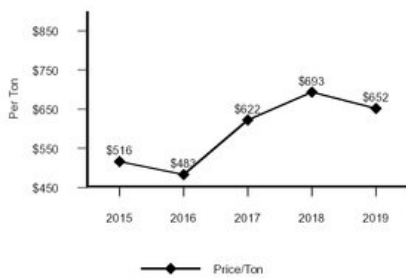
Raw Steel Production and Shipments



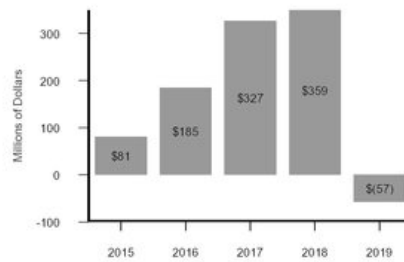
Raw Steel Capability Utilization



Average Realized Price Per Ton



Segment Earnings (Loss) Before Interest and Income Taxes

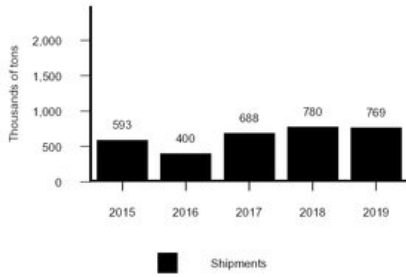


The USSE segment had a loss of \$57 million for the year ended December 31, 2019 compared to earnings of \$359 million for the year ended December 31, 2018. The decrease in USSE results in 2019 compared to 2018 was primarily due to significant market challenges from weakening economic conditions resulting in decreased shipments (approximately \$130 million), lower average realized prices (approximately \$100 million), higher raw material costs (approximately \$115 million), the weakening of the euro versus the U.S. dollar (approximately \$70 million), higher energy costs (\$35 million). These charges were partially offset by lower spending for operating and maintenance (approximately \$10 million) and other costs (approximately \$25 million).

Gross margin decreased from 2019 as compared to 2018 primarily due to lower average realized prices.

Segment results for Tubular

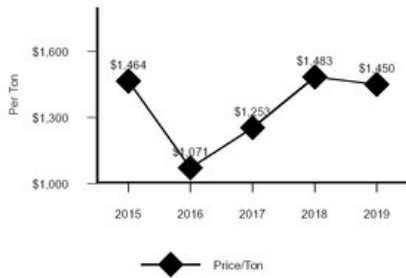
Shipments



Segment Earnings (Loss) before Interest and Income Taxes



Average Realized Price Per Ton



The Tubular segment had a loss of \$67 million for the year ended December 31, 2019 compared to a loss of \$58 million for the year ended December 31, 2018. The decrease in Tubular results in 2019 as compared to 2018 was primarily due to lower average realized prices (approximately \$15 million), decreased shipments (approximately \$15 million), increased spending on operating costs (approximately \$35 million) and increased costs associated with the continued execution of Tubular's commercial and technology strategy (approximately \$25 million). These charges were partially offset by lower substrate and rounds costs (approximately \$80 million).

Gross margin for 2019 as compared to 2018 decreased primarily due to lower average realized prices.

Results for Other Businesses

Other Businesses had earnings of \$23 million and \$55 million for 2019 and 2018, respectively.

Items not allocated to segments:

We incurred charges of \$50 million for costs associated with the **December 24, 2018 Clairton coke making facility fire**.

We recorded \$275 million of **restructuring and other charges** for the intended indefinite idling of a significant portion of Great Lakes Works, the indefinite idling of ECT and our finishing facility in Dearborn, Michigan, within the Flat-Rolled segment, the labor productivity strategy within the USSE segment and company-wide headcount reductions.

We recorded a charge of \$81 million for **United Steelworkers labor agreement signing bonus and related costs** in 2018 associated with the 2018 Labor Agreements with the United Steelworkers.

We recorded \$80 million for **Granite City Works restart and related costs** in 2018 as a result of costs associated with the restart of the "A" and "B" blast furnaces.

We recorded a favorable adjustment of \$8 million in 2018 related to **Granite City Works temporary idling charges**.

We recognized a **gain on equity investee transactions** of \$38 million in 2018. The gain on equity investee transactions included approximately \$18 million for the assignment of our 33% ownership interest in Leeds Retail Center, LLC and \$20 million from the sale of our 40% ownership interest in Acero Prime, S. R. L. de CV. (see Note 12 to the Consolidated Financial Statements, "Investments and Long-Term Receivables and Equity Investee Transactions" for further details).

Net Interest and Other Financial Costs

	Year Ended December 31,	
	2019	2018
<i>(Dollars in millions)</i>		
Interest income	\$ (17)	\$ (23)
Interest expense	142	168
Net periodic benefit cost (other than service cost)	91	69
Loss on debt extinguishment	—	98
Other financial costs	6	—
Net interest and other financial costs	\$ 222	\$ 312

During 2019, U. S. Steel entered into a new five-year senior secured asset-based revolving credit facility in an aggregate amount of \$2.0 billion (Fifth Credit Facility Agreement) to replace its former \$1.5 billion credit facility. Also, during 2019 U. S. Steel had net borrowings of \$600 million from the Fifth Credit Facility Agreement; launched offerings of two series of environmental revenue bonds in aggregate principal amount of approximately \$368 million, that will mature between 2024 and 2049 of which approximately \$93 million was used to redeem a portion of our existing outstanding environmental revenue bonds; issued \$350 million aggregate principal amount of 5.00% Senior Convertible Notes due 2026 (2026 Senior Convertible Notes) and, had additional borrowings of €150 million (approximately \$164 million) from the USSK Credit Agreement. For additional information regarding changes in our debt profile see Note 17 to the Consolidated Financial Statements.

During 2018, U. S. Steel issued \$650 million aggregate principal amount of 6.250% Senior Notes due 2026 (2026 Senior Notes) and had borrowings of €200 million (approximately \$229 million) from the USSK Credit Agreement. Also, during 2018, through a series of open market purchases, U. S. Steel repurchased approximately \$75 million of its 7.375% Senior Notes due in 2020 (2020 Senior Notes) and redeemed the remaining \$357 million. Additionally, U. S. Steel tendered and then redeemed the \$780 million aggregate principal amount of its 8.375% Senior Secured Notes due 2021 (2021 Senior Secured Notes). The aggregate redemption costs of these repurchases and redemptions totaled \$1,296 million, which included \$1,212 million for the remaining principal balances and \$84 million of redemption premiums which have been reflected within the loss on debt extinguishment line in the table above.

The net periodic benefit cost (other than service cost) of pension and other benefit costs are a component of net interest and other financial costs. The increase in 2019 pension and Other Benefit expense was primarily due to lower asset returns than expected for 2018 and a lower asset return assumption used in 2019, partially offset by the natural maturation of the plans.

For additional information on U. S. Steel's foreign currency exchange activity see Note 16 to the Consolidated Financial Statements and Item 7A. "Quantitative and Qualitative Disclosures about Market Risk – Foreign Currency Exchange Rate Risk."

Income Taxes

The income tax expense for the year ended December 31, 2019 was \$178 million compared to an income tax benefit of \$303 million in 2018. The tax provision in 2019 does not reflect any tax benefit in the U.S. as a valuation allowance was recorded against the net domestic deferred tax asset (excluding a portion of deferred tax liability related to an asset with an indefinite life, as well as a deferred tax asset related to refundable Alternative Minimum Tax (AMT) credits). Included in the 2018 tax benefit is a benefit of \$374 million related to the reversal of a portion of the valuation allowance recorded against the Company's net domestic deferred tax asset, as well as a benefit of \$38 million related to the reversal of the valuation allowance for current year activity.

The net domestic deferred tax asset was \$12 million at December 31, 2019, net of an established valuation allowance of \$560 million, compared to a net domestic deferred tax asset of \$445 million at December 31, 2018, net of an established valuation allowance of \$211 million.

At December 31, 2019, the net foreign deferred tax asset was \$3 million, net of an established valuation allowance of \$3 million. At December 31, 2018, the net foreign deferred tax liability was \$14 million, net of an established valuation allowance of \$3 million.

For further information on income taxes see Note 11 to the Consolidated Financial Statements.

Net earnings/(loss) attributable to U. S. Steel

Net loss attributable to U. S. Steel in 2019 was \$(630) million compared to net earnings of \$1,115 million in 2018. The changes primarily reflected the factors discussed above.

Financial Condition, Cash Flows and Liquidity

Financial Condition

Accounts receivable decreased by \$482 million from December 31, 2018 primarily as a result of lower average realized prices in all of our segments and lower shipments in our European segment.

Inventories decreased by \$307 million from December 31, 2018 primarily due to decreased operating levels in our Flat-Rolled and USSE segments.

Long-term restricted cash increased by \$151 million primarily related to proceeds from environmental revenue bonds that are restricted to pay for the electric arc furnace construction and certain other capital expenditure projects at the Company's Fairfield Tubular Operations.

Investments and long-term receivables increased by \$953 million from year-end 2018 primarily as a result of our purchase of a 49.9% ownership interest in Big River Steel and the call option related to it.

Operating lease assets increased by \$230 million from year-end 2018 as a result of the adoption of the new accounting standard for leases (see Note 24 for further details).

Property, plant and equipment, net increased by \$582 million from year-end 2018 due to the level of capital expenditures exceeding depreciation expense.

Deferred income tax benefits decreased by \$426 million from year-end 2018 primarily because it was determined that it was more likely than not that the net domestic deferred tax asset (excluding a portion of a deferred tax liability related to an asset with an indefinite life, as well as a deferred tax asset related to refundable AMT credits) may not be realized.

Other noncurrent assets increased by \$161 million primarily due to the over funded status of our OPEB obligation.

Accounts payable and other accrued liabilities decreased by \$481 million from year-end 2018 primarily as a result of decreased operating levels in our Flat-Rolled and USSE segments.

Payroll and benefits payable decreased by \$104 million from year-end 2018 primarily due to lower accruals for variable compensation, reclassification of liabilities to noncurrent assets due to the overfunded status of our OPEB obligation, partially offset by employee costs associated with the idling of facilities.

Noncurrent operating lease liabilities increased by \$177 million from year-end 2018 as a result of the adoption of the new accounting standard for leases (see Note 24 for further details).

Long-term debt increased by \$1,311 million from year-end 2018 primarily due to the net draw of \$600 million on the Fifth Credit Facility Agreement for the purchase of Big River Steel; the issuance of \$350 million in 2026 Senior Convertible Notes and increase of \$275 million, net of redemptions, in environmental revenue bonds for the construction of an EAF at our Fairfield Tubular Operations.

Employee benefits decreased by \$448 million from year-end 2018 primarily due to higher than expected returns on pension plan assets and a reduction in future health care costs partially offset by a lower discount rate.

Deferred credits and other noncurrent liabilities increased by \$278 million from year-end 2018 primarily due to the put option related to our purchase of a 49.9% ownership interest in Big River Steel and liabilities associated with the idling of facilities.

Cash Flows

Net cash provided by operating activities was \$682 million in 2019 compared to \$938 million in 2018. The decrease in 2019 compared to 2018 was primarily due to decreased operating results, partially offset by changes in working capital. Changes in working capital can vary significantly depending on factors such as the timing of inventory production and purchases, which is affected by the length of our business cycles as well as our captive raw materials position, customer payments of accounts receivable and payments to vendors in the regular course of business.

Our key working capital components include accounts receivable and inventory. The accounts receivable and inventory turnover ratios for the years ended December 31, 2019 and 2018 are as follows:

	Year Ended December 31,	
	2019	2018
Accounts Receivable Turnover	9.1	9.3
Inventory Turnover	6.2	6.4

The decrease in accounts receivable turnover approximates one day for 2019 as compared to 2018 and is primarily due to decreased sales as a result of decreased shipments in our USSE segment and lower average realized prices across all segments. The decrease in inventory turnover approximates two days for 2019 as compared to 2018 and is primarily due to lower inventory levels from reduced production in our Flat-Rolled and USSE segments.

The last-in, first-out (LIFO) inventory method is the predominant method of inventory costing in the United States. At December 31, 2019 and 2018, the LIFO method accounted for 75 percent and 74 percent of total inventory values, respectively. In the U.S., management monitors the inventory realizability by comparing the LIFO cost of inventory with the replacement cost of inventory. To the extent the replacement cost (i.e., market value) of inventory is lower than the LIFO cost of inventory, management will write the inventory down. As of December 31, 2019 and 2018, the replacement cost of the inventory was higher by approximately \$735 million and \$1,038 million, respectively.

Our cash conversion cycle increased nine days in the fourth quarter of 2019 from the fourth quarter of 2018 as shown below:

Cash Conversion Cycle	2019		2018	
	\$ millions	Days	\$ millions	Days
Accounts receivable, net ^(a)	\$ 1,177	42	\$ 1,659	42
+ Inventories ^(b)	\$ 1,785	64	\$ 2,092	58
- Accounts Payable and Other Accrued Liabilities ^(c)	\$ 1,970	69	\$ 2,477	72
= Cash Conversion Cycle ^(d)		37		28

^(a) Calculated as Average Accounts Receivable, net divided by total Net Sales multiplied by the number of days in the period.

^(b) Calculated as Average Inventory divided by total Cost of Sales multiplied by the number of days in the period.

^(c) Calculated as Average Accounts Payable and Other Accrued Liabilities less bank checks outstanding and other current liabilities divided by total Cost of Sales multiplied by the number of days in the period.

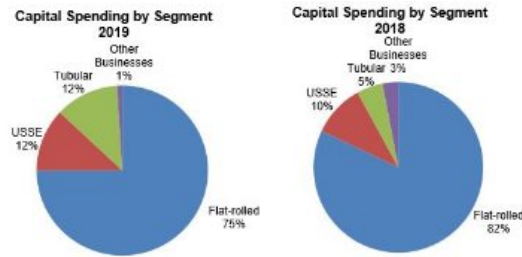
^(d) Calculated as Accounts Receivable Days plus Inventory Days less Accounts Payable Days.

Net cash provided by operating activities for 2019 and 2018 reflects employee benefits payments as shown in the following table.

Employee Benefits Payments

(Dollars in millions)	Year Ended December 31,	
	2019	2018
Other employee benefits payments not funded by trusts	\$ 45	\$ 48
Payments to a multiemployer pension plan	77	60
Pension related payments not funded by trusts	8	20
Reductions in cash flows from operating activities	\$ 130	\$ 128

Capital expenditures in 2019 were \$1.252 billion compared to \$1.001 billion in 2018.



2019 Capital Spending

Total capital expenditures for 2019 were \$1.252 billion. Flat-Rolled capital expenditures were \$943 million and included spending for the Mon Valley No. 3 Blast Furnace outage, Mon Valley Endless Casting and Rolling, Gary Hot Strip Mill upgrades, Great Lakes B2 Blast Furnace, Midwest Tin Cold Mill upgrades, and various other infrastructure, environmental and strategic projects. Tubular capital expenditures were \$145 million and included spending for the Fairfield Electric Arc Furnace (EAF) project, Offshore Operations threading line and swage extension and various other strategic capital projects. USSE capital expenditures of \$153 million consisted of spending for improved Sinter Strand Emission control, improved Ore Bridges Emission control, the new Dynamo line and various other infrastructure and environmental projects.

Capital expenditures for 2020 are expected to total approximately \$875 million and remain focused largely on strategic, infrastructure and environmental projects, as well as continued reinvestment in our equipment to improve our operating reliability and efficiency, and product quality and cost by focusing on investments in our Flat-Rolled segment.

U. S. Steel's contractual commitments to acquire property, plant and equipment at December 31, 2019, totaled \$880 million.

In 2019, U. S. Steel purchased a 49.9% ownership interest in Big River Steel at a purchase price of approximately \$710 million including approximately \$27 million of transaction costs.

In 2018, U. S. Steel sold its 40% ownership interest in Acero Prime, S. R. L. de CV for a pretax gain of \$20 million.

Revolving credit facilities - borrowings, net of financing costs, totaled \$860 million in 2019, which represents cash received primarily from borrowings under the Fifth Credit Facility Agreement for the purchase of our 49.9% equity interest in Big River Steel. In 2018, \$228 million was borrowed under the USSK Credit Agreement.

Issuance of long-term debt, net of financing costs, totaled \$702 million in 2019. In 2019, U. S. Steel issued \$368 million under two series of environmental revenue bonds for which it received net proceeds of \$362 million after underwriting fees and estimated offering expenses and issued \$350 million aggregate principal amount of 2026 Senior Convertible Notes for which it received net proceeds of \$340 million after underwriting fees and estimated offering expenses. In 2018, U. S. Steel issued \$650 million of 6.250% Senior Notes due March 15, 2026. U. S. Steel received net proceeds from the offering of approximately \$640 million after fees of approximately \$10 million related to the underwriting and third-party expenses. For further information see Note 17 to the Consolidated Financial Statements.

Repayment of revolving credit facilities totaled \$100 million in 2019 and represents repayment on our Fifth Credit Facility Agreement.

Repayment of long-term debt totaled \$155 million in 2019. In 2019, U. S. Steel redeemed \$148 million in environmental revenue bonds and made principal payments on finance leases of \$7 million. In 2018, through a series of open market purchases, U. S. Steel repurchased approximately \$75 million aggregate principal amount of its 7.375% Senior Notes due 2020 (7.375% Senior Notes) for an aggregate cash outflow of \$80 million which included \$5 million of premiums. U. S. Steel then redeemed the remaining \$357 million aggregate principal amount of its 7.375% Senior Notes for an aggregate cash outflow of \$376 million which included \$19 million of premiums. Also in 2018, the Company tendered and then redeemed its \$780 million 8.375% Senior Secured Notes due 2021 for an aggregate cash outflow of \$840

million which included \$60 million of premiums. For further information see Note 17 to the Consolidated Financial Statements.

Common stock repurchased totaled \$88 million in 2019. In 2019, U. S. Steel repurchased 5,289,475 shares under its common stock repurchase program that was approved in 2018. In December 2019, the common stock repurchase program was terminated. In 2018, U. S. Steel repurchased 2,760,112 shares under the common stock repurchase program. See Note 27 to the Consolidated Financial Statements, "Common Stock Repurchase Program and Common Stock Issuance" for further details.

For all four quarters in 2019 and 2018, **dividends paid** per share of U. S. Steel common stock was \$0.05. In December 2019, U. S. Steel announced an adjustment to the quarterly dividend amount to \$0.01 per share beginning with dividends declared in 2020.

Liquidity

The following table summarizes U. S. Steel's liquidity as of December 31, 2019:

(Dollars in millions)

Cash and cash equivalents	\$	749
Amount available under \$2.0 Billion Credit Facility		1,380
Amounts available under USSK credit facilities		155
Total estimated liquidity	\$	2,284

Total Estimated Liquidity at December 31, 2019



As of December 31, 2019, \$255 million of the total cash and cash equivalents was held by our foreign subsidiaries. Substantially all of the liquidity attributable to our foreign subsidiaries can be accessed without the imposition of income taxes as a result of the election effective December 31, 2013 to liquidate for U.S. income tax purposes a foreign subsidiary that holds most of our international operations.

U. S. Steel maintains a \$2.0 billion asset-backed revolving credit facility (Fifth Credit Facility Agreement). As of December 31, 2019, there was \$600 million drawn on the Fifth Credit Facility Agreement. U. S. Steel must maintain a fixed charge negative covenant test of at least 1.00 to 1.00 for the most recent four consecutive quarters when availability under the Fifth Credit Facility Agreement is less than the greater of 10% of the total aggregate commitments and \$200 million. Based on the four quarters as of December 31, 2019, we would have met this covenant. If we are unable to meet this covenant in future periods, the amount available to the Company under this facility would be reduced by \$200 million. On October 30, 2019, we drew \$700 million on the Fifth Credit Facility Agreement and on November 14, 2019 repaid \$100 million on the facility. On January 26, 2020, U. S. Steel made another payment of \$50 million on this facility.

At December 31, 2019, USSK had borrowings of €350 million (approximately \$393 million) under its €460 million (approximately \$517 million) revolving credit facility (the USSK Credit Agreement). On December 23, 2019 USSK

entered into a supplemental agreement that amended the USSK Credit Agreement leverage covenant and pledged certain USSK trade receivables and inventory as collateral in support of USSK's obligations. If USSK does not comply with the financial covenants it may not be able to draw on the facility until the next measurement date. At December 31, 2019, USSK had availability of €110 million (approximately \$124 million) under the USSK Credit Agreement. See Note 17 to the Consolidated Financial Statements, "Debt" for further details.

At December 31, 2019, USSK had no borrowings under its €20 million and €10 million credit facilities (collectively approximately \$33 million) and the aggregate availability was approximately \$31 million due to approximately \$2 million of customs and other guarantees outstanding. These facilities expire in December 2021.

On December 10, 2019, U. S. Steel entered into an Export Credit Agreement (ECA) with KfW IPEX-Bank GMBH and certain other lenders. Funding of the ECA is expected to occur during the first quarter of 2020. The purpose of the ECA is to finance equipment purchased for the endless casting and rolling facility under construction at our Mon Valley Works facility in Braddock, Pennsylvania. Loans available under the ECA total approximately \$288 million and are made up of a Commercial Facility of approximately \$38 million and a Covered Facility of approximately \$250 million. See Note 17 to the Consolidated Financial Statements, "Debt" for further details.

In March 2018, U. S. Steel issued \$650 million aggregate principal amount of 6.250% Senior Notes due March 15, 2026 (2026 Senior Notes). U. S. Steel received net proceeds from the offering of approximately \$640 million after fees of approximately \$10 million related to the underwriting and third-party expenses. The net proceeds from the issuance of the 2026 Senior Notes, together with cash on hand, were used to tender or otherwise redeem all of our outstanding 2021 Senior Secured Notes. U. S. Steel will pay interest on the notes semi-annually in arrears on March 15th and September 15th of each year, commencing on September 15, 2018.

We may from time to time seek to retire or repurchase our outstanding long-term debt through open market purchases, privately negotiated transactions, exchange transactions, redemptions or otherwise. Such purchases or exchanges, if any, will depend on prevailing market conditions, our liquidity requirements, and other factors and may be commenced or suspended at any time. The amounts involved may be material.

We use surety bonds, trusts and letters of credit to provide financial assurance for certain transactions and business activities. The use of some forms of financial assurance and cash collateral have a negative impact on liquidity. U. S. Steel has committed \$164 million of liquidity sources for financial assurance purposes as of December 31, 2019. Increases in certain of these commitments which use collateral are reflected in restricted cash on the Consolidated Statement of Cash Flows.

At December 31, 2019, in the event of a change in control of U. S. Steel: (a) debt obligations totaling \$3,093 million as of December 31, 2019 may be declared due and payable; (b) the Credit Facility Agreement and the USSK credit facilities may be terminated and any amounts outstanding declared due and payable; and (c) U. S. Steel may be required to either repurchase the leased Fairfield slab caster for \$19 million or provide a cash collateralized letter of credit to secure the remaining obligation.

The maximum guarantees of the indebtedness of unconsolidated entities of U. S. Steel totaled \$4 million at December 31, 2019. If any default related to the guaranteed indebtedness occurs, U. S. Steel has access to its interest in the assets of the investees to reduce its potential losses under the guarantees.

The following table summarizes U. S. Steel's contractual obligations at December 31, 2019, and the effect such obligations are expected to have on our liquidity and cash flows in future periods.

(Dollars in millions)

Contractual Obligations	Total	2020	Payments Due by Period		
			2021 through 2022	2023 through 2024	Beyond 2024
Long-term debt (including interest) and finance leases ^(a)	\$ 5,751	\$ 226	\$ 450	\$ 1,463	\$ 3,612
Operating leases ^(b)	289	74	104	60	51
Contractual purchase commitments ^(c)	4,197	2,400	741	445	611
Capital commitments ^(d)	880	663	217	—	—
Environmental commitments ^(d)	186	53	—	—	133 ^(e)
Steelworkers Pension Trust ^(f)	430	79	172	179	—
Pensions ^(g)	264	—	—	101	163
Other benefits ^(h)	228	48	93	87	—
Total contractual obligations	\$ 12,225	\$ 3,543	\$ 1,777	\$ 2,335	\$ 4,570

(a) See Note 17 to the Consolidated Financial Statements.

(b) See Note 24 to the Consolidated Financial Statements. Amounts exclude subleases.

(c) Reflects contractual purchase commitments under purchase orders and "take or pay" arrangements. "Take or pay" arrangements are primarily for purchases of gases and certain energy and utility services. Additionally, includes coke and steam purchase commitments related to a coke supply agreement with Gateway Energy & Coke Company LLC (See Note 26 to the Consolidated Financial Statements).

(d) See Note 26 to the Consolidated Financial Statements.

(e) Timing of potential cash flows is not reasonably determinable.

(f) While it is difficult to make a prediction of cash requirements beyond the term of the 2018 Labor Agreements with the USW, which expire on September 1, 2022, projected amounts shown through 2023 assume the contribution rate per hour included in the 2018 Labor Agreements.

(g) Projections are estimates of the minimum required contributions to the main domestic defined benefit pension plan which have been estimated assuming future asset performance consistent with our expected long-term earnings rate assumption, no voluntary contributions during the periods, and that the current low interest rate environment persists. Projections include the impacts of the November 2015 pension stabilization legislation, which further extended a revised interest rate formula to be used in calculating minimum required annual contributions. The legislation also increased the contribution rate of future Pension Benefit Guarantee Corporation (PBGC) premiums. After 2023, payments represent minimum contributions that may be needed over the next five years, and which would fully fund the plan.

(h) The amounts reflect corporate cash outlays for expected benefit payments to be paid by the Company. (See Note 18 to the Consolidated Financial Statements). The accuracy of this forecast of future cash flows depends on future medical health care escalation rates and restrictions related to our trusts for retiree healthcare and life insurance (VEBA) that impact the timing of the use of trust assets. Projected amounts have been reduced to reflect withdrawals from the USW VEBA trust available under its agreements with the USW. Due to these factors, it is not possible to reliably estimate cash requirements beyond five years and actual amounts experienced may differ significantly from those shown.

Contingent lease payments have been excluded from the above table. Contingent lease payments relate to operating lease agreements that include a floating rental charge, which is associated to a variable component. Future contingent lease payments are not determinable to any degree of certainty. U. S. Steel's annual incurred contingent lease expense is disclosed in Note 24 to the Consolidated Financial Statements. Additionally, recorded liabilities related to deferred income taxes and other liabilities that may have an impact on liquidity and cash flow in future periods, disclosed in Note 11 to the Consolidated Financial Statements, are excluded from the above table.

U. S. Steel will monitor the funded status of the pension plan to determine when voluntary contributions may be prudent in order to mitigate potentially larger mandatory contributions in later years. The funded status of U. S. Steel's pension plans is disclosed in Note 18 to the Consolidated Financial Statements.

The following table summarizes U. S. Steel's commercial commitments at December 31, 2019, and the effect such commitments could have on our liquidity and cash flows in future periods.

(Dollars in millions)

Commercial Commitments	Total	Scheduled Reductions by Period			
		2020	2021 through 2022	2023 through 2024	Beyond 2024
Standby letters of credit ^(a)	\$ 36	\$ 25	\$ 1	\$ —	\$ 10 ^(b)
Surety bonds ^(a)	109	—	—	—	109 ^(b)
Funded Trusts ^(a)	3	—	—	—	3 ^(b)
Total commercial commitments	\$ 148	\$ 25	\$ 1	\$ —	\$ 122

(a) Reflects a commitment or guarantee for which future cash outflow is not considered likely.

(b) Timing of potential cash outflows is not determinable.

Our major cash requirements in 2020 are expected to be for capital expenditures, including strategic priorities and asset revitalization, employee benefits and operating costs, which includes purchases of raw materials. We ended 2019 with \$749 million of cash and cash equivalents and \$2,284 million of total liquidity. Available cash is left on deposit with financial institutions or invested in highly liquid securities with parties we believe to be creditworthy.

U. S. Steel management believes that U. S. Steel's liquidity will be adequate to satisfy our obligations for the foreseeable future, including obligations to complete currently authorized capital spending programs. Future requirements for U. S. Steel's business needs, including the funding of acquisitions and capital expenditures, scheduled debt maturities, repurchase of debt, share buybacks, dividends, contributions to employee benefit plans, and any amounts that may ultimately be paid in connection with contingencies, are expected to be funded by a combination of internally generated funds (including asset sales), proceeds from the sale of stock, borrowings, refinancings and other external financing sources.

Off-Balance Sheet Arrangements

U. S. Steel has invested in several joint ventures that are reported as equity investments. Several of these investments involved a transfer of assets in exchange for an equity interest. U. S. Steel has supply arrangements with several of these joint ventures.

U. S. Steel's other off-balance sheet arrangements include guarantees, indemnifications, unconditional purchase obligations, surety bonds, trusts and letters of credit disclosed in Note 26 to the Consolidated Financial Statements.

Derivative Instruments

See "Item 7A. Quantitative and Qualitative Disclosures About Market Risk" for discussion of derivative instruments and associated market risk for U. S. Steel.

Environmental Matters

U. S. Steel's environmental expenditures were as follows:

(Dollars in millions)

	2019	2018	2017
North America:			
Capital	\$ 96	\$ 105	\$ 6
Compliance			
Operating & maintenance	213	198	176
Remediation ^(a)	22	6	9
Total North America	\$ 331	\$ 309	\$ 191
USSE:			
Capital	\$ 27	\$ 20	\$ 46
Compliance			
Operating & maintenance	10	12	11
Remediation ^(a)	8	9	7
Total USSE	\$ 45	\$ 41	\$ 64
Total U. S. Steel	\$ 376	\$ 350	\$ 255

^(a) These amounts include spending charged against remediation reserves, net of recoveries where permissible, but do not include non-cash provisions recorded for environmental remediation.

U. S. Steel's environmental capital expenditures accounted for 10 percent of total capital expenditures in 2019 and 12 percent in 2018 and 10 percent in 2017.

Environmental compliance expenditures represented 2 percent of U. S. Steel's total costs and expenses in 2019, 2018 and 2017. Remediation spending during 2017 through 2019 was mainly related to remediation activities at former and present operating locations.

For discussion of other relevant environmental items see "Part I, Item 3. Legal Proceedings – Environmental Proceedings."

The following table shows activity with respect to environmental remediation liabilities for the years ended December 31, 2019 and December 31, 2018. These amounts exclude liabilities related to asset retirement obligations accounted for in accordance with ASC Topic 410. See Note 19 to the Consolidated Financial Statements.

(Dollars in millions)

	2019	2018
Beginning Balance	\$ 187	\$ 179
Plus: Additions	20	14
Less: Obligations settled	(21)	(6)
Ending Balance	\$ 186	\$ 187

New or expanded environmental requirements, which could increase U. S. Steel's environmental costs, may arise in the future. U. S. Steel intends to comply with all legal requirements regarding the environment, but since many of them are not fixed or presently determinable (even under existing legislation) and may be affected by future legislation, it is not possible to predict accurately the ultimate cost of compliance, including remediation costs which may be incurred and penalties which may be imposed. U. S. Steel's environmental capital expenditures are expected to be approximately \$66 million in 2020, \$5 million of which is related to projects at USSE. U. S. Steel's environmental expenditures for 2020 for operating and maintenance and for remediation projects are expected to be approximately \$215 million and \$60 million, respectively, of which approximately \$10 million and \$5 million for operating and maintenance and remediation, respectively, is related to USSE. Although, the outcome of pending environmental matters are not estimable at this time, it is reasonably possible that U. S. Steel's environmental capital and operating and maintenance expenditures could materially increase as a result of the future resolution of these matters. Predictions of future environmental expenditures beyond 2020 can only be broad-based estimates, which have varied, and will continue

to vary, due to the ongoing evolution of specific regulatory requirements, the possible imposition of more stringent requirements and the availability of new technologies to remediate sites, among other factors.

Accounting Standards

See Notes 2 and 3 to the Consolidated Financial Statements in Part II Item 8 of this Form 10-K.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

U. S. Steel is exposed to certain risks related to its ongoing business operations, including financial, market, political, and economic risks. The following discussion provides information regarding U. S. Steel's exposure to the risks of changing foreign currency exchange rates, commodity prices and interest rates.

U. S. Steel may enter into derivative financial instrument transactions in order to manage or reduce these market risks. The use of derivative instruments is subject to our corporate governance policies. These instruments are used solely to mitigate market exposure and are not used for trading or speculative purposes.

U. S. Steel may elect to use hedge accounting for certain commodity or currency transactions. For those transactions, the impact of the hedging instrument will be recognized in other comprehensive income until the transaction is settled. Once the transaction is settled, the effect of the hedged item will be recognized in income. For further information regarding derivative instruments see Notes 1 and 16 to the Consolidated Financial Statements.

Foreign Currency Exchange Rate Risk

U. S. Steel, through USSE, is subject to the risk of price fluctuations due to the effects of exchange rates on revenues and operating costs, firm commitments for capital expenditures and existing assets or liabilities denominated in currencies other than the U.S. dollar, particularly the euro. U. S. Steel historically has made limited use of forward currency contracts to manage exposure to certain currency price fluctuations. U. S. Steel elected cash flow hedge accounting for euro foreign exchange forwards prospectively effective July 1, 2019. Foreign currency derivative instruments entered into prior to July 1, 2019 have been marked-to-market and the resulting gains or losses recognized in the current period in net interest and other financial costs. At December 31, 2019 and December 31, 2018, U. S. Steel had open euro forward sales contracts for U.S. dollars that were subject to mark-to-market accounting (total notional value of approximately \$153 million and \$344 million, respectively). A 10 percent increase in the December 31, 2019 euro forward rates would result in a \$15 million charge to income.

The fair value of our derivatives is determined using Level 2 inputs, which are defined as "significant other observable" inputs. The inputs used include quotes from counterparties that are corroborated with market sources.

Volatility in the foreign currency markets could have significant implications for U. S. Steel as a result of foreign currency transaction effects. Future foreign currency impacts will depend upon changes in currencies and the extent to which we engage in derivatives transactions. For additional information on U. S. Steel's foreign currency exchange activity, see Note 16 to the Consolidated Financial Statements.

Commodity Price Risk and Related Risks

In the normal course of our business, U. S. Steel is exposed to market risk or price fluctuations related to the purchase, production or sale of steel products. U. S. Steel is also exposed to price risk related to the purchase, production or sale of coal, coke, natural gas, steel scrap, iron ore and pellets, and zinc, tin and other nonferrous metals used as raw materials. U. S. Steel is also subject to market price risk for the purchase of a portion of its electricity at certain facilities. See Note 16 to the Consolidated Financial Statements for further details on U. S. Steel's derivatives.

U. S. Steel's market risk strategy has generally been to obtain competitive prices for our products and services and allow operating results to reflect market price movements dictated by supply and demand; however, from time to time U. S. Steel has made forward physical purchases to manage exposure to price risk related to the purchases of natural gas and certain non-ferrous metals used in the production process. As of December 31, 2019, U. S. Steel did not have forward buy contracts for natural gas or any of the other significant raw materials that it uses in its production process.

Interest Rate Risk

U. S. Steel is subject to the effects of interest rate fluctuations on the fair value of certain of our non-derivative financial instruments. A sensitivity analysis of the projected incremental effect of a hypothetical 10 percent increase/decrease in year-end 2019 and 2018 interest rates on the fair value of U. S. Steel's non-derivative financial instruments is provided in the following table:

(Dollars in millions)

	2019		2018	
Non-Derivative Financial Instruments^(a)	Fair Value^(b)	Change in Fair Value^(c)	Fair Value^(b)	Change in Fair Value^(c)
Financial liabilities:				
Debt ^{(d)(e)}	\$ 3,576	\$ 138	\$ 2,182	\$ 102

(a) Fair values of cash and cash equivalents, current accounts and notes receivable, accounts payable, bank checks outstanding and accrued interest approximate carrying value and are relatively insensitive to changes in interest rates due to the short-term maturity of the instruments. Accordingly, these instruments are excluded from the table.

(b) See Note 20 to the Consolidated Financial Statements for carrying value of instruments.

(c) Reflects, by class of financial instrument, the estimated incremental effect of a hypothetical 10 percent change in interest rates at December 31, 2019 and 2018, on the fair value of U. S. Steel's non-derivative financial instruments. For financial liabilities, this assumes a 10 percent decrease in the weighted average yield to maturity of U. S. Steel's long-term debt at December 31, 2019 and December 31, 2018.

(d) Excludes finance lease obligations.

(e) Fair value was determined using Level 2 inputs which were derived from quoted market prices and is based on the yield on public debt where available or current borrowing rates available for financings with similar terms and maturities.

U. S. Steel's sensitivity to interest rate declines and corresponding increases in the fair value of our debt portfolio would unfavorably affect our results and cash flows only to the extent that we elected to repurchase or otherwise retire all or a portion of our fixed-rate debt portfolio at prices above carrying value.

Other Risks

U. S. Steel's purchase of a 49.9% equity ownership interest in Big River Steel on October 31, 2019 included certain call and put options. U. S. Steel marks these options to fair value each reporting period using a Monte Carlo simulation which is considered a Level 3 valuation technique. Level 3 valuation techniques include inputs to the valuation methodology that are considered unobservable and significant to the fair value measurement. The simulation relies on assumptions that include Big River Steel's future equity value, volatility, the risk free interest rate and U. S. Steel's credit spread. Changes in the key assumptions can cause significant fluctuations in the value of the puts and calls that are recorded in net interest and other financial costs in our Consolidated Statement of Operations. The net change in fair value of the options during 2019 resulted in a \$7 million increase to net interest and other financial costs. See Note 5 and Note 20 to the Consolidated Financial Statements for further details.

Item 8. CONSOLIDATED FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The information required by this item is set forth in our Consolidated Financial Statement contained in this Annual Report on Form 10-K. Specific financial statements can be found at the page listed below:

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CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS) FOR THE YEARS ENDED DECEMBER 31, 2019, 2018 AND 2017	F-8
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MANAGEMENT'S REPORT TO STOCKHOLDERS

February 14, 2020

To the Stockholders of United States Steel Corporation:

Financial Statements and Practices

The accompanying consolidated financial statements of United States Steel Corporation are the responsibility of and have been prepared by United States Steel Corporation in conformity with accounting principles generally accepted in the United States of America. They necessarily include some amounts that are based on our best judgments and estimates. United States Steel Corporation's financial information displayed in other sections of this report is consistent with these financial statements.

United States Steel Corporation seeks to assure the objectivity and integrity of its financial records by careful selection of its managers, by organizational arrangements that provide an appropriate division of responsibility and by communication programs aimed at assuring that its policies, procedures and methods are understood throughout the organization.

United States Steel Corporation has a comprehensive, formalized system of internal controls designed to provide reasonable assurance that assets are safeguarded, that financial records are reliable and that information required to be disclosed in reports filed with or submitted to the Securities and Exchange Commission is recorded, processed, summarized and reported within the required time limits. Appropriate management monitors the system for compliance and evaluates it for effectiveness, and the auditors independently measure its effectiveness and recommend possible improvements thereto.

The Board of Directors exercises its oversight role in the area of financial reporting and internal control over financial reporting through its Audit Committee. This committee, composed solely of independent directors, regularly meets (jointly and separately) with the independent registered public accounting firm, management, internal audit and other executives to monitor the proper discharge by each of their responsibilities relative to internal control over financial reporting and United States Steel Corporation's financial statements.

Internal Control Over Financial Reporting

United States Steel Corporation's management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Exchange Act Rule 13a-15(f). Under the supervision and with the participation of United States Steel Corporation's management, including the Chief Executive Officer and Chief Financial Officer, United States Steel Corporation conducted an evaluation of the effectiveness of its internal control over financial reporting based on the framework in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Based on this evaluation, United States Steel Corporation's management concluded that United States Steel Corporation's internal control over financial reporting was effective as of December 31, 2019.

The effectiveness of United States Steel Corporation's internal control over financial reporting as of December 31, 2019 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which is included herein.

/s/ DAVID B. BURRITT

David B. Burritt
President and
Chief Executive Officer

/s/ CHRISTINE S. BREVES

Christine S. Breves
Senior Vice President and
Chief Financial Officer

/s/ KIMBERLY D. FAST

Kimberly D. Fast
Acting Controller



Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of United States Steel Corporation

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of United States Steel Corporation and its subsidiaries (the "Company") as of December 31, 2019 and 2018, and the related consolidated statements of operations, comprehensive income (loss), stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2019, including the related notes and financial statement schedule listed in the index appearing under Item 15(a)(2) (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control - Integrated Framework (2013) issued by the COSO.

Change in Accounting Principle

As discussed in Note 3 to the consolidated financial statements, the Company changed the manner in which it accounts for leases in 2019.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report to Stockholders on Internal Control Over Financial Reporting. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that (i) relate to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Realizability of Deferred Tax Assets

As described in Notes 1 and 11 to the consolidated financial statements, the Company has total deferred tax assets of \$422 million, which is net of a valuation allowance of \$563 million as of December 31, 2019. The Company records a valuation allowance to reduce deferred tax assets to the amount that is more likely than not to be realized. A valuation allowance is recorded if, based on the weight of all available positive and negative evidence, it is more likely than not that some portion, or all, of a deferred tax asset will not be realized. After weighing all the positive and negative evidence, the Company determined that it was more likely than not that the net domestic deferred tax asset (excluding a portion of a deferred tax liability related to an asset with an indefinite life, as well as a deferred tax asset related to refundable AMT credits) may not be realized. As a result, the Company recorded a \$334 million non-cash charge to tax expense in 2019.

The principal considerations for our determination that performing procedures relating to the realizability of deferred tax assets is a critical audit matter are there was significant judgment by management in determining the amount of deferred tax assets that were more likely than not to be realized in the future. This in turn led to a high degree of auditor judgment and subjectivity in applying our audit procedures relating to management's determination of the amount of deferred tax assets that were more likely than not to be realized in the future, and significant audit effort was necessary in evaluating the weighing of the positive and negative evidence.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to income taxes, including controls over management's assessment of the realizability of deferred tax assets, which included assessing positive and negative evidence. These procedures also included, among others, testing management's process for assessing the amount of deferred tax assets that are more likely than not to be realized; evaluating management's weighing of positive and negative evidence; testing the completeness and relevance of underlying data used; and evaluating the assumptions used by management, including the uncertainty regarding the Company's ability to generate domestic income in the near term. Evaluating management's assumptions related to generating domestic income in the near term involved evaluating whether the assumptions used by management were reasonable considering the current and past performance of the Company and the consistency with external market and industry data.

Fair Value of Options

As described in Notes 5 and 20 to the consolidated financial statements, a wholly-owned subsidiary of U. S. Steel purchased a 49.9% ownership interest in Big River Steel in 2019. The transaction included a call option (U. S. Steel Call Option) to acquire the remaining 50.1% within the next four years at an agreed-upon price formula, which in years three and four is based on Big River Steel's achievement of certain metrics. The transaction also included options where the other Big River Steel equity owners can require U. S. Steel to purchase their 50.1% ownership interest (Class B Common Put Option) or require U. S. Steel to sell its ownership interest (Class B Common Call Option) at an agreed-upon price if the U. S. Steel Call Option expires. All of the options are marked to fair value each period using a Monte Carlo simulation which relies on assumptions regarding Big River Steel's equity value, volatility, the risk free interest rate and credit spread. The value of the U. S. Steel Call Option, the Class B Common Put Option and Class B Common Call Option are \$166 million, \$192 million and \$2 million, respectively, as of December 31, 2019. The net change in fair value of the options during 2019 resulted in a \$7 million increase to net interest and other financial costs.

The principal considerations for our determination that performing procedures relating to the fair value of options is a critical audit matter are there was significant judgment by management when developing the fair value of these options using the Monte Carlo simulation. This in turn led to a high degree of auditor judgment, subjectivity and effort in performing our audit procedures relating to the fair value of options and the significant assumptions of Big River Steel's equity value, volatility, the risk free interest rate and credit spread used in developing the estimate. Also, the audit effort involved the use of professionals with specialized skill and knowledge to assist in performing these procedures and evaluating the audit evidence obtained.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the fair value of the options, including controls over the Company's methods, significant assumptions, and data. The procedures also included, among others, developing an independent range of values for each option and performing a comparison of management's estimate to the independently developed range to evaluate the reasonableness of management's estimate. Developing the independent range of values involved (i) developing an independent Monte Carlo simulation model, (ii) testing the completeness and accuracy of the contractual information used by management to calculate the agreed-upon price to acquire the remaining 50.1% ownership interest in Big River Steel within the next four years, (iii) evaluating the reasonableness of, and testing the accuracy of the inputs used by management to estimate the Big River Steel equity value, and (iv) independently developing risk-free rate, credit spread and volatility assumptions. Professionals with specialized skill and knowledge were used to assist in developing the independent Monte Carlo simulation model, the independent range of values and evaluating the audit evidence.

/s/ PricewaterhouseCoopers LLP
Pittsburgh, Pennsylvania
February 14, 2020

We have served as the Company's auditor since 1903.

UNITED STATES STEEL CORPORATION
CONSOLIDATED STATEMENTS OF OPERATIONS

(Dollars in millions, except per share amounts)	Year Ended December 31,		
	2019	2018	2017
Net sales:			
Net sales	\$ 11,506	\$ 12,758	\$ 11,046
Net sales to related parties (Note 23)	1,431	1,420	1,204
Total (Note 6)	12,937	14,178	12,250
Operating expenses (income):			
Cost of sales (excludes items shown below)	12,082	12,305	10,858
Selling, general and administrative expenses	289	336	320
Depreciation, depletion and amortization (Notes 13 and 14)	616	521	501
Earnings from investees (Note 12)	(79)	(61)	(44)
Gain on equity investee transactions (Note 12)	—	(38)	(2)
Gain associated with U. S. Steel Canada Inc. (Note 5)	—	—	(72)
Restructuring and other charges (Note 25)	275	—	31
Net gain on disposals of assets	(1)	(6)	(5)
Other income, net	(15)	(3)	(6)
Total	13,167	13,054	11,581
(Loss) earnings before interest and income taxes	(230)	1,124	669
Interest expense	142	168	226
Interest income	(17)	(23)	(17)
Loss on debt extinguishment (Note 7)	—	98	54
Other financial costs	6	—	44
Net periodic benefit cost (other than service cost) (Note 3) ^(a)	91	69	61
Net interest and other financial costs (Note 7)	222	312	368
(Loss) earnings before income taxes	(452)	812	301
Income tax provision (benefit) (Note 11)	178	(303)	(86)
Net (loss) earnings	(630)	1,115	387
Less: Net earnings attributable to noncontrolling interests	—	—	—
(Loss) earnings attributable to United States Steel Corporation	\$ (630)	\$ 1,115	\$ 387
(Loss) earnings per common share (Note 8)			
(Loss) earnings per share attributable to United States Steel Corporation stockholders:			
— Basic	\$ (3.67)	\$ 6.31	\$ 2.21
— Diluted	\$ (3.67)	\$ 6.25	\$ 2.19

^(a) Represents postretirement benefit expense as a result of the adoption of Accounting Standards Update 2017-07, *Compensation - Retirement Benefits* on January 1, 2018 (see Note 3 for further details).

The accompanying notes are an integral part of these Consolidated Financial Statements.

UNITED STATES STEEL CORPORATION
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

(Dollars in millions)	Year Ended December 31,			
	2019	2018	2017	2017
Net (loss) earnings	\$ (630)	\$ 1,115	\$	387
Other comprehensive income (loss), net of tax:				
Changes in foreign currency translation adjustments ^(a)	(22)	(60)		189
Changes in pension and other employee benefit accounts ^(a)	573	(107)		462
Changes in derivative financial instruments ^(a)	(3)	(14)		1
Total other comprehensive income (loss), net of tax	548	(181)		652
Comprehensive income including noncontrolling interest	(82)	934		1,039
Comprehensive income attributable to noncontrolling interest	—	—		—
Comprehensive income attributable to United States Steel Corporation	\$ (82)	\$ 934	\$	1,039

^(a) Related income tax benefit (provision)

Foreign currency translation adjustments ^(b)	\$ 6	\$	—	\$	—
Pension and other benefits adjustments ^(b)	(191)		—		—
Derivative adjustments ^(b)	1		—		—

^(b) Amounts for 2018 and 2017 do not reflect a tax benefit as a result of a full valuation allowance on our domestic deferred tax assets.

The accompanying notes are an integral part of these Consolidated Financial Statements.

UNITED STATES STEEL CORPORATION
CONSOLIDATED BALANCE SHEETS

(Dollars in millions)	December 31,	
	2019	2018
Assets		
Current assets:		
Cash and cash equivalents (Note 9)	\$ 749	\$ 1,000
Receivables, less allowance of \$28 and \$29	956	1,435
Receivables from related parties (Note 23)	221	224
Inventories (Note 10)	1,785	2,092
Other current assets	102	79
Total current assets	3,813	4,830
Long-term restricted cash (Note 9)	188	37
Investments and long-term receivables, less allowance of \$5 in both periods (Note 12)	1,466	513
Operating lease assets (Note 24)	230	—
Property, plant and equipment, net (Note 13)	5,447	4,865
Intangibles — net (Note 14)	150	158
Deferred income tax benefits (Note 11)	19	445
Other noncurrent assets	295	134
Total assets	\$ 11,608	\$ 10,982
Liabilities		
Current liabilities:		
Accounts payable and other accrued liabilities	\$ 1,970	\$ 2,454
Accounts payable to related parties (Note 23)	84	81
Payroll and benefits payable	336	440
Accrued taxes	116	118
Accrued interest	45	39
Current operating lease liabilities (Note 24)	60	—
Short-term debt and current maturities of long-term debt (Note 17)	14	65
Total current liabilities	2,625	3,197
Noncurrent operating lease liabilities (Note 24)	177	—
Long-term debt, less unamortized discount and debt issuance costs (Note 17)	3,627	2,316
Employee benefits (Note 18)	532	980
Deferred income tax liabilities (Note 11)	4	14
Deferred credits and other noncurrent liabilities	550	272
Total liabilities	7,515	6,779
Contingencies and commitments (Note 26)		
Stockholders' Equity		
Common stock issued — 178,555,206 and 177,386,430 shares issued (par value \$1 per share, authorized 400,000,000 shares) (Note 8)	179	177
Treasury stock, at cost (8,509,337 shares and 2,857,578 shares)	(173)	(78)
Additional paid-in capital	4,020	3,917
Retained earnings	544	1,212
Accumulated other comprehensive loss (Note 21)	(478)	(1,026)
Total United States Steel Corporation stockholders' equity	4,092	4,202
Noncontrolling interests	1	1
Total liabilities and stockholders' equity	\$ 11,608	\$ 10,982

The accompanying notes are an integral part of these Consolidated Financial Statements.

UNITED STATES STEEL CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS

(Dollars in millions)	Year Ended December 31,		
	2019	2018	2017
Increase (decrease) in cash and cash equivalents			
Operating activities:			
Net (loss) earnings	\$ (630)	\$ 1,115	\$ 387
Adjustments to reconcile net cash provided by operating activities:			
Depreciation, depletion and amortization (Notes 13 and 14)	616	521	501
Gain associated with retained interest in U. S. Steel Canada Inc. (Note 5)	—	—	(72)
Gain on equity investee transactions (Note 12)	—	(38)	(2)
Restructuring and other charges (Note 25)	275	—	31
Loss on debt extinguishment (Note 7)	—	98	54
Pensions and other post-employment benefits	101	77	(16)
Deferred income taxes (Note 11)	202	(329)	(72)
Net gain on disposal of assets	(1)	(6)	(5)
Equity investees earnings, net of distributions received	(74)	(47)	(32)
Changes in:			
Current receivables	453	(312)	(36)
Inventories	296	(374)	(117)
Current accounts payable and accrued expenses	(473)	282	225
Income taxes receivable/payable	13	(8)	(52)
All other, net	(96)	(41)	32
Net cash provided by operating activities	682	938	826
Investing activities:			
Capital expenditures	(1,252)	(1,001)	(505)
Investment in Big River Steel	(710)	—	—
Disposal of assets	4	10	5
Proceeds from sale of ownership interests in equity investees	—	30	116
Investments, net	—	(2)	(2)
Net cash used in investing activities	(1,958)	(963)	(386)
Financing activities:			
Revolving credit facilities - borrowings, net of financing costs	860	228	—
Revolving credit facilities - repayments	(100)	—	—
Issuance of long-term debt, net of financing costs (Note 17)	702	640	737
Repayment of long-term debt (Note 17)	(155)	(1,299)	(1,127)
Common stock repurchased (Note 27)	(88)	(75)	—
Receipts from exercise of stock options (Note 15)	—	35	20
Taxes paid for equity compensation plans (Note 15)	(7)	(8)	(10)
Dividends paid	(35)	(36)	(35)
Net cash provided by (used in) financing activities	1,177	(515)	(415)
Effect of exchange rate changes on cash	(2)	(17)	17
Net (decrease) increase in cash, cash equivalents and restricted cash	(101)	(557)	42
Cash, cash equivalents and restricted cash at beginning of year (Note 9)	1,040	1,597	1,555
Cash, cash equivalents and restricted cash at end of year (Note 9)	\$ 939	\$ 1,040	\$ 1,597

See Note 22 for supplemental cash flow information.

The accompanying notes are an integral part of these Consolidated Financial Statements.

UNITED STATES STEEL CORPORATION
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

	Dollars in Millions			Shares in Thousands		
	2019	2018	2017	2019	2018	2017
Common stock:						
Balance at beginning of year	\$ 177	\$ 176	\$ 176	177,386	176,425	176,425
Common stock issued	2	1	—	1,169	961	—
Balance at end of year	\$ 179	\$ 177	\$ 176	178,555	177,386	176,425
Treasury stock:						
Balance at beginning of year	\$ (78)	\$ (76)	\$ (182)	(2,858)	(1,203)	(2,614)
Common stock repurchased	(88)	(75)	—	(5,289)	(2,760)	—
Common stock (repurchased) reissued for employee/non-employee director stock plans	(7)	73	106	(362)	1,105	1,411
Balance at end of year	\$ (173)	\$ (78)	\$ (76)	(8,509)	(2,858)	(1,203)
Additional paid-in capital:						
Balance at beginning of year	\$ 3,917	\$ 3,932	\$ 4,027			
Dividends on common stock	—	—	(26)			
Issuance of conversion option in 2026 Senior Convertible Notes, net of tax	77	—	—			
Employee stock plans	26	(15)	(69)			
Balance at end of year	\$ 4,020	\$ 3,917	\$ 3,932			

The accompanying notes are an integral part of these Consolidated Financial Statements.

UNITED STATES STEEL CORPORATION
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(Continued)

(Dollars in millions)	2019	2018	2017	Comprehensive (Loss) Income		
				2019	2018	2017
Retained earnings:						
Balance at beginning of year	\$ 1,212	\$ 133	\$ (250)			
Net (loss) earnings attributable to United States Steel Corporation	(630)	1,115	387	\$ (630)	\$ 1,115	\$ 387
Dividends on common stock	(35)	(36)	(9)			
Other	(3)	—	5			
Balance at end of year	\$ 544	\$ 1,212	\$ 133			
Accumulated other comprehensive (loss) income:						
Pension and other benefit adjustments (Note 18):						
Balance at beginning of year	\$ (1,416)	\$ (1,309)	\$ (1,771)			
Changes during year, net of taxes ^(a)	580	(108)	454	580	(108)	454
Changes during year, equity investee net of taxes ^(a)	(7)	1	8	(7)	1	8
Balance at end of year	\$ (843)	\$ (1,416)	\$ (1,309)			
Foreign currency translation adjustments:						
Balance at beginning of year	\$ 403	\$ 463	\$ 274			
Changes during year, net of taxes ^(a)	(22)	(60)	189	(22)	(60)	189
Balance at end of year	\$ 381	\$ 403	\$ 463			
Derivative financial instruments:						
Balance at beginning of year	\$ (13)	\$ 1	\$ —			
Changes during year, net of taxes ^(a)	(3)	(14)	1	(3)	(14)	1
Balance at end of year	\$ (16)	\$ (13)	\$ 1			
Total balances at end of year	\$ (478)	\$ (1,026)	\$ (845)			
Total stockholders' equity	\$ 4,092	\$ 4,202	\$ 3,320			
Noncontrolling interests:						
Balance at beginning of year	\$ 1	\$ 1	\$ 1			
Net loss	—	—	—	—	—	—
Balance at end of year	\$ 1	\$ 1	\$ 1			
Total comprehensive (loss) income				\$ (82)	\$ 934	\$ 1,039

^(a) Related income tax benefit (provision):

Foreign currency translation adjustments ^(b)	\$ 6	\$ —	\$ —
Pension and other benefits adjustments ^(b)	(191)	—	—
Derivative adjustments ^(b)	1	—	—

^(b) Amounts for 2018 and 2017 do not reflect a tax benefit as a result of a full valuation allowance on our domestic deferred tax assets.

The accompanying notes are an integral part of these Consolidated Financial Statements.

1. Nature of Business and Significant Accounting Policies

Nature of Business

U. S. Steel produces and sells steel products, including flat-rolled and tubular products, in North America and Europe. Operations in the United States also include iron ore and coke production facilities, railroad services and real estate operations. Operations in Europe also include coke production facilities.

Significant Accounting Policies

Principles applied in consolidation

These financial statements include the accounts of U. S. Steel and its majority-owned subsidiaries. Additionally, variable interest entities for which U. S. Steel is the primary beneficiary are included in the Consolidated Financial Statements and their impacts are either partially or completely offset by noncontrolling interests. Intercompany accounts, transactions and profits have been eliminated in consolidation.

Investments in entities over which U. S. Steel has significant influence are accounted for using the equity method of accounting and are carried at U. S. Steel's share of net assets plus loans, advances and our share of earnings less distributions.

Earnings or loss from investees includes U. S. Steel's share of earnings or loss from equity method investments (and any amortization of basis differences), which are generally recorded a month in arrears, except for significant and unusual items which are recorded in the period of occurrence.

Use of estimates

Generally accepted accounting principles require management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at year-end and the reported amounts of revenues and expenses during the year. Significant items subject to such estimates and assumptions include the carrying value of property, plant and equipment; intangible assets; valuation allowances for receivables, inventories and deferred income tax assets and liabilities; environmental liabilities; liabilities for potential tax deficiencies; potential litigation claims and settlements; assets and obligations related to employee benefits; put and call option assets and liabilities and restructuring and other charges. Actual results could differ materially from the estimates and assumptions used.

Sales recognition

Sales are recognized when U. S. Steel's performance obligations are satisfied. Generally, U. S. Steel's performance obligations are satisfied, control of our products is transferred, and revenue is recognized at a single point in time, when title transfers to our customer for product shipped or when services are provided. Revenues are recorded net of any sales incentives. Shipping and other transportation costs charged to customers are treated as fulfillment activities and are recorded in both revenue and cost of sales at the time control is transferred to the customer. See Note 6 for further details on U. S. Steel's revenue.

Inventories

Inventories are carried at the lower of cost or market. Fixed costs related to abnormal production capacity are expensed in the period incurred rather than capitalized into inventory.

LIFO (last-in, first-out) is the predominant method of inventory costing for inventories in the United States and FIFO (first-in, first-out) is the predominant method in Europe. The LIFO method of inventory costing was used on 75 percent and 74 percent of consolidated inventories at December 31, 2019 and 2018, respectively.

Derivative instruments

From time to time, U. S. Steel may use fixed price forward physical purchase contracts to partially manage our exposure to price risk. Generally, forward physical purchase contracts qualify for the normal purchase normal sales exclusion in Accounting Standards Codification (ASC) 815, *Derivatives and Hedging*, and are not subject to mark-to-market accounting. U. S. Steel also uses derivatives such as commodity-based financial swaps and foreign currency exchange forward contracts to manage its exposure to purchase and sale price fluctuations and foreign currency exchange rate risk. U. S. Steel elects hedge accounting for some of its derivatives. Under hedge accounting, fluctuations in the value of the derivative are recognized in Accumulated Other Comprehensive Income (AOCI) until the associated underlying is recognized in earnings. When the associated underlying is recognized in earnings, the value of the derivative is reclassified to earnings from AOCI. We recognize fair value

changes for derivatives where hedge accounting has not been elected immediately in earnings. See Note 16 for further details on U. S. Steel's derivatives.

Financial Instruments

U. S. Steel's purchase of a 49.9% equity ownership interest in Big River Steel on October 31, 2019 included certain call and put options. U. S. Steel marks these options to fair value each reporting period using a Monte Carlo simulation which is considered a Level 3 valuation technique. Level 3 valuation techniques include inputs to the valuation methodology that are considered unobservable and significant to the fair value measurement. See Note 5 and Note 20 for further details.

Property, plant and equipment

Property, plant and equipment is carried at cost and is depreciated on a straight-line basis over the estimated useful lives of the assets.

Depletion of mineral properties is based on rates which are expected to amortize cost over the estimated tonnage of minerals to be removed.

When property, plant and equipment is sold or otherwise disposed of, any gains or losses are reflected in income. If a loss on disposal is expected, such losses are recognized when the assets are reclassified as assets held for sale or when impaired as part of an asset group's impairment.

U. S. Steel evaluates impairment of its property, plant and equipment whenever circumstances indicate that the carrying value may not be recoverable. We evaluate the impairment of long-lived assets at the asset group level. Our asset groups are Flat-Rolled, welded tubular, seamless tubular and U. S. Steel Europe (USSE). Asset impairments are recognized when the carrying value of an asset group exceeds its recoverable amount as determined by the asset group's aggregate projected undiscounted cash flows.

During 2019, the challenging steel market environment in the U.S. that led to the idling of certain Flat-Rolled facilities, the challenging steel market in Europe that led to the temporary idling of a blast furnace and significant headcount reductions at USSE, and recent losses in the welded tubular asset group were considered triggering events for those asset groups, respectively. U. S. Steel completed a quantitative analysis of its long-lived assets for these asset groups and determined that the assets were not impaired. There were no triggering events for seamless tubular in 2019.

There were no triggering events in 2018 that required fixed assets to be evaluated for impairment.

Change in Accounting Estimate - Capitalization and Depreciation Method

During 2017, U. S. Steel completed a review of its accounting policy for property, plant and equipment depreciated on a group basis. As a result of this review, U. S. Steel changed its accounting method for property, plant and equipment from the group method of depreciation to the unitary method of depreciation, effective as of January 1, 2017. The Company believes the change from the group method to the unitary method of depreciation is preferable under U.S. GAAP as it results in a more precise estimate of depreciation expense. Additionally, the change to the unitary method of depreciation is consistent with the depreciation method applied by our competitors, and improves the comparability of our results to the results of our competitors. Our change in the method of depreciation was considered a change in accounting estimate effected by a change in accounting principle and has been applied prospectively. Due to the application of the unitary method of depreciation and resultant change in our capitalization policy, maintenance and outage spending that had previously been expensed as well as capital investments associated with our asset revitalization program are now capitalized if the useful life of the related asset is extended.

When property, plant, and equipment are disposed of by sale, retirement, or abandonment, the gross value of the property, plant and equipment and corresponding accumulated depreciation are removed from the Company's financial accounting records. Due to the application of the unitary method of depreciation, any gain or loss resulting from an asset disposal by sale is now immediately recognized as a gain or loss on the disposal of assets line in our consolidated statement of operations. Assets that are retired or abandoned are reflected as an immediate charge to depreciation expense for any remaining book value in our consolidated statement of operations.

Environmental remediation

Environmental expenditures are capitalized if the costs mitigate or prevent future contamination or if the costs improve existing assets' environmental safety or efficiency. U. S. Steel provides for remediation costs and penalties when the responsibility to remediate is probable and the amount of associated costs is reasonably estimable. The timing of remediation accruals typically coincides with completion of studies defining the scope of work to be undertaken or when it is probable that a formal plan of action will be approved by the oversight agency. Remediation liabilities are accrued based on estimates of believed environmental exposure and are discounted if the amount and timing of the cash disbursements are readily determinable.

Asset retirement obligations

Asset retirement obligations (AROs) are initially recorded at fair value and are capitalized as part of the cost of the related long-lived asset and depreciated in accordance with U. S. Steel's depreciation policies for property, plant and equipment. The fair value of the obligation is determined as the discounted value of expected future cash flows. Accretion expense is recorded each month to increase this discounted obligation over time. Certain AROs related to disposal costs of the majority of assets at our integrated steel facilities are not recorded because they have an indeterminate settlement date. These AROs will be initially recognized in the period in which sufficient information exists to estimate their fair value. See Note 19 for further details on U. S. Steel's AROs.

Pensions and other post-employment benefits

U. S. Steel has defined contribution or multi-employer arrangements for pension benefits for more than three-quarters of its employees in the United States and defined benefit pension plans covering the remaining employees. For hires before January 1, 2016, U. S. Steel has defined benefit retiree health care and life insurance plans (Other Benefits) that cover its represented employees in North America upon their retirement. Government-sponsored programs into which U. S. Steel makes required contributions cover the majority of U. S. Steel's European employees. For more details regarding pension and other post-employment benefits see Note 18 of the Consolidated Financial Statements.

The pension and Other Benefits obligations and the related net periodic benefit costs are based on, among other things, assumptions of the discount rate, estimated return on plan assets, salary increases, the projected mortality of participants and the current level and future escalation of health care costs. Additionally, U. S. Steel recognizes an obligation to provide post-employment benefits for disability-related claims covering indemnity and medical payments for certain employees in North America. The obligation for these claims and the related periodic costs are measured using actuarial techniques and assumptions. Actuarial gains and losses occur when actual experience differs from any of the many assumptions used to value the benefit plans, or when assumptions change. For pension and Other Benefits, the Company recognizes into income on an annual basis a portion of unrecognized actuarial net gains or losses that exceed 10 percent of the larger of projected benefit obligations or plan assets (the corridor). These unrecognized amounts in excess of the corridor are amortized over the plan participants' average life expectancy or average future service, depending on the demographics of the plan. Unrecognized actuarial net gains and losses for disability-related claims are immediately recognized into income.

Deferred taxes

Deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis. The realization of deferred tax assets is assessed quarterly based on several interrelated factors. These factors include U. S. Steel's expectation to generate sufficient future taxable income and the projected time period over which these deferred tax assets will be realized. U. S. Steel records a valuation allowance when necessary to reduce deferred tax assets to the amount that will more likely than not be realized. See Note 11 for further details of deferred taxes.

Reclassifications and Adjustments

Certain reclassifications of prior years' data have been made to conform to the current year presentation including the following:

U. S. Steel reclassified certain prior year data as a result of the retrospective adoption on January 1, 2018 of ASU 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash*, ASU 2016-15, *Statement of Cash Flows: Classification of Certain Cash Receipts and Cash Payments* and ASU 2017-07, *Compensation - Retirement Benefits*. See Note 3 for further details.

2. New Accounting Standards

In December 2019, the Financial Accounting Standards Board (FASB) Issued Accounting Standards Update 2019-12, *Income Taxes (Topic 740) - Simplifying the Accounting for Income Taxes* (ASU 2019-12). ASU 2019-12 simplifies accounting for income taxes by removing certain exceptions from the general principles in Topic 740 including elimination of the exception to the incremental approach for intraperiod tax allocation when there is a loss from continuing operations and income or a gain from other items such as other comprehensive income. ASU 2019-12 also clarifies and amends certain guidance in Topic 740. ASU 2019-12 is effective for public companies for fiscal years beginning after December 15, 2020, including interim periods, with early adoption of all amendments in the same period permitted. U. S. Steel is currently assessing the impact of the ASU, but does not believe it will have a material impact on its Consolidated Financial Statements.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments* (ASU 2016-13), which adds an impairment model that is based on expected losses rather than incurred losses. Under ASU 2016-13, an entity recognizes as an allowance its estimate of expected credit losses, which the FASB believes will result in more timely recognition of such losses. ASU 2016-13 is effective for public companies for fiscal years beginning after December 15, 2019 including interim reporting periods, with early adoption permitted. U. S. Steel is in the process of adopting this ASU and does not expect it to have a significant impact on its Consolidated Financial Statements.

3. Recently Adopted Accounting Standards

In August 2018, the FASB issued ASU 2018-14, *Compensation - Retirement Benefits - Defined Benefit Plans - General (Subtopic 715-20), Disclosure Framework - Changes to the Disclosure Requirements for Defined Benefit Plans* (ASU 2018-14). ASU 2018-14 removes certain disclosures that the FASB no longer considers cost beneficial, adds certain disclosure requirements and clarifies others. U. S. Steel early-adopted ASU 2018-14 for purposes of its year end disclosures. Accordingly, we removed disclosure of amounts in AOCI expected to be recognized as components of net periodic benefit cost over the next year and removed the disclosure of a one-percentage-point change in assumed health care cost trend rates. In addition, we added disclosure to include an explanation of the reasons for significant gains and losses related to changes in the benefit obligation for the period. See Note 18 for further details.

In February 2016, the FASB issued ASU 2016-02, *Leases* (ASU 2016-02). Under ASU 2016-02, for operating leases, a lessee should recognize in its statement of financial position a liability to make lease payments and a right-of-use asset representing its right to use the underlying asset for the lease term; recognize a single lease cost, which is allocated over the lease term, generally on a straight line basis, and classify all cash payments within operating activities in the statement of cash flows. For finance leases, a lessee is required to recognize a right-of-use asset and a lease liability; recognize interest on the lease liability separately from amortization of the right-of-use asset, and classify repayments of the principal portion of the lease liability within financing activities and payments of interest on the lease liability within operating activities in the statement of cash flows. For leases with a term of 12 months or less, a lessee is permitted to make an accounting policy election not to recognize lease assets and lease liabilities. In July 2018, the FASB issued ASU 2018-11, *Leases (Topic 842) - Targeted Improvements* (ASU 2018-11), which provides an option to use a modified retrospective transition method at the adoption date. U. S. Steel adopted the new lease accounting standard effective January 1, 2019 using the optional modified retrospective transition method outlined in ASU 2018-11. As a result of the adoption, an operating lease asset and current and noncurrent liabilities for operating leases were recorded, and there was an insignificant reduction in prior year retained earnings for the cumulative effect of adoption for operating leases where payment started after lease commencement. See Note 24 for further details.

In March 2017, the FASB issued ASU 2017-07, *Compensation - Retirement Benefits* (ASU 2017-07). ASU 2017-07 requires an employer who offers defined benefit and postretirement benefit plans to report the service cost component of the net periodic benefit cost in the same line item or items as other compensation cost arising from services rendered by employees during the period. The other components of net periodic benefit costs are required to be presented on a retrospective basis in the statement of operations separately from the service cost component and outside a subtotal of income from operations, if one is presented. The ASU also allows for the service cost component of net periodic benefit cost to be eligible for capitalization into inventory when

applicable. ASU 2017-07 was effective for periods beginning after December 15, 2017, including interim periods within those annual periods; early adoption was permitted. U. S. Steel adopted ASU 2017-07 on January 1, 2018. U. S. Steel has historically capitalized the service cost component of net periodic benefit cost into inventory, when applicable, and will continue to do so prospectively.

The effect of the retrospective presentation change related to the net periodic benefit cost of our defined benefit pension and other post-employment benefits (OPEB) plans on our consolidated statement of operations was as follows:

Statement of Operations (In millions)	Year Ended December 31, 2017		
	As Revised	Previously Reported	Effect of Change Higher/(Lower)
Cost of Sales	\$ 10,858	\$ 10,864	\$ (6)
Selling, general and administrative expenses	320	375	(55)
Net periodic benefit cost (other than service cost)	61	—	61

In November 2016, the FASB issued ASU 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash* (ASU 2016-18). The ASU reduced diversity in practice in the classification and presentation of changes in restricted cash on the statement of cash flows by including restricted cash and restricted cash equivalents with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. On January 1, 2018, U. S. Steel adopted the provisions of ASU 2016-18 using a retrospective transition method. As a result, a \$3 million cash outflow was removed from the investing activities section in the Consolidated Statements of Cash Flows for the year ended December 31, 2017 as changes in restricted cash are now included in the beginning-of-period and end-of-period total cash, cash equivalents and restricted cash amounts. Expanded disclosures have been included, which describe the components of cash shown on the Company's Consolidated Statements of Cash Flows. See Note 9 for further details.

In August 2016, the FASB issued ASU 2016-15, *Statement of Cash Flows: Classification of Certain Cash Receipts and Cash Payments* (ASU 2016-15). ASU 2016-15 reduced diversity in practice in how certain transactions are classified in the statement of cash flows by addressing eight specific cash receipt and cash payment issues. On January 1, 2018, U. S. Steel adopted the provisions of ASU 2016-15 using a retrospective transition method. As a result, all payments to extinguish debt will now be presented as cash outflows from financing activities on our Consolidated Statements of Cash Flows in accordance with ASU 2016-15. U. S. Steel has historically presented make-whole premiums as cash outflows from operating activities. There was \$23 million of cash outflows for make-whole premiums that were reclassified from cash provided by operating activities to the repayment of long-term debt line within the cash used in financing activities section on the Consolidated Statements of Cash Flows for the year-ended December 31, 2017. The other cash receipt and cash payment items addressed in ASU 2016-15 did not have an impact on the Company's Consolidated Statements of Cash Flows. Additionally, the Company has elected to use the cumulative earnings approach as defined in ASU 2016-15 to classify distributions received from equity method investees.

U. S. Steel's adoption of the following ASU's did not have a material impact on U. S. Steel's financial position, results of operations or cash flows:

Effective Date	Accounting Standard Update	
January 1, 2017	2015-11	Simplifying the Measurement of Inventory
January 1, 2017	2016-09	Compensation - Stock Compensation
January 1, 2018	2014-09	Revenue from Contracts with Customers
January 1, 2018	2017-09	Compensation - Stock Compensation: Scope of Modification Accounting
January 1, 2018	2017-12	Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities
July 1, 2018	2018-02	Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income
January 1, 2019	2018-07	Compensation - Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting
January 1, 2019	2018-15	Intangibles - Goodwill and Other - Internal Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs in a Cloud Computing Arrangement That is a Service Contract

4. Segment Information

U. S. Steel has three reportable segments: North American Flat-Rolled (Flat-Rolled), USSE and Tubular Products (Tubular). The results of Big River Steel and our railroad and real estate businesses that do not constitute reportable segments are combined and disclosed in the Other Businesses category. The majority of U. S. Steel's customers are located in North America and Europe. No single customer accounted for more than 10 percent of gross annual revenues.

The Flat-Rolled segment includes the operating results of U. S. Steel's integrated steel plants and equity investees in the United States (except for Big River Steel, which is included in Other Businesses) involved in the production of slabs, strip mill plates, sheets and tin mill products, as well as all iron ore and coke production facilities in the United States. These operations primarily serve North American customers in the service center, conversion, transportation (including automotive), construction, container, and appliance and electrical markets.

The USSE segment includes the operating results of U. S. Steel Košice (USSK), U. S. Steel's integrated steel plant and coke production facilities in Slovakia, and its subsidiaries. USSE conducts its business mainly in Central and Western Europe and primarily serves customers in the European transportation (including automotive), construction, container, appliance, electrical, service center, conversion and oil, gas and petrochemical markets. USSE produces and sells slabs, strip mill plate, sheet, tin mill products and spiral welded pipe, as well as refractory ceramic materials.

The Tubular segment includes the operating results of U. S. Steel's tubular production facilities and an equity investee in the United States. We sold our ownership interest in an equity investee in Brazil in December of 2017. These operations produce and sell seamless and electric resistance welded (welded) steel casing and tubing (commonly known as oil country tubular goods or OCTG), standard and line pipe and mechanical tubing and primarily serve customers in the oil, gas and petrochemical markets. We sold our Belville facility in 2018. In June 2019, U. S. Steel restarted Pipe Mill #1 at our Lone Star facility.

The chief operating decision maker evaluates performance and determines resource allocations based on a number of factors, the primary measure being earnings (loss) before interest and income taxes. Earnings (loss) before interest and income taxes for reportable segments and Other Businesses does not include net interest and other financial costs (income), income taxes, and certain other items that management believes are not indicative of future results. In 2018, U. S. Steel began allocating certain post-employment benefits to its segments. Prior year information was adjusted to conform with the current year presentation.

The accounting principles applied at the operating segment level in determining earnings (loss) before interest and income taxes are generally the same as those applied at the consolidated financial statement level.

Intersegment sales and transfers are accounted for at market-based prices and are eliminated at the corporate consolidation level. Corporate-level selling, general and administrative expenses and costs related to certain former businesses are allocated to the reportable segments and Other Businesses based on measures of activity that management believes are reasonable.

The results of segment operations are as follows:

(In millions)	Customer Sales	Intersegment Sales	Net Sales	Earnings (loss) from investees	Earnings (Loss) before Interest and Income Taxes	Depreciation, depletion & amortization	Capital expenditures
2019							
Flat-Rolled	\$ 9,279	\$ 281	\$ 9,560	\$ 84	\$ 196	\$ 456	\$ 943
USSE	2,417	3	2,420	—	(57)	92	153
Tubular	1,188	3	1,191	5	(67)	46	145
Total reportable segments	12,884	287	13,171	89	72	594	1,241
Other Businesses	53	115	168	(10)	23	22	11
Reconciling Items and Eliminations	—	(402)	(402)	—	(325)	—	—
Total	\$ 12,937	\$ —	\$ 12,937	\$ 79	\$ (230)	\$ 616	\$ 1,252
2018							
Flat-Rolled	\$ 9,681	\$ 231	\$ 9,912	\$ 54	\$ 883	\$ 367	\$ 820
USSE	3,205	23	3,228	—	359	87	104
Tubular	1,231	5	1,236	7	(58)	47	45
Total reportable segments	14,117	259	14,376	61	1,184	501	969
Other Businesses	61	125	186	—	55	20	32
Reconciling Items and Eliminations	—	(384)	(384)	—	(115)	—	—
Total	\$ 14,178	\$ —	\$ 14,178	\$ 61	\$ 1,124	\$ 521	\$ 1,001
2017							
Flat-Rolled	\$ 8,297	\$ 194	\$ 8,491	\$ 38	\$ 375	\$ 352	\$ 388
USSE	2,949	25	2,974	—	327	76	83
Tubular	944	1	945	8	(99)	51	28
Total reportable segments	12,190	220	12,410	46	603	479	499
Other Businesses	60	119	179	(2)	44	22	6
Reconciling Items and Eliminations	—	(339)	(339)	—	22	—	—
Total	\$ 12,250	\$ —	\$ 12,250	\$ 44	\$ 669	\$ 501	\$ 505

A summary of total assets by segment is as follows:

(In millions)	December 31,	
	2019	2018
Flat-Rolled ^(a)	\$ 7,267	\$ 6,977
USSE ^(b)	5,360	5,607
Tubular	1,150	1,076
Total reportable segments	\$ 13,777	\$ 13,660
Other Businesses	\$ 1,267	\$ 329
Corporate, reconciling items, and eliminations ^(c)	(3,436)	(3,007)
Total assets	\$ 11,608	\$ 10,982

^(a) Included in the Flat-Rolled segment assets is goodwill of \$3 million as of December 31, 2018.

^(b) Included in the USSE segment assets is goodwill of \$4 million as of both December 31, 2019 and 2018.

^(c) The majority of Corporate, reconciling items, and eliminations total assets is comprised of cash and the elimination of intersegment amounts.

The detail of reconciling items to consolidated earnings (loss) before interest and income taxes is as follows:

(In millions)	2019	2018	2017
Items not allocated to segments:			
December 24, 2018 Clairton coke making facility fire	(50)	—	—
United Steelworkers labor agreement signing bonus and related costs	—	(81)	—
Granite City Works restart and related costs	—	(80)	—
Loss on shutdown of certain tubular pipe mill assets (Note 25)	—	—	(35)
Gain associated with U. S. Steel Canada Inc. (Note 5)	—	—	72
Restructuring and other charges (Note 25)	(275)	—	—
Granite City Works temporary idling charges	—	8	(17)
Gain on equity investee transactions (Note 12)	—	38	2
Total reconciling items	\$ (325)	\$ (115)	\$ 22

Geographic Area:

The information below summarizes external sales, property, plant and equipment and equity method investments based on the location of the operating segment to which they relate.

(In millions)	Year	External Sales		Assets	
North America	2019	\$	10,520	\$	5,772 ^(a)
	2018		10,973		4,432 ^(a)
	2017		9,301		3,831 ^(a)
Europe	2019		2,417		947
	2018		3,205		919
	2017		2,949		906
Total	2019		12,937		6,719
	2018		14,178		5,351
	2017		12,250		4,737

^(a) Assets with a book value of \$5,772 million, \$4,432 million and \$3,817 million were located in the United States at December 31, 2019, 2018 and 2017, respectively.

5. Acquisition and Disposition

Big River Steel Acquisition

On October 31, 2019, a wholly owned subsidiary of U. S. Steel purchased a 49.9% ownership interest in Big River Steel at a purchase price of approximately \$683 million in cash, with a call option (U. S. Steel Call Option) to acquire the remaining 50.1% within the next four years at an agreed-upon price formula, which in years three

and four is based on Big River Steel's achievement of certain metrics that include: free cash flow, product development, safety and the completion of a proposed expansion of Big River Steel's existing manufacturing line. Big River Steel currently operates a technologically advanced mini mill with approximately 1.65 million tons of steel making capacity.

U. S. Steel accounts for its investment in Big River Steel under the equity method as control and risk of loss are shared among the partnership members. Big River Steel is not a variable interest entity as it qualifies for the business scope exception under ASC 810, *Consolidation*. Under the equity method of accounting, U. S. Steel recognizes its share of Big River Steel's after tax net income or loss as well as the amortization of any basis differences due to the step-up to fair value of certain assets attributable to Big River Steel. U. S. Steel recorded an equity investment asset for Big River Steel of \$710 million that includes approximately \$27 million of transaction costs and is reflected in the investments and long-term receivables line on our balance sheet.

U. S. Steel's 49.9% share of the total net assets of Big River Steel was approximately \$155 million at October 31, 2019 resulting in a basis difference of approximately \$550 million due to the step-up to fair value of certain assets attributable to Big River Steel. Approximately \$88 million of the step-up was attributable to property, plant and equipment and approximately \$460 million was attributable to goodwill. This basis difference, excluding the portion attributable to goodwill, is being amortized based on the remaining weighted average useful life of the assets of approximately 18 years. U. S. Steel's 49.9% share of amortization expense associated with the fair value step-up was less than \$1 million for 2019.

The transaction to acquire Big River Steel included the U. S. Steel Call Option described above and options where the other Big River Steel equity owners can require U. S. Steel to purchase their 50.1% ownership interest (Class B Common Put Option) or require U. S. Steel to sell its ownership interest (Class B Common Call Option) at an agreed upon price if the U. S. Steel Call Option expires. The U. S. Steel Call Option, Class B Common Call Option and Class B Common Put Option are free-standing financial instruments that are marked to fair value each period using a Monte Carlo simulation which is considered a Level 3 valuation technique, see Note 20 for further details.

(In millions)	Consolidated Balance Sheet Classification	December 31, 2019	
U. S. Steel Call Option	Investments and other long-term receivables	\$	166
Class B Put Option	Deferred credits and other long-term liabilities	\$	192
Class B Call Option	Deferred credits and other long-term liabilities	\$	2

The transaction also included options where U. S. Steel can require the other Big River Steel equity owners to purchase U. S. Steel's ownership interest under certain conditions or if an overall cash flow target is not met for the four-year period ending September 30, 2023. These options are embedded financial instruments that are included in the Big River Steel equity investment asset.

U. S. Steel Canada Inc. Retained Interest Disposition

On June 30, 2017, U. S. Steel completed the restructuring and disposition of U. S. Steel Canada Inc. (USSC) through a sale and transfer of all of the issued and outstanding shares in USSC to an affiliate of Bedrock Industries LLC. In accordance with the Second Amended and Restated Plan of Compromise, Arrangement and Reorganization, approved by the Ontario Superior Court of Justice on June 9, 2017, U. S. Steel received approximately \$127 million in satisfaction of its secured claims, including interest, which resulted in a gain of \$72 million on the Company's retained interest in USSC. U. S. Steel also agreed to the discharge and cancellation of its unsecured claims for nominal consideration. The terms of the settlement included mutual releases among key stakeholders, including a release of all claims against the Company regarding environmental, pension and other liabilities, and transition services agreements that superseded all prior arrangements among the parties, including the 2015 transition arrangements.

6. Revenue

Revenue is generated primarily from contracts to produce, ship and deliver steel products, and to a lesser extent, to deliver raw materials such as iron ore pellets, to deliver coke by-products and for railroad services and real estate sales. Generally, U. S. Steel's performance obligations are satisfied, control of our products is transferred, and revenue is recognized at a single point in time, when title transfers to our customer for product shipped or when services are provided. Revenues are recorded net of any sales incentives. Shipping and other transportation costs charged to customers are treated as fulfillment activities and are recorded in both revenue and cost of sales at the time control is transferred to the customer. Costs related to obtaining sales contracts are incidental and are expensed when incurred. Because customers are invoiced at the time title transfers and U. S. Steel's right to consideration is unconditional at that time, U. S. Steel does not maintain contract asset balances. Additionally, U. S. Steel does not maintain contract liability balances, as performance obligations are satisfied prior to customer payment for product. U. S. Steel offers industry standard payment terms.

U. S. Steel has three reportable segments: Flat-Rolled, USSE and Tubular. Flat-Rolled primarily generates revenue from sheet and coated product sales to North American customers. Flat-Rolled also sells iron ore pellets and coke making by-products. USSE sells slabs, sheets, strip mill plates, tin mill products and spiral welded pipe as well as refractory ceramic materials to customers primarily in the Central and Western European market. Tubular sells seamless and electric resistance welded (ERW) steel casing and tubing (commonly known as oil country tubular goods or OCTG), standard and line pipe and mechanical tubing and primarily serves customers in the oil, gas and petrochemical markets. Revenue from our railroad and real estate businesses is reported in the Other Businesses category in our segment reporting structure. The following table disaggregates our revenue by product for each of our reportable business segments for the years ended December 31, 2019, 2018 and 2017, respectively:

Customer Sales by Product:

(In millions) Year Ended December 31, 2019	Flat-Rolled	USSE	Tubular	Other Businesses	Total
Semi-finished	\$ 305	\$ 11	\$ —	\$ —	\$ 316
Hot-rolled sheets	2,504	997	—	—	3,501
Cold-rolled sheets	2,512	283	—	—	2,795
Coated sheets	2,993	1,006	—	—	3,999
Tubular products	—	40	1,166	—	1,206
All Other ^(a)	965	80	22	53	1,120
Total	\$ 9,279	\$ 2,417	\$ 1,188	\$ 53	\$ 12,937

(In millions) Year Ended December 31, 2018	Flat-Rolled	USSE	Tubular	Other Businesses	Total
Semi-finished	\$ 156	\$ 174	\$ —	\$ —	\$ 330
Hot-rolled sheets	2,816	1,313	—	—	4,129
Cold-rolled sheets	2,709	384	—	—	3,093
Coated sheets	3,090	1,164	—	—	4,254
Tubular products	—	48	1,195	—	1,243
All Other ^(a)	910	122	36	61	1,129
Total	\$ 9,681	\$ 3,205	\$ 1,231	\$ 61	\$ 14,178

(In millions) Year Ended December 31, 2017	Flat-Rolled	USSE	Tubular	Other Businesses	Total
Semi-finished	\$ 72	\$ 232	\$ —	\$ —	\$ 304
Hot-rolled sheets	2,045	1,210	—	—	3,255
Cold-rolled sheets	2,355	328	—	—	2,683
Coated sheets	2,902	1,038	—	—	3,940
Tubular products	—	39	909	—	948
All Other ^(a)	923	102	35	60	1,120
Total	\$ 8,297	\$ 2,949	\$ 944	\$ 60	\$ 12,250

^(a) Consists primarily of sales of raw materials and coke making by-products.

7. Net Interest and Other Financial Costs

(In millions)	2019	2018	2017
Interest income:			
Interest income	\$ (17)	\$ (23)	\$ (17)
Interest expense and other financial costs:			
Interest incurred	162	175	229
Less interest capitalized	20	7	3
Total interest expense	142	168	226
Loss on debt extinguishment ^(a)	—	98	54
Net periodic benefit costs (other than service cost) ^(b)	91	69	61
Foreign currency net (gain) loss ^(c)	(17)	(19)	23
Financial costs on:			
Amended Credit Agreement	5	5	6
USSK credit facilities	1	3	3
Other ^(d)	10	3	2
Amortization of discounts and deferred financing costs	7	8	10
Total other financial costs	6	—	44
Net interest and other financial costs	\$ 222	\$ 312	\$ 368

^(a) Represents a net pretax charge of \$98 million during 2018 related to the retirement of our 2020 Senior Notes and 2021 Senior Secured Notes, and a net pretax charge of \$54 million during 2017 related to the retirement of our 2018, 2021, and 2022 Senior Notes, partial redemption of our 2021 Senior Secured Notes, and redemption of the Lorain Recovery Zone Facility Bonds.

^(b) Represents postretirement benefit expense as a result of the adoption of Accounting Standards Update 2017-07, *Compensation - Retirement Benefits* on January 1, 2018. See Note 3 to the Consolidated Financial Statements.

^(c) The functional currency for USSE is the euro. Foreign currency net (gain) loss is a result of transactions denominated in currencies other than the euro.

^(d) 2019 includes a \$7 million change in fair value of certain call and put options related to U. S. Steel's purchase of its 49.9% ownership interest in Big River Steel during 2019. See Note 5 and Note 20 for further details.

8. Earnings and Dividends Per Common Share

(Loss) Earnings per Share Attributable to United States Steel Corporation Stockholders

Basic (loss) earnings per common share is based on the weighted average number of common shares outstanding during the period.

Diluted (loss) earnings per common share assumes the exercise of stock options, the vesting of restricted stock units and performance awards, provided in each case the effect is dilutive. The "treasury stock" method is used to calculate the dilutive effect of the Senior Convertible Notes due in 2026 (due to our current intent and policy, among other factors, to settle the principal amount of the 2026 Senior Convertible Notes in cash upon conversion).

The computations for basic and diluted (loss) earnings per common share from continuing operations are as follows:

(Dollars in millions, except per share amounts)	2019	2018	2017
Net (loss) earnings attributable to United States Steel Corporation stockholders	\$ (630)	\$ 1,115	\$ 387
Weighted-average shares outstanding (in thousands):			
Basic	171,418	176,633	174,793
Effect of convertible notes	—	—	—
Effect of stock options, restricted stock units and performance awards	—	1,828	1,727
Adjusted weighted-average shares outstanding, diluted	171,418	178,461	176,520
Basic (loss) earnings per common share	\$ (3.67)	\$ 6.31	\$ 2.21
Diluted (loss) earnings per common share	\$ (3.67)	\$ 6.25	\$ 2.19

The following table summarizes the securities that were antidilutive, and therefore, were not included in the computation of diluted (loss) earnings per common share:

(In thousands)	2019	2018	2017
Securities granted under the 2005 Stock Incentive Plan	4,459	1,631	1,579
Securities convertible under the Senior Convertible Notes	650	—	—
Total	5,109	1,631	1,579

Dividends Paid per Share

Quarterly dividends on common stock were five cents per share for each quarter in 2019, 2018 and 2017. U. S. Steel's Board of Directors approved an adjustment of the quarterly dividend to one cent per share effective as dividends are declared in 2020.

9. Cash, Cash Equivalents and Restricted Cash

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported within U. S. Steel's Consolidated Balance Sheets that sum to the total of the same amounts shown in the Consolidated Statement of Cash Flows:

(In millions)	December 31,		
	2019	2018	2017
Cash and cash equivalents	\$ 749	\$ 1,000	\$ 1,553
Restricted cash in other current assets	2	3	6
Long-term restricted cash	188	37	38
Total cash, cash equivalents and restricted cash	\$ 939	\$ 1,040	\$ 1,597

Amounts included in restricted cash represent cash balances which are legally or contractually restricted, primarily for electric arc furnace construction, environmental capital expenditure projects and insurance purposes.

10. Inventories

(In millions)	December 31, 2019		December 31, 2018	
Raw materials	\$	628	\$	605
Semi-finished products		720		1,021
Finished products		376		404
Supplies and sundry items		61		62
Total	\$	1,785	\$	2,092

Current acquisition costs were estimated to exceed the above inventory values at December 31 by \$735 million in 2019 and \$1,038 million in 2018. As a result of the liquidation of LIFO inventories, cost of sales decreased and earnings (loss) before interest and income taxes increased by \$28 million in 2019 and \$10 million in 2018. As a result of the liquidation of LIFO inventories, cost of sales increased and earnings (loss) before interest and income taxes decreased by \$6 million in 2017.

Inventory includes \$40 million and \$39 million of land held for residential/commercial development as of December 31, 2019 and 2018, respectively.

11. Income Taxes

Components of (loss) earnings

(In millions)	2019	2018	2017
United States	\$ (381)	\$ 434	\$ 75
Foreign	(71)	378	226
(Loss) earnings before income taxes	\$ (452)	\$ 812	\$ 301

At the end of both 2019 and 2018, U. S. Steel does not have any undistributed foreign earnings and profits for which U.S. deferred taxes have not been provided.

Income tax provision (benefit)

(In millions)	2019			2018			2017		
	Current	Deferred	Total	Current	Deferred	Total	Current	Deferred	Total
Federal	\$ (18)	\$ 196	\$ 178	\$ (40)	\$ (283)	\$ (323)	\$ (66)	\$ (81)	\$ (147)
State and local	—	23	23	2	(58)	(56)	(1)	—	(1)
Foreign	(6)	(17)	(23)	64	12	76	53	9	62
Total	\$ (24)	\$ 202	\$ 178	\$ 26	\$ (329)	\$ (303)	\$ (14)	\$ (72)	\$ (86)

A reconciliation of the federal statutory tax rate of 21 percent (21 percent in 2018 and 35 percent in 2017) to total provision (benefit) follows:

(In millions)	2019	2018	2017
Statutory rate applied to earnings (loss) before income taxes	\$ (95)	\$ 171	\$ 105
Valuation allowance	334	(412)	36
Excess percentage depletion	(46)	(48)	(68)
State and local income taxes after federal income tax effects	(36)	8	(28)
Effects of foreign operations	(23)	74	62
U.S. impact of foreign operations	25	(21)	(6)
Impact of tax credits	5	(71)	(56)
Effect of tax reform	—	—	(81)
Alternative minimum tax credit refund	—	—	(48)
Adjustment of prior years' federal income taxes	7	—	—
Other	7	(4)	(2)
Total provision (benefit)	\$ 178	\$ (303)	\$ (86)

In 2019, the tax benefit differs from the domestic statutory rate of 21 percent primarily due to the fact that it does not reflect any tax benefit in the U.S. as a valuation allowance was recorded against the Company's net domestic deferred tax asset (excluding a portion of a deferred tax liability related to an asset with an indefinite life, as well as a deferred tax asset related to refundable Alternative Minimum Tax (AMT) credits).

Included in the 2018 tax benefit is a benefit of \$374 million related to the reversal of a portion of the valuation allowance recorded against the Company's net domestic deferred tax asset, as well as a benefit of \$38 million related to the reversal of the valuation allowance for current year activity.

Included in the 2017 tax benefit is a benefit of \$10 million related to corporate rate reduction provided by the Tax Cut and Jobs Act of 2017 (2017 Act), as well as a benefit of \$71 million related to the reversal of the valuation allowance recorded against the remaining balance of the Company's AMT credits, which became fully refundable pursuant to the 2017 Act. Also included in the 2017 tax benefit is a benefit of \$48 million related to the Company's election to claim a refund of AMT credits pursuant to a provision in the Protecting Americans from Tax Hikes (PATH) Act.

Deferred taxes

Deferred tax assets and liabilities resulted from the following:

(In millions)	December 31,	
	2019	2018
Deferred tax assets:		
Federal tax loss carryforwards (expiring in 2035 through 2036)	\$ 176	\$ 220
Federal capital loss carryforwards (expiring 2021)	27	33
State tax credit carryforwards (expiring in 2020 through 2028)	18	16
State tax loss carryforwards (expiring in 2020 through 2039)	130	137
Minimum tax credit carryforwards	19	38
General business credit carryforwards (expiring in 2027 through 2039)	85	85
Foreign tax loss and credit carryforwards (expiring in 2024 through 2029)	170	173
Employee benefits	173	337
Contingencies and accrued liabilities	71	62
Investments in subsidiaries and equity investees	49	59
Inventory	32	—
Other temporary differences	35	26
Valuation allowance	(563)	(214)
Total deferred tax assets	<u>422</u>	<u>972</u>
Deferred tax liabilities:		
Property, plant and equipment	368	468
Inventory	—	22
Receivables, payables and debt	17	33
Indefinite-lived intangible assets	19	18
Other temporary differences	3	—
Total deferred tax liabilities	<u>407</u>	<u>541</u>
Net deferred tax asset	<u>\$ 15</u>	<u>\$ 431</u>

U. S. Steel recognizes deferred tax assets and liabilities for the estimated future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis. The realization of deferred tax assets is assessed quarterly based on several interrelated factors. These factors include U. S. Steel's expectation to generate sufficient future taxable income and the projected time period over which these deferred tax assets will be realized.

Each quarter U. S. Steel analyzes the likelihood that our deferred tax assets will be realized. A valuation allowance is recorded if, based on the weight of all available positive and negative evidence, it is more likely than not that some portion, or all, of a deferred tax asset will not be realized.

At December 31, 2019, we identified the following negative evidence concerning U. S. Steel's ability to use some or all of its domestic deferred tax assets:

- U. S. Steel's domestic operations generated a significant loss in the current year and there is uncertainty regarding the Company's ability to generate domestic income in the near term,
- some of our domestic deferred tax assets are carryforwards, which have expiration dates, and
- the global steel industry is experiencing overcapacity, which is driving adverse economic conditions and depressed selling prices for steel products.

Most positive evidence can be categorized into one of the four sources of taxable income sequentially. These are (from least to most subjective):

- taxable income in prior carryback years, if carryback is permitted,
- future reversal of existing taxable temporary differences,
- tax planning strategies, and
- future taxable income exclusive of reversing temporary differences and carryforwards.

U. S. Steel utilized all available carrybacks, and therefore, our analysis at December 31, 2019 focused on the other sources of taxable income. Our projection of the reversal of our existing temporary differences generated significant taxable income. This source of taxable income, however, was not sufficient to project full utilization of U. S. Steel's domestic deferred tax assets. To assess the realizability of the remaining domestic deferred tax assets, U. S. Steel analyzed its prudent and feasible tax planning strategies.

At December 31, 2019, after weighing all the positive and negative evidence, U. S. Steel determined that it was more likely than not that the net domestic deferred tax asset (excluding a portion of a deferred tax liability related to an asset with an indefinite life, as well as a deferred tax asset related to refundable AMT credits) may not be realized. As a result, U. S. Steel recorded a \$334 million non-cash charge to tax expense. In the future, if we determine that it is more likely than not that we will be able to realize all or a portion of our deferred tax assets, the valuation allowance will be reduced, and we will record a benefit to earnings.

At December 31, 2019, the net domestic deferred tax asset was \$12 million, net of an established valuation allowance of \$560 million. At December 31, 2018, the net domestic deferred tax asset was \$445 million, net of an established valuation allowance of \$211 million.

At December 31, 2019, the net foreign deferred tax asset was \$3 million, net of an established valuation allowance of \$3 million. At December 31, 2018, the net foreign deferred tax liability was \$14 million, net of an established valuation allowance of \$3 million. The net foreign deferred tax asset will fluctuate as the value of the U.S. dollar changes with respect to the euro.

U. S. Steel will continue to monitor the realizability of its deferred tax assets on a quarterly basis taking into consideration, among other items, the uncertainty regarding the Company's continued ability to generate domestic income in the near term. In the future, if we determine that realization is more likely than not for a deferred tax asset with a valuation allowance, the related valuation allowance will be reduced, and we will record a non-cash benefit to earnings.

Unrecognized tax benefits

Unrecognized tax benefits are the differences between a tax position taken, or expected to be taken, in a tax return and the benefit recognized for accounting purposes pursuant to the guidance in ASC Topic 740 on income taxes. The total amount of unrecognized tax benefits was \$3 million, \$35 million and \$42 million as of December 31, 2019, 2018 and 2017, respectively.

The total amount of unrecognized tax benefits that, if recognized, would affect the effective tax rate was \$2 million as of both December 31, 2019 and 2018.

U. S. Steel records interest related to uncertain tax positions as a part of net interest and other financial costs in the Consolidated Statements of Operations. Any penalties are recognized as part of selling, general and administrative expenses. U. S. Steel had accrued liabilities of \$2 million for interest and penalties related to uncertain tax positions as of both December 31, 2019 and 2018.

A tabular reconciliation of unrecognized tax benefits follows:

(In millions)	2019	2018	2017
Unrecognized tax benefits, beginning of year	\$ 35	\$ 42	\$ 72
Increases – tax positions taken in prior years	—	—	1
Decreases – tax positions taken in prior years	—	(2)	(26)
Settlements	(32)	—	(4)
Lapse of statute of limitations	—	(5)	(1)
Unrecognized tax benefits, end of year	\$ 3	\$ 35	\$ 42

It is reasonably expected that during the next 12 months unrecognized tax benefits related to income tax issues will change by an immaterial amount.

Tax years subject to examination

Below is a summary of the tax years open to examination by major tax jurisdiction:

U.S. Federal – 2014 and forward
 U.S. States – 2009 and forward
 Slovakia – 2009 and forward

Status of Internal Revenue Service (IRS) examinations

The IRS audit of U. S. Steel's 2014-2016 federal consolidated tax returns began in 2018 and is ongoing. The IRS completed its audit of the Company's 2012 and 2013 tax returns in 2019. The audit report was agreed to by the Company and approved by the Congressional Joint Committee on Taxation in the fourth quarter of 2019, which resulted in a reduction to unrecognized tax benefits.

12. Investments, Long-Term Receivables and Equity Investee Transactions

(In millions)	December 31,	
	2019	2018
Equity method investments	\$ 1,272	\$ 485
Receivables due after one year, less allowance of \$5 and \$11	191	24
Other	3	4
Total	\$ 1,466	\$ 513

Summarized financial information of all investees accounted for by the equity method of accounting is as follows (amounts represent 100% of investee financial information):

(In millions)	2019	2018	2017
Income data – year ended December 31:^(a)			
Net Sales	\$ 2,528	\$ 2,193	\$ 2,485
Operating income	253	157	132
Net earnings	235	134	109
Balance sheet date – December 31:			
Current Assets	\$ 1,144	\$ 642	\$ 633
Noncurrent Assets	2,976	853	710
Current liabilities	573	348	441
Noncurrent Liabilities	2,542	516	335

(a) Former equity affiliates, Swan Point Development Company, Inc., Tilden Mining Company (Tilden) and Apolo Tubulars S.A. were sold on February 6, 2017, September 29, 2017 and December 22, 2017, respectively. We exited Leeds Retail Center, LLC and sold Acero Prime, S.R.L. de CV on May 31, 2018, and October 23, 2018, respectively. The former equity affiliates are included in the income data through the month prior to the date of sale.

U. S. Steel's portion of the equity in net earnings for its equity investments as reported in the income from investees line on the Consolidated Statements of Operations was \$79 million, \$61 million and \$44 million for the years ended December 31, 2019, 2018 and 2017, respectively.

All of our significant investees are located in the U.S. Investees accounted for using the equity method include:

Investee	December 31, 2019 Interest
Big River Steel ^(a)	49.9%
Chrome Deposit Corporation	50%
Daniel Ross Bridge, LLC	50%
Double G Coatings Company, Inc.	50%
Feralloy Processing Company	49%
Hibbing Development Company	24.1%
Hibbing Taconite Company ^(b)	14.7%
Patriot Premium Threading Services, LLC	50%
PRO-TEC Coating Company, LLC	50%
Strategic Investment Fund Partners II ^(c)	5.2%
USS-POSCO Industries	50%
Worthington Specialty Processing	49%

(a) U. S. Steel's 49.9% ownership in Big River Steel consists of 47.7535% interests in Big River Steel Holdings LLC and BRS Stock Holdco LLC. U. S. Steel Blocker LLC, a wholly-owned subsidiary of U. S. Steel, holds a 2.1465% interest in both of those entities.

(b) Hibbing Taconite Company (Hibbing) is an unincorporated joint venture that is owned, in part, by Hibbing Development Company (HDC), which is accounted for using the equity method. Through HDC we are able to influence the activities of HTC, and as such, its activities are accounted for using the equity method.

(c) Strategic Investment Fund Partners II is a limited partnership and in accordance with ASC Topic 323, the financial activities are accounted for using the equity method.

In 2018, we recognized pre-tax gains on equity investee transactions of approximately \$18 million for the assignment of our ownership interest in Leeds Retail Center, LLC and \$20 million from the sale of our 40 percent ownership interest in Acero Prime, S. R. L. de CV. In 2017, we recognized a total gain on equity investee transactions of \$2 million primarily as a result of a gain on sale of our 15 percent ownership in Tilden Mining Company, L.C., partially offset by a loss on sale of our 50 percent ownership interest in Apolo Tubulars S.A.

Dividends and partnership distributions received from equity investees were \$5 million in 2019, \$13 million in 2018 and \$12 million in 2017.

U. S. Steel evaluates impairment of its equity method investments whenever circumstances indicate that a decline in value below carrying value is other than temporary. Under these circumstances, we would adjust the investment down to its estimated fair value, which then becomes its new carrying value.

We supply substrate to certain of our equity method investees and from time to time will extend the payment terms for their trade receivables. For discussion of transactions and related receivable and payable balances between U. S. Steel and its investees, see Note 23.

Big River Steel

On October 31, 2019, a wholly owned subsidiary of U. S. Steel purchased a 49.9% ownership interest in Big River Steel at a purchase price of approximately \$683 million in cash. U. S. Steel recorded an equity investment asset for Big River Steel of \$710 million that includes approximately \$27 million of transaction costs. U. S. Steel accounts for its investment in Big River Steel under the equity method as control and risk of loss are shared among the partnership members. Big River Steel is not a variable interest entity as it qualifies for the business scope exception under ASC 810, Consolidation. See Note 5 for further details.

Patriot Premium Threading Services, LLC

Patriot Premium Threading Services, LLC (Patriot) is located in Midland, Texas and provides oil country threading, accessory threading, repair services and rig site services to exploration and production companies located principally in the Permian Basin. During the fourth quarter of 2019, Patriot's 50-50 joint venture partners, a wholly owned subsidiary of U. S. Steel and Butch Gilliam Enterprises, Inc. (BGE) amended the joint venture agreement. In accordance with the amended agreement, U. S. Steel will be entitled to receive distributions of 100% of Patriot's earnings starting January 1, 2020 and will purchase BGE's ownership interest in Patriot after a three-year period in exchange for certain fixed payments and payments equal to ten percent of Patriot's earnings before interest and taxes during that time period. The prepaid asset (recorded in other noncurrent assets) related to the future purchase of Patriot was \$33.0 million and \$27.7 million at December 31, 2019 and December 31, 2018,

respectively. The liability (recorded in deferred credits and other noncurrent liabilities) related to the future purchase of Patriot was \$5.7 million at December 31, 2019. There was no liability related to the purchase of Patriot at December 31, 2018.

Patriot is now classified as a variable interest entity because its economics are not proportional to the equal voting interests of its two joint venture partners. U. S. Steel is not the primary beneficiary because it does not direct the decisions that most significantly impact the economic performance of Patriot. These decisions include those related to sales of Patriot's goods and services, its production planning and scheduling and its negotiation of procurement contracts.

At December 31, 2019 and 2018, U. S. Steel had other assets of approximately \$29.8 million and \$23.7 million, respectively, on its consolidated balance sheets related to Patriot. These assets were comprised primarily of our equity investment in Patriot which is classified in investments and other long-term receivables and an insignificant related party receivable for the sale of pipe to Patriot for threading services. The assets represent our maximum exposure to Patriot without consideration of any recovery that could be received if there were a sale of Patriot's assets. Creditors of Patriot have no recourse to the general credit of U. S. Steel.

13. Property, Plant and Equipment

(In millions)	Useful Lives	December 31,	
		2019	2018
Land and depletable property	—	\$ 202	\$ 207
Buildings	35 years	1,105	1,098
Machinery and equipment			
Steel producing	2-30 years	13,658	12,784
Transportation	3-40 years	280	268
Other	5-30 years	129	123
Information technology	5-6 years	787	786
Assets under finance lease	5-15 years	83	36
Construction in process	—	833	706
Total		17,077	16,008
Less accumulated depreciation and depletion		11,630	11,143
Net		\$ 5,447	\$ 4,865

Amounts in accumulated depreciation and depletion for assets acquired under finance leases (including sale-leasebacks accounted for as financings) were \$27 million and \$20 million at December 31, 2019 and 2018, respectively.

14. Intangible Assets

Intangible assets are being amortized on a straight-line basis over their estimated useful lives and are detailed below:

(In millions)	Useful Lives	As of December 31, 2019			As of December 31, 2018		
		Gross Carrying Amount	Accumulated Amortization	Net Amount	Gross Carrying Amount	Accumulated Amortization	Net Amount
Customer relationships	22 Years	\$ 132	\$ 76	\$ 56	\$ 132	\$ 70	\$ 62
Patents	10-15 Years	22	8	14	22	7	15
Other	4-20 Years	14	9	5	14	8	6
Total amortizable intangible assets		\$ 168	\$ 93	\$ 75	\$ 168	\$ 85	\$ 83

Identifiable intangible assets with finite lives are reviewed for impairment whenever events or circumstances indicate that the carrying value may not be recoverable. During 2019, steel market challenges in the U.S. and

Europe, the indefinite idling of certain Flat-Rolled facilities and recent losses in the welded tubular asset groups were considered triggering events for those long-lived asset groups. Long-lived asset impairment evaluations were performed and no impairments were identified. There were no triggering events in 2018 that required a review for impairment.

Amortization expense was \$8 million for both years ended December 31, 2019 and December 31, 2018. We expect a consistent level of annual amortization expense through 2024.

The carrying amount of acquired water rights with indefinite lives as of December 31, 2019 and December 31, 2018 totaled \$75 million. The acquired water rights are tested for impairment annually in the third quarter, or whenever events or circumstances indicate the carrying value may not be recoverable. U. S. Steel performed a quantitative impairment evaluation of its acquired water rights during the third quarter of 2019. Based on the results of the evaluation, the water rights were not impaired.

15. Stock-Based Compensation Plans

U. S. Steel has outstanding stock-based compensation awards that were granted by the Compensation & Organization Committee of the Board of Directors (the Committee) under the 2005 Stock Incentive Plan (the 2005 Plan) and the 2016 Omnibus Incentive Compensation Plan (the Omnibus Plan) (collectively the Plans). On April 26, 2016, the Company's stockholders approved the Omnibus Plan and authorized the Company to issue up to 7,200,000 shares of U. S. Steel common stock under the Omnibus Plan. The Company's stockholders authorized the issuance of an additional 6,300,000 shares under the Omnibus Plan on April 25, 2017. While awards that were previously granted under the 2005 Plan remain outstanding, all future awards will be granted under the Omnibus Plan. As of December 31, 2019, there were 7,464,779 shares available for future grants under the Omnibus Plan. Generally, a share issued under the Omnibus Plan pursuant to an award other than a stock option will reduce the number of shares available under the Stock Plan by 1.73 shares. Shares related to awards under either plan (i) that are forfeited, (ii) that terminate without shares having been issued or (iii) for which payment is made in cash or property other than shares, are again available for awards under the Omnibus Plan. Shares delivered to U. S. Steel or withheld for purposes of satisfying the exercise price or tax withholding obligations are not available for future awards. The purpose of the Plans is to attract, retain and motivate employees and non-employee directors of outstanding ability, and to align their interests with those of the stockholders of U. S. Steel. The Committee administers the Plans, and under the Omnibus Plan, may make grants of stock options, restricted stock units (RSUs), performance awards, and other stock-based awards.

The following table summarizes the total stock-based compensation awards granted during the years 2019, 2018 and 2017:

	Stock Options	Restricted Stock Units	TSR Performance Awards	ROCE Performance Awards
2019 Grants	—	1,005,500	210,520	527,470
2018 Grants	—	824,195	79,190	247,510
2017 Grants	647,780	348,040	169,850	—

Stock-based compensation expense

The following table summarizes the total compensation expense recognized for stock-based compensation awards:

(In millions, except per share amounts)	Year Ended December 31, 2019	Year Ended December 31, 2018	Year Ended December 31, 2017
Stock-based compensation expense recognized:			
Cost of sales	\$ 9	\$ 11	\$ 10
Selling, general and administrative expenses	17	21	17
Decrease in net income	26	32	27
Decrease in basic earnings per share	0.15	0.14	0.15
Decrease in diluted earnings per share	0.15	0.13	0.15

As of December 31, 2019, total future compensation cost related to nonvested stock-based compensation arrangements was \$16 million, and the average period over which this cost is expected to be recognized is approximately 18 months.

Stock options

Compensation expense for stock options is recorded over the vesting period based on the fair value on the date of grant, as calculated by U. S. Steel using the Black-Scholes model and the assumptions listed below. Awards generally vest ratably over a three-year service period and have a term of ten years. Stock options are generally issued at the market price of the underlying stock on the date of the grant. Upon exercise of stock options, shares of U. S. Steel stock are issued from treasury stock or from authorized, but unissued common stock. There were no stock options granted in 2019 and 2018.

Black-Scholes Assumptions ^(a)	2017 Grants
Grant date price per share of option award	\$ 36.94
Exercise price per share of option award	\$ 36.94
Expected annual dividends per share	\$ 0.20
Expected life in years	5.0
Expected volatility	57%
Risk-free interest rate	2.0%
Average grant date fair value per share of unvested option awards as calculated from above	\$ 17.28

(a) The assumptions represent a weighted-average for all grants during the year.

The expected annual dividends per share are based on the latest annualized dividend rate at the date of grant; the expected life in years is determined primarily from historical stock option exercise data; the expected volatility is based on the historical volatility of U. S. Steel stock; and the risk-free interest rate is based on the U.S. Treasury strip rate for the expected life of the option.

The following table shows a summary of the status and activity of stock options for the year ended December 31, 2019:

	Shares	Weighted-Average Exercise Price (per share)	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in millions)
Outstanding at January 1, 2019	2,746,520	\$ 27.73		
Granted	—	\$ —		
Exercised	(10,435)	\$ 16.05		
Forfeited or expired	(384,254)	\$ 32.00		
Outstanding at December 31, 2019	2,351,831	\$ 27.08	4.43	\$ —
Exercisable at December 31, 2019	2,209,073	\$ 26.50	4.28	\$ —
Exercisable and expected to vest at December 31, 2019	2,323,996	\$ 26.97	4.40	\$ —

The aggregate intrinsic value in the table above represents the total pretax intrinsic value (difference between our closing stock price on the last trading day of 2019 and the exercise price, multiplied by the number of in-the-money options). Intrinsic value changes are a function of the fair market value of our stock.

The total intrinsic value of stock options exercised (i.e., the difference between the market price at exercise and the price paid by the employee to exercise the option) was immaterial during the year ended December 31, 2019, \$27 million during the year ended December 31, 2018 and \$11 million during the year ended December 31, 2017. The total amount of cash received by U. S. Steel from the exercise of options during the year ended December 31, 2019 and December 31, 2018, was an immaterial amount and \$35 million, respectively, and the related net tax benefit realized from the exercise of these options was an immaterial amount and \$3 million in 2019 and 2018, respectively.

Stock awards

Compensation expense for nonvested stock awards is recorded over the vesting period based on the fair value at the date of grant.

RSUs awarded as part of annual grants generally vest ratably over three years. Their fair value is the market price of the underlying common stock on the date of grant. RSUs granted in connection with new-hire or retention awards generally cliff vest three years from the date of the grant.

Total shareholder return (TSR) performance awards may vest at varying levels at the end of a three-year performance period if U. S. Steel's total shareholder return compared to the total shareholder return of a peer group of companies meets performance criteria during the three-year performance period. For the 2017 and 2018 awards, TSR is calculated over the full three-year performance period. For the 2019 awards, TSR is calculated as follows: 20 percent for each year in the three-year performance period and 40 percent for the full three-year period. TSR performance awards may vest and payout 50 percent at the threshold level, 100 percent at the target level and 200 percent at the maximum level for payouts. Payment for performance in between the threshold percentages will be interpolated. The fair value of the performance awards is calculated using a Monte-Carlo simulation.

Performance awards based on the return on capital employed (ROCE) metric were granted in 2019 and 2018 in equity and in 2017 in cash. ROCE awards granted will be measured on a weighted average basis of the Company's consolidated worldwide earnings (loss) before interest and income taxes, as adjusted, divided by consolidated worldwide capital employed, as adjusted, over a three year period.

Weighted average ROCE is calculated based on the ROCE achieved in the first, second and third years of the performance period, weighted at 20 percent, 30 percent and 50 percent, respectively. The ROCE awards will payout 50 percent at the threshold level, 100 percent at the target level and 200 percent at the maximum level. Payouts for performance in between the threshold percentages will be interpolated.

Compensation expense associated with the ROCE awards will be contingent based upon the achievement of the specified ROCE performance goals and will be adjusted on a quarterly basis to reflect the probability of achieving the ROCE metric.

ROCE performance awards may vest at the end of a three-year performance period contingent upon meeting ROCE performance goals approved by the Committee. The fair value of the ROCE performance awards is the average market price of the underlying common stock on the date of grant.

The following table shows a summary of the performance awards outstanding as of December 31, 2019, and their fair market value on the respective grant date:

Performance Period	Fair Value (in millions)	Minimum Shares	Target Shares	Maximum Shares
2019 - 2021	\$ 17	—	653,194	1,306,388
2018 - 2020	\$ 14	—	288,379	576,758
2017 - 2019	\$ 4	—	101,587	203,174

The following table shows a summary of the status and activity of nonvested stock awards for the year ended December 31, 2019:

	Restricted Stock Units	TSR Performance Awards ^(a)	ROCE Performance Awards ^(a)	Total	Weighted- Average Grant-Date Fair Value
Nonvested at January 1, 2018	1,496,272	375,787	235,898	2,107,957	\$ 30.92
Granted	1,005,500	210,520	527,470	1,743,490	24.46
Vested	(771,677)	(384,664)	—	(1,156,341)	18.26
Performance adjustment factor ^(b)	—	192,332	—	192,332	10.02
Forfeited or expired	(140,271)	(43,658)	(70,525)	(254,454)	30.45
Nonvested at December 31, 2019	1,589,824	350,317	692,843	2,632,984	\$ 30.72

(a) The number of shares shown for the performance awards is based on the target number of share awards.

(b) Consists of adjustments to vested performance awards to reflect actual performance. The adjustments were required since the original grants of the awards were at 100 percent of the targeted amounts and the awards vested at greater than target.

The following table presents information on RSUs and performance awards granted:

	2019	2018	2017
Number of awards granted	1,743,490	1,150,895	517,890
Weighted-average grant-date fair value per share	\$ 24.46	\$ 41.65	\$ 37.68

During the years ended December 31, 2019, 2018, and 2017, the total fair value of shares vested was \$21 million, \$14 million, and \$11 million, respectively.

16. Derivative Instruments

U. S. Steel is exposed to foreign currency exchange rate risks in our European operations. USSE's revenues are primarily in euros and costs are primarily in euros and U.S. dollars (USD). U. S. Steel uses foreign exchange forward sales contracts (foreign exchange forwards) with maturities no longer than 12 months to exchange euros for USD to manage our currency requirements and exposure to foreign currency exchange rate fluctuations. Derivative instruments are required to be recognized at fair value in the Consolidated Balance Sheet. U. S. Steel did not designate euro foreign exchange forwards entered into prior to July 1, 2019, as hedges; therefore, changes in their fair value were recognized immediately in the Consolidated Statements of Operations (mark-to-market accounting). For those contracts, U. S. Steel will continue to recognize changes in fair value immediately through earnings until the contracts mature. U. S. Steel elected cash flow hedge accounting for euro foreign exchange forwards prospectively effective July 1, 2019. Accordingly, future gains and losses for euro foreign exchange forwards entered into after July 1, 2019 will be recorded within accumulated other comprehensive income (AOCI) until the related contract impacts earnings. We mitigate the risk of concentration of counterparty credit risk by purchasing our forwards from several counterparties.

In 2018, U. S. Steel entered into long-term freight contracts in its domestic operations that require payment in Canadian dollars (CAD). We entered into foreign exchange forward contracts with remaining maturities up to 12 months to exchange USD for CAD to mitigate a portion of the related risk of exchange rate fluctuations and to manage our currency requirements. We elected to designate these contracts as cash flow hedges.

U. S. Steel may use fixed-price forward physical purchase contracts to partially manage our exposure to price risk related to the purchases of natural gas, zinc and tin used in the production process. Generally, forward physical purchase contracts qualify for the normal purchase and normal sales exceptions described in ASC Topic 815 and are not subject to mark-to-market accounting. U. S. Steel also uses financial swaps to protect from the commodity price risk associated with purchases of natural gas, zinc and tin (commodity purchase swaps). We elected cash flow hedge accounting for domestic commodity purchase swaps and use mark-to-market accounting for commodity purchase swaps used in our European operations.

From time to time, we enter into financial swaps that are used to partially manage the sales price of certain hot-rolled coil and iron ore pellet sales (sales swaps). We elected cash flow hedge accounting for hot-rolled coil sales swaps effective January 1, 2018 and for iron ore pellet sales swaps effective January 1, 2019.

In accordance with the guidance in ASC Topic 820 on fair value measurements and disclosures, the fair value of our foreign exchange forwards, commodity purchase swaps and sales swaps was determined using Level 2 inputs, which are defined as "significant other observable" inputs. The inputs used are from market sources that aggregate data based upon market transactions.

The table below shows the outstanding swap quantities used to hedge forecasted purchases and sales as of December 31, 2019 and December 31, 2018:

Hedge Contracts	Classification	December 31, 2019	December 31, 2018
Natural gas (in mmbtus)	Commodity purchase swaps	56,613,200	33,951,016
Tin (in metric tons)	Commodity purchase swaps	145	585
Zinc (in metric tons)	Commodity purchase swaps	9,819	3,471
Hot-rolled coils (in tons)	Sales swaps	—	9,000
Foreign currency (in millions of euros)	Foreign exchange forwards	€ 282	€ 286
Foreign currency (in millions of CAD)	Foreign exchange forwards	C\$ 25	C\$ 50

The following summarizes the fair value amounts included in our Consolidated Balance Sheets as of December 31, 2019 and December 31, 2018:

(In millions) Designated as Hedging Instruments	Balance Sheet Location	December 31, 2019	December 31, 2018
Sales swaps	Accounts payable	\$ —	\$ 1
Commodity purchase swaps	Accounts receivable	1	2
Commodity purchase swaps	Accounts payable	17	17
Commodity purchase swaps	Investments and long-term receivables	1	—
Commodity purchase swaps	Other long-term liabilities	7	1
Foreign exchange forwards	Accounts payable	1	1
Foreign exchange forwards	Other long-term liabilities	—	1
Not Designated as Hedging Instruments			
Foreign exchange forwards	Accounts receivable	4	12

The table below summarizes the effect of hedge accounting on AOCI and amounts reclassified from AOCI into earnings for 2019, 2018, and 2017:

(In millions)	Gain (Loss) on Derivatives in AOCI			Location of Reclassification from AOCI ^(a)	Amount of Gain (Loss) Recognized in Income		
	2019	2018	2017		2019	2018	2017
Sales swaps	\$ 1	\$ —	\$ —	Net sales ^(b)	\$ (1)	\$ (13)	\$ —
Commodity purchase swaps	(6)	(15)	1	Cost of sales ^(c)	(19)	(8)	(2)
Foreign exchange forwards	1	(2)	—	Cost of sales	(1)	—	—

^(a) The earnings impact of our hedging instruments substantially offsets the earnings impact of the related hedged items since ineffectiveness is less than \$1 million.

^(b) U. S. Steel elected cash flow hedge accounting for hot-rolled coil sales swaps effective January 1, 2018 and for iron ore pellet sales swaps effective January 1, 2019.

^(c) Costs for commodity purchase swaps are recognized in cost of sales as products are sold.

The table below summarizes the impact of derivative activity where hedge accounting has not been elected on our Consolidated Statements of Operations for 2019, 2018 and 2017:

(In millions)	Consolidated Statement of Operations Location	Amount of Gain (Loss) Recognized in Income		
		2019	2018	2017
Sales swaps ^(a)	Net sales	\$ —	\$ (1)	\$ 6
Commodity purchase swaps ^(b)	Cost of sales	—	—	3
Foreign exchange forwards ^(c)	Other financial costs	17	24	(23)

^(a) U. S. Steel elected cash flow hedge accounting for hot-rolled coil sales swaps effective January 1, 2018 and for iron ore pellet sales swaps effective January 1, 2019.

^(b) The 2017 impacts were for de-designated zinc contracts for our domestic operations.

^(c) U. S. Steel has elected hedge accounting for foreign exchange forwards to exchange USD for CAD. U. S. Steel elected cash flow hedge accounting for euro foreign exchange forwards prospectively effective July 1, 2019.

At current contract values, \$17 million in AOCI as of December 31, 2019 will be recognized as an increase in cost of sales over the next year as related hedged items are recognized in earnings. The maximum derivative contract duration for commodity purchase swaps is 23 months and the maximum duration for foreign exchange forwards is 12 months. There are no outstanding contracts for commodity sales swaps.

17. Debt

(In millions)	Interest Rates %	Maturity	December 31,	
			2019	2018
2037 Senior Notes	6.650	2037	\$ 350	\$ 350
2026 Senior Notes	6.250	2026	650	650
2026 Senior Convertible Notes	5.000	2026	350	—
2025 Senior Notes	6.875	2025	750	750
Environmental Revenue Bonds	4.875 - 6.750	2024 - 2049	620	400
Fairfield Caster Lease		2022	18	22
Other finance leases and all other obligations		2020-2029	48	6
Amended Credit Facility, \$2.0 billion	Variable	2024	600	—
USSK Credit Agreement	Variable	2023	393	229
USSK credit facilities	Variable	2021	—	—
Total debt			3,779	2,407
Less unamortized discount and debt issuance costs			138	26
Less short-term debt and long-term debt due within one year			14	65
Long-term debt			\$ 3,627	\$ 2,316

2026 Senior Convertible Notes

On October 21, 2019, U. S. Steel issued an aggregate principal amount of \$300 million of 5.00% Senior Convertible Notes due November 1, 2026 (2026 Senior Convertible Notes), with a 30-day option to purchase up to an additional \$50 million in aggregate principal amount of 2026 Senior Convertible Notes, on the same terms and conditions. On October 25, 2019, U. S. Steel issued an additional \$50 million of 2026 Senior Convertible Notes after the full option was exercised. U. S. Steel received net proceeds of approximately \$340 million from the sale of the 2026 Senior Convertible Notes after deducting underwriting fees and estimated offering expenses. The Company intends to use the net proceeds for general corporate purposes, including, without limitation, for previously announced strategic investments and capital expenditures. Interest on the 2026 Senior Convertible Notes is payable semi-annually on May 1 and November 1 of each year, commencing on May 1, 2020.

The initial conversion rate for the 2026 Senior Convertible Notes is 74.8391 shares of U. S. Steel common stock per \$1,000 principal amount, equivalent to an initial conversion price of approximately \$13.36 per share of common stock, subject to adjustment as defined in the 2026 Senior Convertible Notes. On the issuance date of the 2026 Senior Convertible Notes, the market price of U. S. Steel's common stock was below the stated conversion price of \$13.36 so there was no beneficial conversion option to the holders. Based on the initial conversion rate, the 2026 Senior Convertible Notes are convertible into 26,193,685 shares of U. S. Steel common stock and we reserved for the possible issuance of 33,396,930 shares, which is the maximum amount that could be issued upon conversion. Prior to August 1, 2026, holders of notes may convert all or a portion of their notes at their option only upon the satisfaction of specified conditions and during certain periods. On or after August 1, 2026, holders may convert all or a portion of their notes at any time prior to the close of business on the second scheduled trading day immediately preceding the maturity date. Upon conversion, we will satisfy the obligation with cash, common stock, or a combination thereof, at our election. U. S. Steel may not redeem the 2026 Senior Convertible Notes prior to November 5, 2023. On or after November 5, 2023 and prior to August 1, 2026, if the price per share of U. S. Steel's common stock has been at least 130% of the conversion price for specified periods, U. S. Steel may redeem all or a portion of the 2026 Senior Convertible Notes at a cash redemption price of 100% of the principal amount, plus accrued and unpaid interest.

If U. S. Steel undergoes a fundamental change, as defined in the 2026 Senior Convertible Notes, holders may require us to repurchase the 2026 Senior Convertible Notes in whole or in part for cash at a price equal to 100% of the principal amount of the 2026 Senior Convertible Notes to be purchased plus any accrued and unpaid interest (including additional interest, if any) up to, but excluding the repurchase date.

For accounting purposes, the proceeds received from the issuance of the notes were allocated between debt and equity to reflect the fair value of the conversion option embedded in the notes and the fair value of similar debt without the conversion option. As a result, based on the aggregate principal amount of \$350 million, we recorded approximately \$106 million of the gross proceeds of the 2026 Senior Convertible Notes as an increase in additional paid-in capital with the offsetting amount recorded as a debt discount. The debt discount will be amortized over the term of the 2026 Senior Convertible Notes using an estimated interest rate of 10.5% (the estimated effective borrowing rate for nonconvertible debt at the time of issuance) which will accrete the carrying value of the notes to the principal amount at maturity. As of December 31, 2019, the remaining unamortized debt discount was \$103 million and the net carrying amount of the 2026 Senior Convertible Notes was \$247 million.

Environmental Revenue Bonds

On October 10, 2019, we launched offerings of two series of environmental revenue bonds in aggregate principal amount of approximately \$368 million, that will mature between 2024 and 2049 (collectively, the "2019 Environmental Revenue Bonds"). Proceeds of the 2019 Environmental Revenue Bonds in the amount of approximately \$93 million were used to redeem a portion of our existing outstanding environmental revenue bonds for which we issued a conditional redemption notice. Proceeds of the 2019 Environmental Revenue Bonds in the amount of \$275 million will be used to finance or refinance the acquisition, construction, equipping and installation of certain solid waste disposal facilities, including an electric arc furnace and other equipment and facilities at the Company's Fairfield Works. The 2019 Environmental Revenue Bonds closed on October 25, 2019.

The Company also redeemed \$55 million of outstanding Indiana Finance Authority environmental revenue bonds in December 2019.

Amended and Restated Credit Agreement

On October 25, 2019, we entered into a new five-year senior secured asset-based revolving credit facility in an aggregate amount of \$2.0 billion (Fifth Credit Facility Agreement) to replace the prior \$1.5 billion credit facility agreement. The Fifth Credit Facility Agreement has substantially the same terms as the prior credit facility agreement, except the Fifth Credit Facility Agreement will mature five years from the date of effectiveness, includes a "first-in, last-out" tranche in an amount of \$150 million and includes certain other changes, including changes to the fixed charge negative covenant test allowing us to exclude (i) certain capital expenditures from the calculation of the test and (ii) certain restricted payments made pursuant to any share repurchase program from the calculation of "consolidated fixed charges." On October 30, 2019, we drew \$700 million, which included \$5 million in fees, on the Fifth Credit Facility Agreement to fund the closing of our acquisition of a 49.9% interest in Big River Steel. On November 14, 2019, \$100 million of outstanding drawings was repaid on the facility. On January 16, 2020, U. S. Steel made an additional payment of \$50 million on this facility.

As of December 31, 2019, there was \$600 million drawn under the \$2.0 billion Fifth Credit Facility Agreement. U. S. Steel must maintain a fixed charge coverage ratio of at least 1.00 to 1.00 for the most recent four consecutive quarters when availability under the Fifth Credit Facility Agreement is less than the greater of 10 percent of the total aggregate commitments and \$200 million. Based on the most recent four quarters as of December 31, 2019, we would have met the fixed charge negative covenant test. However, since the value of our accounts receivable and inventory less specified reserves do not support the full amount of the facility at December 31, 2019, the amount available to the Company under this facility was reduced by \$20 million. The availability under the Fifth Credit Facility Agreement was \$1.38 billion as of December 31, 2019.

The Fifth Credit Facility Agreement provides for borrowings at interest rates based on defined, short-term market rates plus a spread based on availability and includes other customary terms and conditions including restrictions on our ability to create certain liens and to consolidate, merge or transfer all, or substantially all, of our assets. The Fifth Credit Facility Agreement expires in October 2024. Maturity may be accelerated 91 days prior to the stated maturity of any outstanding senior debt if excess cash and credit facility availability do not meet the liquidity conditions set forth in the Fifth Credit Facility Agreement. Borrowings are secured by liens on substantially all inventory and trade accounts receivable of the Company and subsidiary guarantors.

U. S. Steel Košice (USSK) credit facilities

At December 31, 2019, USSK had borrowings of €350 million (approximately \$393 million) under its €460 million (approximately \$517 million) revolving credit facility. At December 31, 2018, USSK had borrowings of €200 million (approximately \$229 million) under its €460 million (approximately \$527 million) revolving credit facility. The USSK Credit Agreement contains certain USSK specific financial covenants including a minimum stockholders' equity to assets ratio and net debt to EBITDA ratio. The covenants are measured semi-annually at June and December each year for the period covering the last twelve calendar months, with the first net debt to EBITDA measurement occurring at June 2021. If USSK does not comply with the USSK Credit Agreement financial covenants, it would constitute an event of default under the USSK Credit Agreement, under which USSK may not draw upon the facility, and the majority lenders, as defined in the USSK Credit Agreement, may cancel any and all commitments, and/or accelerate full repayment of any or all amounts outstanding under the USSK Credit Agreement. On December 23, 2019, USSK entered into a supplemental agreement that amended the USSK Credit Agreement leverage covenant and pledged certain USSK trade receivables and inventory as collateral in support of USSK's obligations. At December 31, 2019, USSK had availability of €110 million (approximately \$124 million) under the USSK Credit Agreement.

At December 31, 2019, USSK had no borrowings under its €20 million and €10 million credit facilities (collectively approximately \$33 million) and the availability was approximately \$31 million due to approximately \$2 million of customs and other guarantees outstanding.

Each of these facilities bear interest at the applicable inter-bank offer rate plus a margin and contain customary terms and conditions.

Export Credit Agreement

On December 10, 2019, U. S. Steel entered into an Export Credit Agreement (ECA) with KfW IPEX-Bank GMBH (Facility Agent) and certain other lenders (Lenders). Funding of the ECA is expected to occur during the first quarter of 2020. The purpose of the ECA is to finance equipment purchased for the endless casting and rolling facility under construction at our Mon Valley Works facility in Braddock, Pennsylvania. Loans available under the ECA total approximately \$288 million and are made up of a Commercial Facility of approximately \$38 million and a Covered Facility of approximately \$250 million. The Covered Facility was entered into in conjunction with a guarantee agreement between the Lenders and Oesterreichische Kontrollbank AG (OeKB Guarantor) which provides certain guarantees (OeKB Guarantee) to the Lenders and the project equipment supplier (Supplier). Payment of loans will be due every six months from the earlier of the date on which the relevant goods and services are accepted from the Supplier or April 30, 2023 (Starting Point of Credit). Each loan granted from the Covered Facility must be repaid in full within eight years from the Starting Point of Credit. Each loan granted from the Commercial Facility must be repaid in full within five years from the Starting Point of Credit.

If at any time, any portion of the OeKB Guarantee becomes unlawful or invalid, or if at any time the OeKB Guarantor attempts to rescind, suspend, or terminate any portion of the OeKB Guarantee, each Lender's Covered Facility commitments are reduced to zero and each Covered Facility amount outstanding becomes fully due within 30 days. If at any time performance under the agreement with the Supplier becomes impaired the Facility Agent may request that U. S. Steel prepay outstanding loans within 30 days. If the costs under the agreement with the Supplier against which loans may be drawn are reduced, the Facility Agent may request prepayment in an amount corresponding with the reduction within 30 days. The Company is required to comply with a number of customary covenants and there are customary events of default and remedies for credit facilities of this nature.

Change in control event

If there is a change in control of U. S. Steel: (a) debt obligations totaling \$3,093 million as of December 31, 2019 may be declared due and payable; (b) the Credit Facility Agreement and the USSK credit facilities may be terminated and any amounts outstanding declared due and payable; and (c) U. S. Steel may be required to either repurchase the leased Fairfield Works slab caster for \$19 million or provide a letter of credit to secure the remaining obligation.

Debt Maturities – Aggregate maturities of debt are as follows (in millions):

2020	2021	2022	2023	2024	Later Years	Total
\$ 14	\$ 12	\$ 17	\$ 399	\$ 664	\$ 2,673	\$ 3,779

18. Pensions and Other Benefits

U. S. Steel has defined contribution or multi-employer retirement benefits for more than three-quarters of its employees in the United States and non-contributory defined benefit pension plans covering the remaining employees. Benefits under the defined benefit pension plans are based upon years of service and final average pensionable earnings, or a minimum benefit based upon years of service, whichever is greater. In addition, pension benefits for most non-represented employees under these plans are based upon a percent of total career pensionable earnings. Effective December 31, 2015, non-represented participants in the defined benefit plan no longer accrue additional benefits under the plan. For those without defined benefit coverage (defined benefit pension plan was closed to new participants in 2003) and those for which the defined benefit plan was frozen, the Company also provides in the defined contribution plans (401(k) plans) a retirement account benefit based on salary and attained age. Most non-represented employees also participate in the 401(k) plans whereby the Company matches a certain percentage of salary based on the amount contributed by the participant. At December 31, 2019, more than two-thirds of U. S. Steel's represented employees in the United States are covered by the Steelworkers Pension Trust (SPT), a multi-employer pension plan, to which U. S. Steel contributes on the basis of a fixed dollar amount for each hour worked.

On November 13, 2018, the USW ratified successor four year Collective Bargaining Agreements with U. S. Steel and its U. S. Steel Tubular Products, Inc. subsidiary (the 2018 Labor Agreements). The 2018 Labor Agreements were effective as of September 1, 2018 and expire on September 1, 2022. As a result of the 2018 Labor Agreements, the defined benefit pension liability increased \$26 million after considering higher wages on final average pay formulas and higher flat rate minimum multipliers.

U. S. Steel's defined benefit retiree health care and life insurance plans (Other Benefits) cover the majority of its represented employees in the United States upon their retirement. Health care benefits are provided for Medicare and pre-Medicare retirees, with Medicare retirees largely enrolled in Medicare Advantage Plans. Both are subject to various cost sharing features, and in most cases domestically, an employer cap on total costs. The Other Benefits plan was closed to represented employees hired or rehired under certain conditions on or after January 1, 2016.

Per an amendment effective June 30, 2014 to the retiree medical and retiree life insurance plan, benefits for non-represented employees who retired after December 31, 2017 were eliminated.

The majority of U. S. Steel's European employees are covered by government-sponsored programs into which U. S. Steel makes required contributions. Also, U. S. Steel sponsors defined benefit plans for most European employees covering benefit payments due to employees upon their retirement, some of which are government mandated. These same employees receive service awards throughout their careers based on stipulated service and, in some cases, age and service.

U. S. Steel uses a December 31 measurement date for its plans and may have an interim measurement date if significant events occur. Details relating to pension benefits and Other Benefits are below.

(In millions)	Pension Benefits		Other Benefits	
	2019	2018	2019	2018
Change in benefit obligations				
Benefit obligations at January 1	\$ 5,626	\$ 6,107	\$ 2,121	\$ 2,379
Service cost	44	49	13	17
Interest cost	237	233	91	92
Plan amendments	—	26	—	—
Actuarial (gains) losses	416	(223)	(195)	(185)
Exchange rate loss	1	(3)	—	—
Settlements, curtailments and termination benefits	—	(18)	—	—
Benefits paid	(502)	(545)	(154)	(182)
Benefit obligations at December 31	\$ 5,822	\$ 5,626	\$ 1,876	\$ 2,121
Change in plan assets				
Fair value of plan at January 1	\$ 4,960	\$ 5,732	\$ 1,860	\$ 2,042
Actual return on plan assets	948	(228)	274	(49)
Employer contributions	—	—	—	—
Benefits paid from plan assets	(502)	(544)	(109)	(133)
Fair value of plan assets at December 31	\$ 5,406	\$ 4,960	\$ 2,025	\$ 1,860
Funded status of plans at December 31	(416)	(666)	149	(261)

For Pension Benefits, the largest contributor to the actuarial loss in 2019 was the decrease in discount rate from 4.41% at December 31, 2018 to 3.35% at December 31, 2019. This loss was partially offset by a change in mortality assumptions. In 2018, the largest contributor of actuarial gain was the increase in the discount rate from 4.00% at December 31, 2017 to 4.41% at December 31, 2018.

For Other Benefits, the largest contributor to the actuarial gain in 2019 was attributable to reductions in future health care costs and assumptions on future participant enrollment in the plan. The gain was partially offset by a decrease in the discount rate from 4.47% at December 31, 2018 to 3.43% at December 31, 2019. In 2018, the largest contributor of actuarial gain was the increase in discount rate from 4.03% at December 31, 2017 to 4.47% at December 31, 2018. Reductions to future health care costs at December 31, 2018 also contributed to the actuarial gain.

Amounts recognized in accumulated other comprehensive loss:

(In millions)	12/31/2018	2019		12/31/2019
		Amortization	Activity	
Pensions				
Prior Service Cost	\$ 18	\$ (2)	\$ —	\$ 16
Actuarial Losses	2,442	(134)	(207)	2,101
Other Benefits				
Prior Service Cost	(80)	(29)	—	(109)
Actuarial Gains	(17)	(3)	(391)	(411)

As of December 31, 2019 and 2018, the following amounts were recognized in the Consolidated Balance Sheet:

(In millions)	Pension Benefits			Other Benefits	
	2019	2018		2019	2018
Noncurrent assets ^(a)	—	—		158	—
Current liabilities	(3)	(2)		(1)	(52)
Noncurrent liabilities	(413)	(664)		(8)	(209)
Accumulated other comprehensive loss ^(b)	2,117	2,460		(520)	(97)
Net amount recognized	\$ 1,701	\$ 1,794		\$ (371)	\$ (358)

^(a) Included in Noncurrent assets are \$49 million of expected retiree medical and life insurance payments for the next twelve months.

^(b) Accumulated other comprehensive loss effects associated with accounting for pensions and other benefits in accordance with ASC Topic 715 at December 31, 2019 and December 31, 2018, respectively, are reflected net of tax of \$800 million and \$991 million respectively, on the Consolidated Statements of Stockholders' Equity.

The Accumulated Benefit Obligation (ABO) for all defined benefit pension plans was \$5,636 million and \$5,454 million at December 31, 2019 and 2018, respectively.

(In millions)	December 31,	
	2019	2018
Information for pension plans with an accumulated benefit obligation in excess of plan assets:		
Aggregate accumulated benefit obligations (ABO)	\$ (5,636)	\$ (5,454)
Aggregate projected benefit obligations (PBO)	(5,822)	(5,626)
Aggregate fair value of plan assets	5,406	4,960

The aggregate PBO in excess of plan assets reflected above is included in the payroll and benefits payable and employee benefits lines on the Consolidated Balance Sheet.

Following are the details of net periodic benefit costs related to Pension and Other Benefits:

(In millions)	Pension Benefits			Other Benefits		
	2019	2018	2017	2019	2018	2017
Components of net periodic benefit cost:						
Service cost	\$ 44	\$ 49	\$ 50	\$ 13	\$ 17	\$ 17
Interest cost	237	233	235	91	92	94
Expected return on plan assets	(324)	(361)	(390)	(79)	(82)	(65)
Amortization - prior service costs	2	—	—	29	29	29
- actuarial losses	132	152	148	3	4	3
Net periodic benefit cost, excluding below	91	73	43	57	60	78
Multiemployer plans ^(a)	77	60	59	—	—	—
Settlement, termination and curtailment losses	11	10	7	—	—	—
Net periodic benefit cost	\$ 179	\$ 143	\$ 109	\$ 57	\$ 60	\$ 78

(a) Primarily represents pension expense for the SPT covering USW employees hired from National Steel Corporation and new USW employees hired after May 21, 2003.

Net periodic benefit cost for pensions and Other Benefits is projected to be approximately \$141 million and approximately \$(29) million, respectively, in 2020. The pension cost projection includes approximately \$79 million of contributions to the SPT.

Weighted average assumptions used to determine the benefit obligation at December 31 and net periodic benefit cost for the year ended December 31 are detailed below.

	Pension Benefits		Other Benefits	
	2019	2018	2019	2018
	U.S. and Europe	U.S. and Europe	U.S.	U.S.
Actuarial assumptions used to determine benefit obligations at December 31:				
Discount rate	3.35%	4.41%	3.43%	4.47%
Increase in compensation rate	2.60%	2.60%	N/A	N/A

	Pension Benefits		
	2019	2018	2017
	U.S. and Europe	U.S. and Europe	U.S. and Europe
Actuarial assumptions used to determine net periodic benefit cost for the year ended December 31:			
Discount rate	4.41%	4.00%	4.00%
Expected annual return on plan assets	6.50%	6.85%	7.25%
Increase in compensation rate	2.60%	2.60%	2.60%

	Other Benefits		
	2019	2018	2017
	U.S.	U.S.	U.S.
Discount rate	4.47%	4.03%	4.00%
Expected annual return on plan assets	4.25%	4.25%	3.25%
Increase in compensation rate	N/A	N/A	3.50%

The discount rate reflects the current rate at which the pension and Other Benefit liabilities could be effectively settled at the measurement date. In 2017, we refined our discount rate determination process for our U.S. plans by using a bond matching approach to select specific bonds that would satisfy our projected benefit payments. We believe the bond matching approach more closely reflects the process we would employ to settle our pension and other benefits obligations. For our European pension plan, the discount rate is determined using a yield curve methodology based on European bonds. The discount rate assumptions are updated annually.

	2019	2018
	U.S.	U.S.
Assumed health care cost trend rates at December 31:		
Health care cost trend rate assumed for next year	6.50%	7.00%
Rate to which the cost trend rate is assumed to decline (the ultimate trend rate)	4.50%	5.00%
Year that the rate reaches the ultimate trend rate	2028	2023

U. S. Steel reviews its actual historical rate experience and expectations of future health care cost trends to determine the escalation of per capita health care costs under U. S. Steel's benefit plans. About three quarters of our costs for the domestic USW participants' retiree health benefits in the Company's main domestic benefit plan are limited to a per capita dollar maximum calculation based on 2006 base year actual costs incurred under the main U. S. Steel benefit plan for USW participants (cost cap). The full effect of the cost cap is expected to be realized around 2028. After 2028, the Company's costs for a majority of USW retirees and their dependents are expected to remain fixed and as a result, the cost impact of health care escalation for the Company is projected to be limited for this group.

Plan Assets

ASC Topic 820 establishes a single definition of fair value, creates a three-tier hierarchy as a framework for measuring fair value based on inputs used to value the Plan's investments, and requires additional disclosure about fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1) and the lowest priority to unobservable inputs (level 3). The three levels of the fair value hierarchy are summarized below:

- Level 1 – Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Plan has the ability to access.
- Level 2 – Inputs to the valuation methodology include:
 - Quoted prices for similar assets or liabilities in active markets;
 - Quoted prices for identical or similar assets or liabilities in inactive markets;
 - Inputs other than quoted prices that are observable for the asset or liability;
 - Inputs that are derived principally from or corroborated by observable market data by correlation or other means

If the asset or liability has a specified (contractual) term, the level 2 input must be observable for substantially the full term of the asset or liability.

- Level 3 – Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

U. S. Steel's Pension plan and Other Benefits plan assets are classified as follows:

Level 1	Level 2	Level 3
Short-term Investments	Corporate Bonds - U.S. & Non U.S.	Private Equities
Equity Securities - U.S. & Non U.S.	Government Bonds - U.S. & Non U.S.	Real Estate
Exchange-traded Funds	Mortgage and asset-backed securities	Mineral Interests
Investment Trusts		Timberlands

An instrument's level is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques maximize the use of relevant observable inputs and minimize the use of unobservable inputs. The following is a description of the valuation methodologies used for assets measured at fair value. There have been no changes in the methodologies used at December 31, 2019 and 2018.

Short-term investments are valued at amortized cost which approximates fair value due to the short-term maturity of the instruments. Equity securities - U.S. & Non U.S., investments in investment trusts and exchange-traded funds are valued at the closing price reported on the active exchange on which the individual securities are traded. U.S. & Non U.S. government bonds are valued using pricing models maximizing the use of observable inputs for similar securities. Corporate U.S. & Non U.S. bonds are also valued using pricing models maximizing the use of observable inputs for similar securities, which includes basing value on yields currently available on comparable securities of issuers with similar credit ratings. When quoted prices are not available for identical or similar bonds, the bond is valued under a discounted cash flow approach that maximizes observable inputs, such as current yields of similar instruments, but includes adjustments for certain risks that may not be observable, such as credit and liquidity risks. Mortgage and asset-backed securities are valued using quotes from a broker dealer. Private equities and real estate are valued using information provided by external managers for each individual investment held in the fund or using NAV as a practical expedient. Timberland investments are valued at their appraised value. Mineral Interests are valued at the present value of estimated future cash flows discounted at estimated market rates for assets of similar quality and duration.

The following is a summary of U. S. Steel's Pension plan assets carried at fair value at December 31, 2019 and 2018:

Asset Classes	Fair Value Measurements at December 31, 2019 (in millions)			
	Total	Quoted Prices in Active Markets (Level 1)	Other Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Equity Securities ^(a)	130	130	—	—
Corporate & Government Bonds ^(b)	2,277	—	2,277	—
Mineral Interests	2	—	—	2
Timberlands	283	—	—	283
Real Estate ^(c)	32	—	—	32
All Other ^(d)	34	34	—	—
Total assets in the fair value hierarchy	\$ 2,758	\$ 164	\$ 2,277	\$ 317
Investments measured at net asset value ^(e)	2,648			
Investments at fair value	\$ 5,406			

(a) Includes \$123 million of U.S. equity securities and \$7 million of Non U.S. equity securities.

(b) Underlying investments include:

Corporate Bonds – U.S.	\$ 1,004
Corporate Bonds - Non U.S.	160
Government Bonds – U.S.	771
Government Bonds - Non U.S.	77
Mortgage and asset-backed securities	265
Total	\$ 2,277

(c) Includes investments in the Avanti Funds and the Mariano Ranch properties.

(d) Includes \$26 million of cash, \$19 million of accrued income, \$(8) million of investment purchases and \$(3) million of miscellaneous payables.

(e) In accordance with ASC Topic 820, certain investments that were measured at net asset value per share (or its equivalent) have not been classified in the fair value hierarchy.

The following table represents investments based on net asset value and the significant unobservable inputs and the ranges of values for those inputs (in millions):

	Net Asset Value at December 31, 2019	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Private Equity Funds ^(a)	\$ 238	\$ 48	Not redeemable	N/A
Real Estate Funds ^(a)	240	62	Not redeemable	N/A
Commingled Funds	2,170	N/A	N/A	N/A
Investments measured at net asset value	\$ 2,648			

(a) The remaining lives of such investments range from approximately less than 1 year to up to 9 years.

Fair Value Measurements at December 31, 2018 (in millions)

Asset Classes	Total	Quoted Prices in Active Markets (Level 1)	Other Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Short-term investments	\$ 7	\$ 7	\$ —	\$ —
Equity Securities ^(a)	101	101	—	—
Corporate & Government Bonds ^(b)	2,143	—	2,143	—
Mineral Interests	2	—	—	2
Timberlands	294	—	—	294
Private equities ^(c)	2	—	—	2
Real Estate ^(d)	33	—	—	33
All Other ^(e)	14	14	—	—
Total assets in the fair value hierarchy	\$ 2,596	\$ 122	2,143	\$ 331
Investments measured at net asset value ^(f)	2,364			
Investments at fair value	\$ 4,960			

(a) Includes \$95 million of U.S. equity securities and \$6 million of Non U.S. equity securities.

(b) Underlying investments include:

Corporate Bonds – U.S.	\$ 933
Corporate Bonds – Non U.S.	149
Government Bonds – U.S.	858
Government Bonds – Non U.S.	67
Mortgage and asset-backed securities	136
Total	\$ 2,143

(c) Includes investments in CAI Partners and Company III LP, Clayton Dubilier Rice Fund VI and Epiris Club 2007.

(d) Includes investments in the Avanti Funds and the Mariano Ranch properties.

(e) Includes \$32 million of cash, \$57 million of investment sales, \$21 million of accrued income, and \$(80) million of investment purchases and \$(16) million of miscellaneous payables.

(f) In accordance with ASC Topic 820, certain investments that were measured at net asset value per share (or its equivalent) have not been classified in the fair value hierarchy.

The following table represents investments based on net asset value and the significant unobservable inputs and the ranges of values for those inputs (in millions):

	Net Asset Value at December 31, 2018	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Private Equity Funds ^(a)	\$ 254	\$ 68	Not redeemable	N/A
Real Estate Funds ^(a)	236	93	Not redeemable	N/A
Commingled Funds	1,874	N/A	N/A	N/A
Investments measured at net asset value	\$ 2,364			

(a) The remaining lives of such investments range from approximately less than 1 year to up to 10 years.

The following table sets forth a summary of changes in the fair value of U. S. Steel's Pension plan Level 3 assets for the years ended December 31, 2019 and 2018:

(In millions)	Level 3 assets only	
	2019	2018
Balance at beginning of period	\$ 331	\$ 340
Transfers in and/or out of Level 3	—	—
Actual return on plan assets:		
Realized gain	8	11
Net unrealized loss	(21)	(8)
Purchases, sales, issuances and settlements:		
Purchases	1	—
Sales	(2)	(12)
Balance at end of period	\$ 317	\$ 331

The following is a summary of U. S. Steel's Other Benefits plan assets carried at fair value at December 31, 2019 and 2018.

Asset Classes	Fair Value Measurements at December 31, 2019 (in millions)			
	Total	Quoted Prices in Active Markets (Level 1)	Other Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Short-term investments	\$ 31	\$ 31	—	—
Equity Securities ^(a)	49	49	—	—
Corporate & Government Bonds ^(b)	1,799	—	1,799	—
Timberlands	35	—	—	35
All Other ^(c)	25	25	—	—
Total assets in the fair value hierarchy	\$ 1,939	\$ 105	\$ 1,799	\$ 35
Investments measured at net asset value ^(d)	86			
Investments at fair value	\$ 2,025			

(a) Includes \$30 million of U.S. equity securities and \$19 million of Non U.S. equity securities.

(b) Underlying investments include:

Corporate Bonds – U.S.	\$ 1,132
Corporate Bonds - Non U.S.	287
Government Bonds – U.S.	329
Government Bonds - Non U.S.	13
Mortgage and asset-backed Securities	38
Total	\$ 1,799

(c) Includes \$12 million of cash, \$16 million of accrued income, \$2 million of investments sales and \$(5) million of miscellaneous payables.

(d) In accordance with Subtopic 820-10, certain investments that were measured at net asset value per share (or its equivalent) have not been classified in the fair value hierarchy.

The following table represents investments based on net asset value and the significant unobservable inputs and the ranges of values for those inputs (in millions):

	Net Asset Value at December 31, 2019	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Private Equity Funds ^(a)	\$ 54	\$ 8	Not redeemable	NA
Real Estate Funds ^(a)	32	10	Not redeemable	NA
Investments measured at net asset value	\$ 86			

(a) The remaining lives of such investments range from approximately less than 1 year up to 9 years.

Fair Value Measurements at December 31, 2018 (in millions)				
Asset Classes	Total	Quoted Prices in Active Markets (Level 1)	Other Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Short-term investments	42	42	—	—
Equity Securities ^(a)	45	45	—	—
Corporate & Government Bonds ^(b)	1,631	—	1,631	—
Timberlands	35	—	—	35
All Other ^(c)	13	13	—	—
Total assets in the fair value hierarchy	\$ 1,766	\$ 100	\$ 1,631	\$ 35
Investments measured at net asset value ^(d)	94			
Investments at fair value	\$ 1,860			

(a) Includes \$27 million of U.S. equity securities and \$18 million of Non U.S. equity securities.

(b) Underlying investments include:

Corporate Bonds – U.S.	\$ 1,052
Corporate Bonds - Non U.S.	271
Government Bonds – U.S.	270
Government Bonds - Non U.S.	8
Mortgage and asset-backed Securities	30
Total	\$ 1,631

(c) Includes \$16 million of accrued income and \$(3) million of investment purchase payables.

(d) In accordance with Subtopic 820-10, certain investments that were measured at net asset value per share (or its equivalent) have not been classified in the fair value hierarchy.

The following table represents investments based on net asset value and the significant unobservable inputs and the ranges of values for those inputs (in millions):

	Net Asset Value at December 31, 2018	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Private Equity Funds ^(a)	\$ 61	\$ 10	Not redeemable	N/A
Real Estate Funds ^(a)	33	12	Not redeemable	N/A
Investments measured at net asset value	\$ 94			

(a) The remaining lives of such investments range from approximately less than 1 year to up to 10 years.

The following table sets forth a summary of changes in the fair value of U. S. Steel's Other Benefits plan Level 3 assets for the years ended December 31, 2019 and 2018:

(In millions)	Level 3 assets only	
	2019	2018
Balance at beginning of period	\$ 35	\$ 35
Transfers in and/or out of Level 3	—	—
Actual return on plan assets:		
Realized gain	—	1
Net unrealized loss	—	(1)
Purchases, sales, issuances and settlements:		
Sales	—	—
Balance at end of period	\$ 35	\$ 35

U. S. Steel's investment strategy for its U.S. pension and Other Benefits plan assets provides for a diversified mix of high quality bonds, public equities and selected smaller investments in private equities, timber and mineral

interests. For its U.S. pension, U. S. Steel has a target allocation for plan assets of 45 percent in corporate bonds, government bonds and mortgage and asset-backed securities. The balance is invested in equity securities, timber, private equity and real estate partnerships. U. S. Steel believes that returns on equities over the long term will be higher than returns from fixed-income securities as actual historical returns from U. S. Steel's trusts have shown. Returns on bonds tend to offset some of the short-term volatility of stocks. Both equity and fixed-income investments are made across a broad range of industries and companies (both domestic and foreign) to provide protection against the impact of volatility in any single industry as well as company specific developments. U. S. Steel will use a 6.50 percent assumed rate of return on assets for the development of net periodic cost for the main defined benefit pension plan in 2020. The 2020 assumed rate of return is consistent with the rate of return used for 2019 domestic expense and was determined by taking into account the intended asset mix and some moderation of the historical premiums that fixed-income and equity investments have yielded above government bonds. Actual returns since the inception of the plan have exceeded this 6.50 percent rate and while recent annual returns have been volatile, it is U. S. Steel's expectation that rates will achieve this level in future periods.

For its Other Benefits plan, U. S. Steel is employing a liability driven investment strategy. The plan assets are allocated to match the plan cash flows with maturing investments. To achieve this strategy, U. S. Steel has a target allocation for plan assets of 90 percent in high quality bonds with the balance primarily invested in equity securities, timber, private equity and real estate partnerships. U. S. Steel will use a 4.25 percent assumed rate of return on assets for the development of net periodic cost for its Other Benefits plan for 2020. The 2020 assumed rate of return is consistent with the rate of return used for 2019 and has been conservatively set, taking into account the intended asset mix.

Steelworkers Pension Trust

For most bargaining unit employees participating in the SPT, U. S. Steel contributes to the SPT a fixed dollar amount for each hour worked of \$3.15 through December 31, 2019. SPT contributions per hour worked increase to \$3.35 and \$3.50 effective January 1, 2020 and January 1, 2021, respectively. U. S. Steel's contributions to the SPT represented greater than 5% of the total combined contributions of all employers participating in the plan for the years ended December 31, 2019, 2018 and 2017.

Participation in a multi-employer pension plan agreed to under the terms of a collective bargaining agreement differ from a traditional qualified single employer defined benefit pension plan. The SPT shares risks associated with the plan in the following respects:

- a. Contributions to the SPT by U. S. Steel may be used to provide benefits to employees of other participating employers;
- b. If a participating employer stops contributing to the SPT, the unfunded obligations of the plan may be borne by the remaining participating employers;
- c. If U. S. Steel chooses to stop participating in the SPT, U. S. Steel may be required to pay an amount based on the underfunded status of the plan, referred to as a withdrawal liability.

On March 21, 2011 the Board of Trustees of the SPT elected funding relief which has the effect of decreasing the amount of required minimum contributions in near-term years, but will increase the minimum funding requirements during later plan years. As a result of the election of funding relief, the SPT's zone funding under the Pension Protection Act may be impacted.

In addition to the funding relief election, the Board of Trustees also elected a special amortization rule, which allows the SPT to separately amortize investment losses incurred during the SPT's December 31, 2008 plan year-end over a 29 year period, whereas they were previously required to be amortized over a 15 year period.

U. S. Steel's participation in the SPT for the annual periods ended December 31, 2019, 2018 and 2017 is outlined in the table below.

Pension Fund	Employer Identification Number/ Pension Plan Number	Pension Protection Act Zone Status as of December 31 ^(a)		FIP/RP Status Pending/Implemented ^(b)	U.S. Steel Contributions (in millions)			Surcharge Imposed ^(c)		Expiration Date of Collective Bargaining Agreement
		2019	2018		2019	2018	2017	2019	2018	
Steelworkers Pension Trust	23-6648508/499	Green	Green	No	\$ 77	\$ 60	\$ 59	No	No	September 1, 2022

(a) The zone status is based on information that U. S. Steel received from the plan and is certified by the plan's actuary. Among other factors, plans in the green zone are at least 80 percent funded, while plans in the yellow zone are less than 80 percent funded and plans in the red zone are less than 65 percent funded.

(b) Indicates if a financial improvement plan (FIP) or a rehabilitation plan (RP) is either pending or has been implemented.

(c) Indicates whether there were charges to U. S. Steel from the plan.

Cash Flows

The following information is in addition to the contributions to the SPT noted in the table above.

Employer Contributions – U. S. Steel did not make any voluntary or mandatory contributions to the U. S. Steel Retirement Plan Trust in 2019 or 2018. The U. S. Steel Retirement Plan Trust is the funding vehicle for the Company's main defined benefit pension plan. U. S. Steel did make a voluntary contribution of \$75 million to the main pension plan on November 20, 2017.

For pension plans not funded by trusts, U. S. Steel made \$8 million, \$20 million and \$13 million of pension payments not funded by trusts in 2019, 2018 and 2017, respectively.

Cash payments totaling \$45 million, \$48 million and \$59 million were made for other post-employment benefit payments not funded by trusts in 2019, 2018 and 2017, respectively. In 2019, 2018 and 2017, U. S. Steel continued to use assets from our VEBA trust for represented retiree health care and life insurance benefits to pay USW post-employment benefit claims.

Estimated Future Benefit Payments – The following benefit payments, which reflect expected future service as appropriate, are expected to be paid from U. S. Steel's defined benefit plans:

(In millions)	Pension Benefits	Other Benefits
2020	\$ 483	\$ 153
2021	465	152
2022	442	151
2023	418	149
2024	406	146
Years 2025 - 2028	1,850	680

Defined contribution plans

U. S. Steel also contributes to several defined contribution plans for its salaried employees. Effective December 31, 2015, all non-represented salaried employees in North America receive pension benefits in the form of a separate retirement account through a defined contribution plan with contribution percentages based upon age, for which company contributions totaled \$23 million, \$23 million and \$22 million in 2019, 2018 and 2017, respectively. U. S. Steel's matching contributions to salaried employees' defined contribution plans, which are 100 percent of the employees' contributions up to six percent of their eligible salary, totaled \$18 million in 2019 and \$17 million in 2018 and 2017. U. S. Steel also maintains non-qualified defined contribution plans to provide benefits which are otherwise limited by the Internal Revenue Code for qualified plans. U. S. Steel's contributions under these defined contribution plans totaled \$1 million, \$4 million, and \$1 million in 2019, 2018 and 2017, respectively.

Most represented employees are eligible to participate in a defined contribution plan where there is no company match on savings except for certain Tubular hourly employees. Effective with the 2015 Labor Agreement, represented hires on or after January 1, 2016 are eligible for a \$0.50 per hour savings account contribution. As a result of the 2018 Labor Agreements, the savings account contribution for each hour worked will increase to \$0.55 effective January 1, 2019, \$0.60 effective January 1, 2020, and \$0.65 effective January 1, 2021. These Company contributions for represented employees totaled \$3 million, \$2 million and \$1 million in 2019, 2018 and 2017, respectively.

Other post-employment benefits

The Company provides benefits to former or inactive employees after employment but before retirement. Certain benefits including workers' compensation and black lung benefits represent material obligations to the Company and under the guidance for nonretirement post-employment benefits, have historically been treated as accrued benefit obligations. Liabilities for these benefits recorded at December 31, 2019, totaled \$111 million as compared to \$110 million at December 31, 2018. Liability amounts were developed assuming a discount rate of 3.40% and 4.36% at December 31, 2019 and 2018. Net periodic benefit cost for these benefits is projected to be \$15 million in 2020 compared to \$21 million in 2019 and \$10 million in 2018.

Pension Funding

In November 2015, pension stabilization legislation further extended a revised interest rate formula to be used to measure defined benefit pension obligations for calculating minimum annual contributions. The new interest rate formula results in higher interest rates for minimum funding calculations as compared to prior law over the next few years, which will improve the funded status of our main defined benefit pension plan and reduce minimum required contributions.

U. S. Steel will monitor the funded status of the plan to determine when voluntary contributions may be prudent in order to mitigate potentially larger mandatory contributions in later years.

19. Asset Retirement Obligations

U. S. Steel's asset retirement obligations (AROs) primarily relate to mine, landfill closure and post-closure costs. The following table reflects changes in the carrying values of AROs for the years ended December 31, 2019 and 2018:

(In millions)	December 31,	
	2019	2018
Balance at beginning of year	\$ 60	\$ 69
Additional obligations incurred	4	—
Obligations settled	(9)	(12)
Accretion expense	3	3
Balance at end of period	\$ 58	\$ 60

Certain AROs related to disposal costs of the majority of fixed assets at our integrated steel facilities have not been recorded because they have an indeterminate settlement date. These AROs will be initially recognized in the period in which sufficient information exists to estimate their fair value.

20. Fair Value of Financial Instruments

The carrying value of cash and cash equivalents, current accounts and notes receivable, accounts payable, bank checks outstanding, and accrued interest included in the Consolidated Balance Sheet approximate fair value. See Note 16 for disclosure of U. S. Steel's derivative instruments, which are accounted for at fair value on a recurring basis.

On October 31, 2019, a wholly owned subsidiary of U. S. Steel purchased a 49.9% ownership interest in Big River Steel. The transaction included a call option (U. S. Steel Call Option) to acquire the remaining 50.1% within the next four years at an agreed-upon price formula, which in years three and four is based on Big River Steel's achievement of certain metrics that include: free cash flow, product development, safety and the completion of

a proposed expansion of Big River Steel's existing manufacturing line. The transaction also included options where the other Big River Steel equity owners can require U. S. Steel to purchase their 50.1% ownership interest (Class B Common Put Option) or require U. S. Steel to sell its ownership interest (Class B Common Call Option) after the U. S. Steel Call Option expires.

All of the options are marked to fair value each period using a Monte Carlo simulation which is considered a Level 3 valuation technique. Level 3 valuation techniques include inputs to the valuation methodology that are considered unobservable and significant to the fair value measurement. The simulation relies on assumptions that include Big River Steel's future equity value, volatility, the risk free interest rate and U. S. Steel's credit spread. The net change in fair value of the options during 2019 resulted in a \$7 million increase to net interest and other financial costs. See Note 5 and Note 7 for further details.

The following table shows the change in fair value by option from purchase date through December 31, 2019.

(In millions)	Balance Sheet Location	Fair Value asset/(liability) at Purchase Date ^(a)		Fair Value Mark to Market gain/(loss)		Fair Value asset/(liability) at December 31, 2019	
U. S. Steel Call Option	Investments and Long-Term Receivables	\$	162	\$	4	\$	166
Class B Common Put Option	Deferred credits and other noncurrent liabilities	\$	(181)	\$	(11)	\$	(192)
Class B Common Call Option	Deferred credits and other noncurrent liabilities	\$	(2)	\$	—	\$	(2)
Net Mark to Market Impact				\$	(7)		

(a) On October 31, 2019, a wholly owned subsidiary of U. S. Steel purchased a 49.9% ownership interest in Big River Steel

The following table shows the net fair values of the options at December 31, 2019 and the effect on these amounts of a hypothetical change in the market prices or rates that existed as of December 31, 2019.

(In millions)	Fair Value asset/(liability)	Big River Steel Equity Value		Volatility		Risk Free Interest Rate		U. S. Steel's Credit Spread	
		5%	(5)%	10%	(10)%	1%	(1)%	1%	(1)%
U. S. Steel Call Option	\$166	\$19	\$(17)	\$34	\$(34)	\$3	\$(3)	N/A	N/A
Class B Common Put Option	\$(192)	\$15	\$(16)	\$(25)	\$25	\$13	\$(14)	\$7	\$(8)
Class B Common Call Option	\$(2)	\$—	\$—	\$—	\$—	\$—	\$—	N/A	N/A

The following tables shows the assumptions used in the calculations shown in the table directly above.

At December 31, 2019	
Big River Steel Equity Value (in approximate billions)	\$ 1.4
Volatility	54.1%
Risk Free Interest Rate	1.6%
Credit Spread	7.9%

The following table summarizes U. S. Steel's financial assets and liabilities that were not carried at fair value at December 31, 2019 and 2018.

(In millions)	December 31, 2019		December 31, 2018	
	Fair Value	Carrying Amount	Fair Value	Carrying Amount
Financial liabilities:				
Long-term debt ^(a)	\$ 3,576	\$ 3,575	\$ 2,182	\$ 2,353

(a) Excludes finance lease obligations.

The fair value of long-term debt was determined using Level 2 inputs which were derived from quoted market prices and is based on the yield on public debt where available or current borrowing rates available for financings with similar terms and maturities.

Fair value of the financial assets and liabilities disclosed herein is not necessarily representative of the amount that could be realized or settled, nor does the fair value amount consider the tax consequences of realization or settlement.

Financial guarantees are U. S. Steel's only unrecognized financial instrument. For details relating to financial guarantees see Note 26.

21. Reclassifications from Accumulated Other Comprehensive Income (AOCI)

(In millions)	Pension and Other Benefit Items	Foreign Currency Items	Unrealized Gain (Loss) on Derivatives	Total
Balance at December 31, 2017	\$ (1,309)	\$ 463	\$ 1	\$ (845)
Other comprehensive loss before reclassifications ^(b)	(255)	(60)	—	(315)
Amounts reclassified from AOCI ^{(a)(b)}	148	—	(14)	134
Net current-period other comprehensive loss	(107)	(60)	(14)	(181)
Balance at December 31, 2018	\$ (1,416)	\$ 403	\$ (13)	\$ (1,026)
Other comprehensive income (loss) before reclassifications	446	(22)	(19)	405
Amounts reclassified from AOCI ^(a)	127	—	16	143
Net current-period other comprehensive income (loss)	573	(22)	(3)	548
Balance at December 31, 2019	\$ (843)	\$ 381	\$ (16)	\$ (478)

(a) See table below for further details.

(b) The Company previously disclosed in Note 21 to the Consolidated Financial Statements in its Annual Report on Form 10-K for the period ended December 31, 2018, an increase to AOCI of \$41 million in the Other comprehensive income before reclassifications line item and a decrease to AOCI of \$148 million in the Amounts reclassified from AOCI line item for the twelve months ended December 31, 2018 amounts for Pension and Other Benefit Items. These amounts should have been disclosed as a decrease to AOCI of \$255 million and an increase to AOCI of \$148 million, respectively, which have been corrected in the table above. The Company concluded that the errors were not material to the financial statements of any prior annual or interim period and therefore, amendments of previously filed reports are not required. The revision had no impact on the Consolidated Balance Sheets, Consolidated Statements of Operations, Consolidated Statements of Cash Flows or the Consolidated Statements of Comprehensive Income (Loss). Quarterly periods not presented herein will be revised, as applicable, in future filings.

(In millions) ^(a)	Details about AOCI components	Amount reclassified from AOCI ^(c)		
		2019	2018	2017
	Amortization of pension and other benefit items			
	Prior service costs ^(a)	\$ 31	\$ 29	\$ 29
	Actuarial losses ^(a)	135	156	151
	Settlements, termination and curtailment losses ^(a)	3	10	7
	Total pensions and other benefits items	169	195	187
	Derivative reclassifications to Consolidated Statements of Operations	22	(19)	(4)
	Total before tax	191	176	183
	Tax provision ^(b)	(48)	(42)	—
	Net of tax	\$ 143	\$ 134	\$ 183

(a) These AOCI components are included in the computation of net periodic benefit cost (see Note 18 for additional details).

(b) Amounts in 2017 do not reflect a tax benefit as a result of a full valuation allowance on our domestic deferred tax assets.

(c) The corrections noted in footnote (b) to the table above are consistently reflected in this table.

22. Supplemental Cash Flow Information

(In millions)	Year Ended December 31,		
	2019	2018	2017
Net cash (used in) provided by operating activities included:			
Interest and other financial costs paid (net of amount capitalized)	\$ (151)	\$ (207)	\$ (242)
Income taxes refunded (paid)	\$ 38	\$ (39)	\$ (40)
Non-cash investing and financing activities:			
Change in accrued capital expenditures	\$ (70)	\$ 135	\$ 208
U. S. Steel common stock issued for employee/non-employee director stock plans	\$ 19	\$ 21	\$ 49
Capital expenditures funded by finance lease borrowings	\$ 46	\$ —	\$ —
Big River Steel put and call options ^(a)	\$ 21	\$ —	\$ —

(a) The Big River Steel put and call options amount represents the excess of the Class B Common Put Option and the Class B Common Call Option liabilities over the U. S. Steel Call Option asset from U. S. Steel's acquisition of its 49.9% ownership interest in Big River Steel on October 31, 2019. See Note 20 for further details.

23. Transactions with Related Parties

Net sales to related parties and receivables from related parties primarily reflect sales of raw materials and steel products to equity investees. Generally, transactions are conducted under long-term contractual arrangements. Related party sales and service transactions were \$1,431 million, \$1,420 million and \$1,204 million in 2019, 2018 and 2017, respectively. As of December 31, 2019, the related party receivable included a short-term note receivable of \$10 million to PRO-TEC. Payment on the note receivable is anticipated in the first quarter of 2020.

Purchases from related parties for outside processing services provided by equity investees amounted to \$31 million, \$29 million and \$70 million during 2019, 2018 and 2017, respectively. Purchases of iron ore pellets from related parties amounted to \$104 million, \$91 million and \$140 million for the years ended December 31, 2019, 2018 and 2017, respectively.

Accounts payable to related parties include balances due to PRO-TEC Coating Company (PRO-TEC) of \$82 million and \$80 million at December 31, 2019 and 2018, respectively for invoicing and receivables collection services provided by U. S. Steel on PRO-TEC's behalf. U. S. Steel, as PRO-TEC's exclusive sales agent, is responsible for credit risk related to those receivables. U. S. Steel also provides PRO-TEC marketing, selling and customer service functions. Payables to other related parties totaled \$2 million and \$1 million at December 31, 2019 and 2018, respectively.

24. Leases

Effective January 1, 2019, U. S. Steel adopted ASU 2016-02 using the optional modified retrospective transition method outlined in ASU 2018-11 which permitted application of ASU 2016-02 on January 1, 2019 using a cumulative effect adjustment to the opening balance of retained earnings. As of December 31, 2019, an operating lease asset of \$230 million and current and noncurrent liabilities for operating leases of \$60 million and \$177 million, respectively, were recorded (see below tabular disclosure for further details). There was an insignificant cumulative effect of adoption for operating lease liabilities that exceeded their related asset values for leases where payment started after lease commencement.

Operating lease assets consist primarily of office space, heavy mobile equipment used in our mining operations and facilities and equipment under operating service agreements for electricity generation and scrap processing. We also have operating lease assets for light mobile equipment and information technology assets. Significant finance leases include the Fairfield slab caster lease and heavy mobile equipment used in our mining operations (see Note 17 for further details). Variable lease payments are primarily related to operating service agreements where payment is solely dependent on consumption of certain services, such as raw material and by-product processing. Most long-term leases include renewal options and, in certain leases, purchase options. Generally, we are not reasonably certain that these options will be exercised. We have residual value guarantees under certain light mobile equipment leases. There is no impact to our leased assets for residual value guarantees as the potential loss is not probable (see "Other Contingencies" in Note 26 for further details). We do not have

material restrictive covenants associated with our leases or material amounts of sublease income. From time to time, U. S. Steel may enter into arrangements for the construction or purchase of an asset and then enter into a financing arrangement to lease the asset. U. S. Steel recognizes leased assets and liabilities under these arrangements when it obtains control of the asset.

U. S. Steel elected the option within ASU 2016-02 to straight-line expense and not record assets or liabilities for leases with an initial term of 12 months or less. For leases beginning in 2019 and later, we separate non-lease components from lease components for leases under operating service agreements. We do not separate non-lease components for other lease types as they are not significant. The Company does not have secured notes outstanding; therefore, we use an estimated secured borrowing rate as the discount rate for most of our leases. In accordance with the practical expedients outlined in ASU 2016-02, we did not use hindsight in determining the lease term for existing leases and elected not to reassess the following for existing leases: whether contracts contain a lease, lease classification, and initial direct costs.

The following table summarizes the lease amounts included in our Consolidated Balance Sheet as of December 31, 2019.

(In millions)	Balance Sheet Location	December 31, 2019	
Assets			
Operating	Operating lease assets ^(a) ^(c)	\$	230
Finance	Property, plant and equipment ^(b)		56
Total Lease Assets		\$	286
Liabilities			
Current			
Operating	Current operating lease liabilities ^(c)	\$	60
Finance	Current portion of long-term debt		11
Non-Current			
Operating	Noncurrent operating lease liabilities ^(c)		177
Finance	Long-term debt less unamortized discount and issue costs		51
Total Lease Liabilities		\$	299

^(a) Operating lease assets are recorded net of accumulated amortization of \$50 million.

^(b) Finance lease assets are recorded net of accumulated depreciation of \$27 million.

^(c) Operating lease assets and noncurrent operating lease liabilities were reduced by \$7 million for an amendment to a building lease and \$4 million for retirements. The impact on the current operating lease liabilities was immaterial.

The following table summarizes lease costs included in our Consolidated Statement of Operations for the twelve month periods ended December 31, 2019.

(In millions)	Classification	Year Ended December 31, 2019	
Operating Lease Cost ^(a)	Cost of sales	\$	81
Operating Lease Cost	Selling, general and administrative expenses		11
Finance Lease Cost			
Amortization	Depreciation, depletion and amortization		7
Interest	Interest expense		3
Total Lease Cost		\$	102

^(a) Operating lease cost recorded in cost of sales includes \$15 million of variable lease cost for the year ended December 31, 2019. An immaterial amount of variable lease cost is included in selling, general and administrative expenses and immaterial amounts of short-term lease cost are included in cost of sales and selling, general and administrative expenses.

Lease liability maturities as of December 31, 2019 are shown below

(In millions)	Operating		Finance		Total
2020	\$	74	\$	15	\$ 89
2021		58		14	72
2022		46		18	64
2023		34		7	41
2024		26		6	32
After 2024		51		12	63
Total Lease Payments	\$	289	\$	72	\$ 361
Less: Interest		52		10	62
Present value of lease liabilities	\$	237	\$	62	\$ 299

Future minimum commitments for capital and operating leases having non-cancelable lease terms in excess of one year as of the year ended December 31, 2018 were as follows.

(In millions)	Capital Leases	Operating Leases
2019	\$ 5	\$ 66
2020	5	55
2021	5	45
2022	11	37
2023	—	28
After 2023	—	72
Total minimum lease payments	\$ 26	\$ 303
Less imputed interest costs	4	
Present value of net minimum lease payments included in long-term debt	\$ 22	

Lease terms and discount rates are shown below.

	December 31, 2019
Weighted average lease term	
Finance	5 years
Operating	5 years
Weighted average discount rate	
Finance	6.05%
Operating	7.76%

Supplemental cash flow information related to leases follows.

(In millions)	Year Ended December 31, 2019
Cash paid for amounts included in the measurement of lease liabilities:	
Operating cash flows from operating leases	\$ 72
Operating cash flows from finance leases	3
Financing cash flows from finance leases	7
Right-of-use assets exchanged for lease liabilities:	
Operating leases	53
Finance leases	46

25. Restructuring and Other Charges

During 2019, U. S. Steel recorded restructuring and other charges of \$275 million, which consists of charges of \$25 million at USSK for headcount reductions and plant exit costs, \$227 million for the indefinite idling of our East Chicago Tin operations, our finishing facility in Dearborn, Michigan, and the intended indefinite idling of a significant portion of Great Lakes Works and \$23 million for Company-wide headcount reductions. Cash payments were made related to severance and exit costs of \$35 million.

During 2018, restructuring and other charges recorded were immaterial. Cash payments were made related to severance and exit costs of \$21 million.

During 2017, U. S. Steel recorded net restructuring and other charges of approximately \$31 million, which consists of charges of \$37 million primarily related to the permanent shutdown and relocation of the No. 6 Quench & Temper Mill at Lorain Tubular Operations and a favorable adjustment of \$6 million primarily associated with a change in estimate for previously recorded costs for environmental obligations and Company-wide headcount reductions. Cash payments were made related to severance and exit costs of \$32 million.

Charges for restructuring and ongoing cost reduction initiatives are recorded in the period U. S. Steel commits to a restructuring or cost reduction plan, or executes specific actions contemplated by the plan and all criteria for liability recognition have been met. Charges related to the restructuring and cost reductions are reported in restructuring and other charges in the Consolidated Statements of Operations.

The activity in the accrued balances incurred in relation to restructuring and other cost reduction programs during the years ended December 31, 2019 and December 31, 2018 were as follows:

(in millions)	Employee Related Costs	Exit Costs	Non-cash Charges ^(a)	Total
Balance at December 31, 2017	\$ 4	\$ 34	\$ —	\$ 38
Cash payments/utilization	(4)	(17)	—	(21)
Balance at December 31, 2018	\$ —	\$ 17	\$ —	\$ 17
Additional charges	111	119	45	275
Cash payments/utilization	(24)	(11)	(45)	(80)
Balance at December 31, 2019	\$ 87	\$ 125	\$ —	\$ 212

^(a) Non-cash charges primarily relate to accelerated depreciation associated with the intended indefinite idling of our ECT operations and Dearborn, Michigan, finishing facility.

Accrued liabilities for restructuring and other cost reduction programs are included in the following balance sheet lines:

(in millions)	December 31, 2019		December 31, 2018	
Accounts payable	\$	46	\$	11
Payroll and benefits payable		64		—
Employee benefits		23		—
Deferred credits and other noncurrent liabilities		79		6
Total	\$	212	\$	17

26. Contingencies and Commitments

U. S. Steel is the subject of, or party to, a number of pending or threatened legal actions, contingencies and commitments involving a variety of matters, including laws and regulations relating to the environment. Certain of these matters are discussed below. The ultimate resolution of these contingencies could, individually or in the aggregate, be material to the Consolidated Financial Statements. However, management believes that U. S. Steel will remain a viable and competitive enterprise even though it is possible that these contingencies could be resolved unfavorably.

U. S. Steel accrues for estimated costs related to existing lawsuits, claims and proceedings when it is probable that it will incur these costs in the future and the costs are reasonably estimable.

Asbestos matters – As of December 31, 2019, U. S. Steel was a defendant in approximately 800 active cases involving approximately 2,390 plaintiffs. The vast majority of these cases involve multiple defendants. About 1,540, or approximately 65 percent, of these plaintiff claims are currently pending in jurisdictions which permit filings with massive numbers of plaintiffs. At December 31, 2018, U. S. Steel was a defendant in approximately 755 cases involving approximately 2,320 plaintiffs. Based upon U. S. Steel's experience in such cases, it believes that the actual number of plaintiffs who ultimately assert claims against U. S. Steel will likely be a small fraction of the total number of plaintiffs.

The following table shows the number of asbestos claims in the current year and the prior two years:

Period ended	Opening Number of Claims	Claims Dismissed, Settled and Resolved ^(a)	New Claims	Closing Number of Claims
December 31, 2017	3,340	275	250	3,315
December 31, 2018	3,315	1,285	290	2,320
December 31, 2019	2,320	195	265	2,390

(a) The period ending December 31, 2018 includes approximately 1,000 dismissed cases previously pending in the State of Texas.

Historically, asbestos-related claims against U. S. Steel fall into three groups: (1) claims made by persons who allegedly were exposed to asbestos on the premises of U. S. Steel facilities; (2) claims made by persons allegedly exposed to products manufactured by U. S. Steel; and (3) claims made under certain federal and maritime laws by employees of former operations of U. S. Steel.

The amount U. S. Steel accrues for pending asbestos claims is not material to U. S. Steel's financial condition. However, U. S. Steel is unable to estimate the ultimate outcome of asbestos-related claims due to a number of uncertainties, including: (1) the rates at which new claims are filed, (2) the number of and effect of bankruptcies of other companies traditionally defending asbestos claims, (3) uncertainties associated with the variations in the litigation process from jurisdiction to jurisdiction, (4) uncertainties regarding the facts, circumstances and disease process with each claim, and (5) any new legislation enacted to address asbestos-related claims.

Further, U. S. Steel does not believe that an accrual for unasserted claims is required. At any given reporting date, it is probable that there are unasserted claims that will be filed against the Company in the future. In 2018 and 2019, the Company engaged an outside valuation consultant to assist in assessing its ability to estimate an accrual for unasserted claims. This assessment was based on the Company's settlement experience, including recent claims trends. The analysis focused on settlements made over the last several years as these claims are likely to best represent future claim characteristics. After review by the valuation consultant and U. S. Steel management, it was determined that the Company could not estimate an accrual for unasserted claims.

Despite these uncertainties, management believes that the ultimate resolution of these matters will not have a material adverse effect on U. S. Steel's financial condition.

Environmental Matters – U. S. Steel is subject to federal, state, local and foreign laws and regulations relating to the environment. These laws generally provide for control of pollutants released into the environment and require responsible parties to undertake remediation of hazardous waste disposal sites. Penalties may be imposed for noncompliance. Changes in accrued liabilities for remediation activities where U. S. Steel is identified as a named party are summarized in the following table:

(In millions)	Year Ended December 31,	
	2019	2018
Beginning of period	\$ 187	\$ 179
Accruals for environmental remediation deemed probable and reasonably estimable	20	14
Obligations settled	(21)	(6)
End of period	\$ 186	\$ 187

Accrued liabilities for remediation activities are included in the following Consolidated Balance Sheet lines:

(In millions)	December 31, 2019	December 31, 2018
Accounts payable	\$ 53	\$ 37
Deferred credits and other noncurrent liabilities	133	150
Total	\$ 186	\$ 187

Expenses related to remediation are recorded in cost of sales and were immaterial for the years ended December 31, 2019, December 31, 2018 and December 31, 2017. It is not currently possible to estimate the ultimate amount of all remediation costs that might be incurred or the penalties that may be imposed. Due to uncertainties inherent in remediation projects and the associated liabilities, it is reasonably possible that total remediation costs for active matters may exceed the accrued liabilities by as much as 15 to 30 percent.

Remediation Projects

U. S. Steel is involved in environmental remediation projects at or adjacent to several current and former U. S. Steel facilities and other locations that are in various stages of completion ranging from initial characterization through post-closure monitoring. Based on the anticipated scope and degree of uncertainty of projects, we categorize projects as follows:

- (1) *Projects with Ongoing Study and Scope Development* – Projects which are still in the development phase. For these projects, the extent of remediation that may be required is not yet known, the remediation methods and plans are not yet developed, and/or cost estimates cannot be determined. Therefore, significant costs, in addition to the accrued liabilities for these projects, are reasonably possible. There are six environmental remediation projects where additional costs for completion are not currently estimable, but could be material. These projects are at Fairfield Works, Lorain Tubular, USS-POSCO Industries (UPI), the Fairless Plant, Gary Works and the former steelmaking plant at Joliet, Illinois. As of December 31, 2019, accrued liabilities for these projects totaled \$2 million for the costs of studies, investigations, interim measures, design and/or remediation. It is reasonably possible that additional liabilities associated with future requirements regarding studies, investigations, design and remediation for these projects could be as much as \$30 million to \$45 million.
- (2) *Significant Projects with Defined Scope* – Projects with significant accrued liabilities with a defined scope. As of December 31, 2019, there are four significant projects with defined scope greater than or equal to \$5 million each, with a total accrued liability of \$128 million. These projects are: Gary Resource Conservation and Recovery Act (RCRA) (accrued liability of \$25 million), the former Geneva facility (accrued liability of \$48 million), the Cherryvale Zinc site (accrued liability of \$10 million) and the former Duluth facility St. Louis River Estuary (accrued liability of \$45 million).
- (3) *Other Projects with a Defined Scope* – Projects with relatively small accrued liabilities for which we believe that, while additional costs are possible, they are not likely to be significant, and also include those projects for which we do not yet possess sufficient information to estimate potential costs to U. S. Steel. There are

two other environmental remediation projects which each had an accrued liability of between \$1 million and \$5 million. The total accrued liability for these projects at December 31, 2019 was \$4 million. These projects have progressed through a significant portion of the design phase and material additional costs are not expected.

The remaining environmental remediation projects each have an accrued liability of less than \$1 million each. The total accrued liability for these projects at December 31, 2019 was approximately \$2 million. We do not foresee material additional liabilities for any of these sites.

Post-Closure Costs – Accrued liabilities for post-closure site monitoring and other costs at various closed landfills totaled \$23 million at December 31, 2019 and were based on known scopes of work.

Administrative and Legal Costs – As of December 31, 2019, U. S. Steel had an accrued liability of \$11 million for administrative and legal costs related to environmental remediation projects. These accrued liabilities were based on projected administrative and legal costs for the next three years and do not change significantly from year to year.

Capital Expenditures – For a number of years, U. S. Steel has made substantial capital expenditures to comply with various regulations, laws, and other requirements relating to the environment. In 2019 and 2018, such capital expenditures totaled \$123 million and \$125 million, respectively. U. S. Steel anticipates making additional such expenditures in the future, which may be material; however, the exact amounts and timing of such expenditures are uncertain because of the continuing evolution of specific regulatory requirements.

EU Environmental Requirements – Under the Emissions Trading Scheme (ETS), USSK's final allocation of allowances for the Phase III period, which covers the years 2013 through 2020 is 48 million allowances. Based on projected total production levels, we started to purchase allowances in the third quarter of 2017 to meet the annual compliance submission in the future. As of December 31, 2019, we have purchased approximately 11.7 million European Union Allowances (EUA) totaling €132 million (approximately \$148 million) to cover the estimated shortfall of emission allowances. We estimate that the total shortfall will be approximately 12.5 million allowances for the Phase III period. The full cost of complying with the ETS regulations will depend on future production levels and future emissions intensity levels.

The EU's Industrial Emissions Directive requires implementation of EU determined best available techniques (BAT) for Iron and Steel production to reduce environmental impacts as well as compliance with BAT associated emission levels. Our most recent estimate of total capital expenditures for projects to comply with or go beyond BAT requirements is €138 million (approximately \$155 million) over the 2017 to 2020 program period. These costs may be mitigated if USSK complies with certain financial covenants, which are assessed annually. USSK complied with these covenants as of December 31, 2019. If we are unable to meet these covenants in the future, USSK might be required to provide additional collateral (e.g. bank guarantee) to secure the full value of estimated expenditures. There could be increased operating costs associated with these projects, such as increased energy and maintenance costs. We are currently unable to reliably estimate what the increase in operating costs will be as many projects are in the development stage.

Environmental indemnifications – Throughout its history, U. S. Steel has sold numerous properties and businesses and many of these sales included indemnifications and cost sharing agreements related to the assets that were divested. These indemnifications and cost sharing agreements have included provisions related to the condition of the property, the approved use, certain representations and warranties, matters of title, and environmental matters. While most of these provisions have not specifically dealt with environmental issues, there have been transactions in which U. S. Steel indemnified the buyer for clean-up or remediation costs relating to the business sold or its then existing conditions or past practices related to non-compliance with environmental laws. Most of the recent indemnification and cost sharing agreements are of a limited nature, only applying to non-compliance with past and/or current laws. Some indemnifications and cost sharing agreements only run for a specified period of time after the transactions close and others run indefinitely. In addition, current owners or operators of property formerly owned or operated by U. S. Steel may have common law claims and cost recovery and contribution rights against U. S. Steel related to environmental matters. The amount of potential environmental liability associated with these transactions and properties is not estimable due to the nature and extent of the unknown conditions related to the properties divested and deconsolidated. Aside from the environmental liabilities already recorded as a result of these transactions due to specific environmental remediation activities and cases (included in the \$186 million of accrued liabilities for remediation discussed above), there are no other known probable and estimable environmental liabilities related to these transactions.

Guarantees – The maximum guarantees of the indebtedness of unconsolidated entities of U. S. Steel totaled \$4 million at December 31, 2019.

Other contingencies – Under certain operating lease agreements covering various equipment, U. S. Steel has the option to renew the lease or to purchase the equipment at the end of the lease term. If U. S. Steel does not exercise the purchase option by the end of the lease term, U. S. Steel guarantees a residual value of the equipment as determined at the lease inception date (totaling approximately \$23 million at December 31, 2019). No liability has been recorded for these guarantees as the potential loss is not probable.

Insurance – U. S. Steel maintains insurance for certain property damage, equipment, business interruption and general liability exposures; however, insurance is applicable only after certain deductibles and retainages. U. S. Steel is self-insured for certain other exposures including workers' compensation (where permitted by law) and auto liability. Liabilities are recorded for workers' compensation and personal injury obligations. Other costs resulting from losses under deductible or retainage amounts or not otherwise covered by insurance are charged against income upon occurrence.

U. S. Steel uses surety bonds, trusts and letters of credit to provide whole or partial financial assurance for certain obligations such as workers' compensation. The total amount of active surety bonds, trusts and letters of credit being used for financial assurance purposes was approximately \$164 million as of December 31, 2019, which reflects U. S. Steel's maximum exposure under these financial guarantees, but not its total exposure for the underlying obligations. A significant portion of our trust arrangements and letters of credit are collateralized by our Credit Facility Agreement. The remaining trust arrangements and letters of credit are collateralized by restricted cash. Restricted cash, which is recorded in other current and noncurrent assets, totaled \$190 million and \$40 million at December 31, 2019 and December 31, 2018 respectively.

Capital Commitments – At December 31, 2019, U. S. Steel's contractual commitments to acquire property, plant and equipment totaled \$880 million.

Contractual Purchase Commitments – U. S. Steel is obligated to make payments under contractual purchase commitments, including unconditional purchase obligations. Payments for contracts with remaining terms in excess of one year are summarized below (in millions):

2020	2021	2022	2023	2024	Later years	Total
\$430	\$404	\$337	\$338	\$107	\$611	\$2,227

The majority of U. S. Steel's unconditional purchase obligations relate to the supply of industrial gases, and certain energy and utility services with terms ranging from two to 16 years. Unconditional purchase obligations also include coke and steam purchase commitments related to a coke supply agreement with Gateway Energy & Coke Company LLC (Gateway) under which Gateway is obligated to supply a minimum volume of the expected targeted annual production of the heat recovery coke plant, and U. S. Steel is obligated to purchase the coke from Gateway at the contract price. As of December 31, 2019, if U. S. Steel were to terminate the agreement, it may be obligated to pay in excess of \$138 million.

Total payments relating to unconditional purchase obligations were approximately \$653 million in 2019, \$600 million in 2018 and \$576 million in 2017.

27. Common Stock Repurchase Program

In November 2018, U. S. Steel announced a common stock repurchase program that allowed for the repurchase of up to \$300 million of its outstanding common stock from time to time in the open market or privately negotiated transactions through 2020 at the discretion of management. U. S. Steel repurchased 5,289,475 and 2,760,112 shares of common stock for approximately \$88 million and \$75 million under this program during 2019 and 2018, respectively. In December 2019, the Board of Directors terminated the authorization for the common stock repurchase program.

28. Subsequent Event

On January 23, 2020, U. S. Steel and POSCO-California Corporation, a subsidiary of POSCO (POSCAL), entered into an agreement under which U. S. Steel will acquire POSCAL's 50% ownership interest in USS-POSCO Industries (UPI). UPI is located in Pittsburg, California and markets sheet and tin mill products, principally in the western United States. UPI produces hot rolled pickled and oiled, cold-rolled sheets, galvanized sheets and tin mill products made from hot bands principally provided by U. S. Steel. UPI's annual production capability is approximately 1.5 million tons. The closing of the transaction is expected to occur sometime during the first quarter of 2020, subject to customary closing terms and conditions. U. S. Steel currently accounts for UPI using the equity method of accounting. Upon the closing of the transaction, UPI's financial results will be fully consolidated in U. S. Steel's financial statements.

SELECTED QUARTERLY FINANCIAL DATA (Unaudited)

(In millions, except per share data)	2019				2018			
	4th Qtr. ^(a)	3rd Qtr.	2nd Qtr.	1st Qtr.	4th Qtr.	3rd Qtr.	2nd Qtr.	1st Qtr.
Net sales	\$ 2,824	\$ 3,069	\$ 3,545	\$ 3,499	\$ 3,691	\$ 3,729	\$ 3,609	\$ 3,149
Segment (loss) earnings before interest and income taxes:								
Flat-rolled	(79)	46	134	95	321	305	224	33
USSE	(30)	(46)	(10)	29	62	72	115	110
Tubular	(46)	(25)	(6)	10	(3)	7	(35)	(27)
Total reportable segments	\$ (155)	\$ (25)	\$ 118	\$ 134	\$ 380	\$ 384	\$ 304	\$ 116
Other Businesses	(3)	8	10	8	11	16	17	11
Items not allocated to segments	(218)	(63)	(13)	(31)	(78)	(27)	(20)	10
Total (loss) earnings before interest and income taxes	\$ (376)	\$ (80)	\$ 115	\$ 111	\$ 313	\$ 373	\$ 301	\$ 137
Net (loss) earnings	(668)	(84)	68	54	592	291	214	18
Net (loss) earnings attributable to United States Steel Corporation	\$ (668)	\$ (84)	\$ 68	\$ 54	\$ 592	\$ 291	\$ 214	\$ 18
Gross profit	\$ 43	\$ 167	\$ 318	\$ 327	\$ 487	\$ 557	\$ 488	\$ 341
Common stock data								
Net (loss) earnings per share attributable to United States Steel Corporation								
- Basic	\$ (3.93)	\$ (0.49)	\$ 0.39	\$ 0.31	\$ 3.36	\$ 1.64	\$ 1.21	\$ 0.10
- Diluted	\$ (3.93)	\$ (0.49)	\$ 0.39	\$ 0.31	\$ 3.34	\$ 1.62	\$ 1.20	\$ 0.10
Dividends paid per share	\$ 0.05	\$ 0.05	\$ 0.05	\$ 0.05	\$ 0.05	\$ 0.05	\$ 0.05	\$ 0.05

^(a) Fourth quarter and full year 2019 results have been revised from the Company's earnings release issued on January 30, 2020 for an adjustment to the deferred tax asset valuation allowance.

SUPPLEMENTARY INFORMATION ON MINERAL RESERVES OTHER THAN OIL AND GAS (Unaudited)
Mineral Reserves

U. S. Steel operates two surface iron ore mining complexes in Minnesota consisting of the Minntac Mine and Pellet Plant and the Keetac Mine and Pellet Plant. As of December 31, 2019 U. S. Steel owns an interest in the iron ore mining assets of Hibbing Taconite Company.

The following table provides a summary of our reserves and minerals production by mining complex:

(Millions of short tons)	Proven and Probable Reserves As of December 31, 2019			Production		
	Owned	Leased	Total	2019	2018	2017
Iron ore pellets:						
Minntac Mine and Pellet Plant	116	298	414	14.4	15.9	16.0
Keetac Mine and Pellet Plant	19	349	368	5.8	5.9	5.1
Tilden Mining Company, L.C. ⁽¹⁾⁽²⁾	—	—	—	—	—	0.8
Hibbing Taconite Company ⁽¹⁾	—	5	5	1.2	1.3	1.3
Total	135	652	787	21.4	23.1	23.2

(1) Represents U. S. Steel's proportionate share of proven and probable reserves and production as these investments are unconsolidated equity affiliates.

(2) On September 29, 2017, a subsidiary of U. S. Steel completed the sale of its 15% ownership interest in Tilden Mining Company, L.C.

Iron Ore Reserves

Reserves are defined by SEC Industry Standard Guide 7 as that part of a mineral deposit that could be economically and legally extracted and produced at the time of the reserve determination. The estimate of proven and probable reserves is of recoverable tons. Recoverable tons mean the tons of product that can be used internally or delivered to a customer after considering mining and beneficiation or preparation losses. Neither inferred reserves nor resources that exist in addition to proven and probable reserves were included in these figures. At December 31, 2019, all 787 million tons of proven and probable reserves are assigned, which means that they have been committed by U. S. Steel to its operating mines and are of blast furnace pellet grade.

U. S. Steel estimates its iron ore reserves using exploration drill holes, physical inspections, sampling, laboratory testing, 3-D computer models, economic pit analysis and fully-developed pit designs for its operating mines. These estimates are reviewed and reassessed from time to time. The most recent such review for our Keetac operating mine was completed in 2013 and resulted in an increase in the proven and probable reserves primarily due to additional exploration drilling and development of an economic computerized mine plan. The most recent review for our Minntac operating mine was conducted in 2019 and resulted in a decrease due to updated drilling and economic parameters. Estimates for our share of unconsolidated equity affiliates are based upon information supplied by the joint ventures. The most recent such review for Hibbing Taconite Company was conducted in 2015.

FIVE-YEAR OPERATING SUMMARY (Unaudited)

(Thousands of tons, unless otherwise noted)	2019	2018	2017	2016	2015
Raw Steel Production					
Gary, IN	4,974	5,958	5,755	5,608	5,172
Great Lakes, MI	1,964	2,369	2,592	2,543	2,257
Mon Valley, PA	2,331	2,640	2,473	2,555	2,266
Granite City, IL	2,140	926	0	0	1,162
Fairfield, AL ^(a)	0	0	0	0	480
Total Flat-Rolled facilities	11,409	11,893	10,820	10,706	11,337
U. S. Steel Košice	3,903	5,023	5,091	4,967	4,669
Total	15,312	16,916	15,911	15,673	16,006
Raw Steel Capability					
Flat-Rolled ^(a)	17,000	17,000	17,000	17,000	17,000
USSE	5,000	5,000	5,000	5,000	5,000
Total	22,000	22,000	22,000	22,000	22,000
Production as % of total capability:					
Flat-Rolled	67%	70%	64%	63%	60%
USSE	78%	100%	102%	99%	93%
Coke Production					
Flat-Rolled ^(a)	3,485	3,718	3,416	2,961	3,957
USSE	1,328	1,514	1,497	1,545	1,600
Total	4,813	5,232	4,913	4,506	5,557
Iron Ore Pellet Production^(b)					
Total	21,450	23,054	23,246	17,635	17,422
Steel Shipments by Segment^(c)					
Flat-Rolled ^(a)	10,700	10,510	9,887	10,094	10,595
USSE	3,590	4,457	4,585	4,496	4,357
Tubular	769	780	688	400	593
Total steel shipments	15,059	15,747	15,160	14,990	15,545
Average Realized Price (dollars per net ton)					
Flat-Rolled	\$ 753	\$ 811	\$ 726	\$ 666	\$ 695
USSE	\$ 652	\$ 693	\$ 622	\$ 483	\$ 516
Tubular	\$ 1,450	\$ 1,483	\$ 1,253	\$ 1,071	\$ 1,464

(a) As a result of the permanent shutdown of the blast furnace and associated steelmaking operations, along with most of the flat-rolled finishing operations at Fairfield Works late in the third quarter of 2015, Flat-Rolled's annual raw steel capability was reduced to 17.0 million tons. In 2015, coke operations at Gary Works and Granite City Works were permanently shutdown.

(b) Includes our share of production from Hibbing and Tilden. As a result of the sale of our ownership interest, iron ore pellet production amounts do not include Tilden after September 29, 2017.

(c) Does not include intersegment shipments or shipments by joint ventures and other equity investees of U. S. Steel. Includes shipments from U. S. Steel to joint ventures and equity investees of substrate materials, primarily hot-rolled and cold-rolled sheets.

FIVE-YEAR OPERATING SUMMARY (Unaudited) (Continued)

(Thousands of net tons)	2019	2018	2017	2016	2015
Steel Shipments by Market - North American Facilities^(a) (c)					
Steel service centers	1,902	1,904	1,953	2,094	1,946
Further conversion:					
Trade customers	2,823	2,273	1,738	1,420	2,146
Joint ventures ^(b)	819	810	715	414	260
Transportation and automotive ^(b)	2,620	2,874	2,982	2,228	3,536
Construction and construction products	1,120	991	951	1,025	948
Containers and packaging	652	768	715	2,107	982
Appliances and electrical equipment	570	599	594	600	611
Oil, gas and petrochemicals	725	742	647	360	538
All other	238	329	280	246	221
Total	<u>11,469</u>	<u>11,290</u>	<u>10,575</u>	<u>10,494</u>	<u>11,188</u>
Steel Shipments by Market - USSE					
Steel service centers	740	799	761	801	718
Further conversion:					
Trade customers	214	287	284	274	304
Transportation and automotive	676	728	708	660	705
Construction and construction products	1,048	1,637	1,831	1,811	1,703
Containers and packaging	440	439	438	436	424
Appliances and electrical equipment	220	261	247	236	236
Oil, gas and petrochemicals	0	11	10	4	0
All other	252	295	306	274	267
Total	<u>3,590</u>	<u>4,457</u>	<u>4,585</u>	<u>4,496</u>	<u>4,357</u>

(a) Does not include shipments by joint ventures and other equity investees of U. S. Steel, but instead reflects the shipments of substrate materials, primarily hot-rolled and cold-rolled sheets, to those entities.

(b) PRO-TEC automotive substrate shipments are included in the Transportation and Automotive category.

(c) Shipments previously reported in 2018, 2017, 2016 and 2015 as Exports have been reclassified to one of the other categories to which they relate.

FIVE-YEAR FINANCIAL SUMMARY (Unaudited) (Continued)

(Dollars in millions, except per share amounts)	2019 ^(c)	2018	2017	2016	2015
Net sales by segment:					
Flat-Rolled	\$ 9,560	\$ 9,912	\$ 8,491	\$ 7,532	\$ 8,561
USSE	2,420	3,228	2,974	2,246	2,326
Tubular	1,191	1,236	945	451	898
Total reportable segments	\$ 13,171	\$ 14,376	\$ 12,410	\$ 10,229	\$ 11,785
Other Businesses	168	186	179	169	165
Intersegment sales	(402)	(384)	(339)	(137)	(376)
Total	\$ 12,937	\$ 14,178	\$ 12,250	\$ 10,261	\$ 11,574
Segment earnings (loss) before interest and income taxes:					
Flat-Rolled	\$ 196	\$ 883	\$ 375	\$ 22	\$ (249)
USSE	(57)	359	327	185	81
Tubular	(67)	(58)	(99)	(303)	(181)
Total reportable segments	\$ 72	\$ 1,184	\$ 603	\$ (96)	\$ (349)
Other Businesses	23	55	44	63	33
Items not allocated to segments ^(b)	(325)	(115)	22	(168)	(826)
Total (loss) earnings before interest and income taxes ^(a)	\$ (230)	\$ 1,124	\$ 669	\$ (201)	\$ (1,142)
Net interest and other financial costs ^(a)	222	312	368	215	317
Income tax provision (benefit)	178	(303)	(86)	24	183
Net (loss) earnings attributable to United States Steel Corporation	\$ (630)	\$ 1,115	\$ 387	\$ (440)	\$ (1,642)
Per common share:					
- Basic	\$ (3.67)	\$ 6.31	\$ 2.21	\$ (2.81)	\$ (11.24)
- Diluted	\$ (3.67)	\$ 6.25	\$ 2.19	\$ (2.81)	\$ (11.24)

(a) Amounts have been adjusted to include \$61 million, (\$36) million and \$60 million in 2017, 2016 and 2015, respectively, of postretirement benefit expense (other than service cost) related to the retrospective presentation change of net periodic benefit cost of our defined benefit pension and other post-employment benefits as a result of the adoption of Accounting Standards Update 2017-07, *Compensation - Retirement Benefits* on January 1, 2018.

(b) See Note 4 to the Consolidated Financial Statements.

(c) Fourth quarter and full year 2019 results have been revised from the Company's earnings release issued on January 30, 2020 for an adjustment to the deferred tax asset valuation allowance.

FIVE-YEAR FINANCIAL SUMMARY (Unaudited) (Continued)

	2019	2018	2017	2016	2015
Balance Sheet Position at Year-End (dollars in millions)					
Current assets	\$ 3,813	\$ 4,830	\$ 4,755	\$ 4,356	\$ 3,917
Net property, plant & equipment	5,447	4,865	4,280	3,979	4,411
Total assets ^(a)	11,608	10,982	9,862	9,160	9,167
Short-term debt and current maturities of long-term debt	14	65	3	50	45
Other current liabilities	2,611	3,132	2,770	2,281	2,103
Long-term debt ^(a)	3,627	2,316	2,700	2,981	3,093
Employee benefits	532	980	759	1,216	1,101
Total United States Steel Corporation stockholders' equity	4,092	4,202	3,320	2,274	2,436
Cash Flow Data (dollars in millions)					
Net cash provided by operating activities ^{(b) (c)}	\$ 682	\$ 938	\$ 826	\$ 754	\$ 360
Capital expenditures	1,252	1,001	505	306	500
Dividends paid	35	36	35	31	29
Employee Data					
Total employment costs (dollars in millions)	\$ 2,870	\$ 2,824	\$ 2,477	\$ 2,342	\$ 2,780
Average North America employment costs (dollars per hour)	\$ 65.70	\$ 65.97	\$ 62.32	\$ 61.75	\$ 65.64
Average number of North America employees	16,633	16,258	15,326	15,048	19,391
Average number of USSE employees	11,314	11,993	11,948	11,927	12,052
Number of pensioners at year-end	41,198	43,573	45,837	47,765	49,802
Stockholder Data at Year-End					
Common shares outstanding, net of treasury shares (millions)	170.0	174.5	175.2	173.8	146.3
Registered stockholders (thousands)	12.1	13.0	13.8	14.8	15.4
Market price of common stock	\$ 11.41	\$ 18.24	\$ 35.19	\$ 33.01	\$ 7.98

(a) 2015 amounts have been adjusted to retroactively adopt Accounting Standards Update 2015-03, *Interest-Imputation of Interest (Subtopic 835-30) - Simplifying the Presentation of Debt Issuance Costs*, which requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of the debt liability.

(b) 2016 and 2015 amounts have been adjusted to retroactively adopt Accounting Standards Update 2016-09, *Compensation - Stock Compensation*, which requires that cash taxes paid by the Company when directly withholding shares for tax withholding purposes be classified as a cash flow from financing activity.

(c) 2017, 2016 and 2015 amounts have been adjusted to retroactively adopt Accounting Standards Update 2016-15, *Statement of Cash Flows: Classification of Certain Cash Receipts and Cash Payments*, which requires that all payments to extinguish debt now be presented as cash outflows from financing activities on our Consolidated Statement of Cash Flows.

Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

Item 9A. CONTROLS AND PROCEDURES

Conclusions Regarding the Effectiveness of Disclosure Controls and Procedures

Under the supervision and with the participation of U. S. Steel's management, including the chief executive officer and chief financial officer, U. S. Steel conducted an evaluation of our disclosure controls and procedures, as such term is defined under Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934, as amended (the Exchange Act). Based on this evaluation, U. S. Steel's chief executive officer and chief financial officer concluded that U. S. Steel's disclosure controls and procedures were effective as of the end of the period covered by this annual report.

Management's Report on Internal Control Over Financial Reporting

See "Item 8. Financial Statements and Supplementary Data – Management's Reports to Stockholders – Internal Control Over Financial Reporting."

Attestation Report of Independent Registered Public Accounting Firm

See "Item 8. Financial Statements and Supplementary Data – Report of Independent Registered Public Accounting Firm."

Changes in Internal Control Over Financial Reporting

There have not been any changes in U. S. Steel's internal control over financial reporting that occurred during the fourth quarter of 2019 which have materially affected, or are reasonably likely to materially affect, U. S. Steel's internal control over financial reporting.

Item 9B. OTHER INFORMATION

None.

PART III

Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information concerning the directors of U. S. Steel required by this item is incorporated and made part hereof by reference to the material appearing under the heading "Election of Directors" in U. S. Steel's Proxy Statement for the 2020 Annual Meeting of Stockholders, which will be filed with the Securities and Exchange Commission, pursuant to Regulation 14A, no later than 120 days after the end of the fiscal year. Information concerning the Audit Committee and its financial expert required by this item is incorporated and made part hereof by reference to the material appearing under the heading "Corporate Governance - Board Committees – Audit Committee" in U. S. Steel's Proxy Statement for the 2020 Annual Meeting of Stockholders. Information regarding the Nominating Committee required by this item is incorporated and made part hereof by reference to the material appearing under the heading "Corporate Governance - Board Committees – Corporate Governance & Sustainability Committee" in U. S. Steel's Proxy Statement for the 2020 Annual Meeting of Stockholders. Information regarding the ability of stockholders to communicate with the Board of Directors is incorporated and made part hereof by reference to the material appearing under the heading "Communications from Stockholders and Interested Parties" in U. S. Steel's Proxy Statement for the 2020 Annual Meeting of Stockholders. Information regarding compliance with Section 16(a) of the Exchange Act required by this item is incorporated and made part hereof by reference to the material appearing under the heading "Delinquent Section 16(a) Reports" in U. S. Steel's Proxy Statement for the 2020 Annual Meeting of Stockholders. Information concerning the executive officers of U. S. Steel is contained in Part I of this Form 10-K under the caption "Executive Officers of the Registrant."

U. S. Steel has adopted a Code of Ethical Business Conduct that applies to all of our directors and officers, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. U. S. Steel will provide a copy of this code free of charge upon request. To obtain a copy, contact the Office of the Corporate Secretary, United States Steel Corporation, 600 Grant Street, Pittsburgh, Pennsylvania, 15219-2800 (telephone: 412-433-1121). The Code of Ethical Business Conduct is also available through the Company's website at www.ussteel.com. U. S. Steel does not intend to incorporate the contents of our website into this Annual Report on Form 10-K.

Item 11. EXECUTIVE COMPENSATION

Information required by this item is incorporated and made part hereof by reference to the material appearing under the heading "Compensation & Organization Committee Report" in U. S. Steel's Proxy Statement for the 2020 Annual Meeting of Stockholders.

Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Equity Compensation Plan Information

Plan Category	(1) Number of securities to be issued upon exercise of outstanding options, warrants and rights	(2) Weighted-average exercise price of outstanding options, warrants and rights	(3) Number of securities remaining available for future issuance under equity compensation plans [excluding securities reflected in Column (1)] ^(b)
Equity compensation plans approved by security holders ^(a)	6,491,060	\$27.08	7,464,779
Equity compensation plans not approved by security holders ^(c)	5,000	(one for one)	—
Total	6,496,060	—	7,464,779

^(a) The numbers in columns (1) and (2) of this row contemplate all shares that could potentially be issued as a result of outstanding grants under the 2005 Stock Incentive Plan and the 2016 Omnibus Incentive Compensation Plan as of December 31, 2019. (For more information, see Note 15 to the Consolidated Financial Statements. Column (1) includes (i) 463,085 shares of common stock that could be issued for the Common Stock Units outstanding under the Deferred Compensation Program for Non-Employee Directors and (ii) 2,086,320 shares that could be issued for the 1,043,160 performance awards outstanding under the Long-Term Incentive Compensation Program (a program under the 2016 Omnibus Incentive Compensation Plan). The calculation in column (2) does not include the Common Stock Units since the weighted average exercise price for Common Stock Units is one for one; that is, one share of common stock will be given in exchange for each unit of such phantom stock accumulated through the date of the director's retirement. Also, the calculation in column (2) does not include the performance awards since the weighted average exercise price for performance awards can range from zero for one to two for one; that is, performance awards may result in up to 2,086,320 of common stock being issued (two for one), or some lesser number of shares (including zero shares of common stock issued), depending upon the Corporation's common stock performance versus that of a peer group of companies or the Corporation's return on capital employed performance over a performance period.

^(b) Represents shares available under the 2016 Omnibus Incentive Compensation Plan.

^(c) At December 31, 2019, U. S. Steel had no securities remaining for future issuance under equity compensation plans that had not been approved by security holders. Column (1) represents Common Stock Units that were issued pursuant to the Deferred Compensation Plan for Non-Employee Directors prior to its being amended to make it a program under the 2005 Stock Incentive Plan and 2016 Omnibus Incentive Compensation Plan. The weighted average exercise price for Common Stock Units in column (2) is one for one; that is, one share of common stock will be given in exchange for each unit of phantom stock upon the director's retirement from the Board of Directors. All future grants under this amended plan/program will count as shares issued under to the 2016 Omnibus Incentive Compensation Plan, a stockholder approved plan.

Other information required by this item is incorporated and made part hereof by reference to the material appearing under the headings "Stock Ownership of Directors and Executive Officers" and "Stock Ownership of Certain Beneficial Owners" in U. S. Steel's Proxy Statement for the 2020 Annual Meeting of Stockholders.

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Information required by this item is incorporated and made part hereof by reference to the material appearing under the headings "Policy with Respect to Related Person Transactions" and "Corporate Governance – Independence" in U. S. Steel's Proxy Statement for the 2020 Annual Meeting of Stockholders.

Item 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Information required by this item is incorporated and made part hereof by reference to the material appearing under the heading "Audit Fees" in U. S. Steel's Proxy Statement for the 2020 Annual Meeting of Stockholders.

PART IV

Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULE

A. Documents Filed as Part of the Report

1. Financial Statements and Supplementary Data

Financial Statements filed as part of this report are included in "Item 8 – Financial Statements and Supplementary Data" list on page F-1.

2. Financial Statement Schedules

"Schedule II – Valuation and Qualifying Accounts and Reserves" for years ended December 31, 2019, 2018, and 2017 is included on page 107. All other schedules are omitted because they are not applicable or the required information is contained in the applicable financial statements or notes thereto.

B. Exhibits

Exhibit No.

3. Articles of Incorporation and By-Laws

- | | | |
|-----|--|---|
| (a) | Amended and Restated Certificate of Incorporation of United States Steel Corporation, dated April 25, 2017 | Incorporated by reference to Exhibit 3.1 to United States Steel Corporation's Form 8-K filed on April 28, 2017, Commission File Number 1-16811. |
| (b) | Amended and Restated By-Laws of United States Steel Corporation dated as of November 1, 2016. | Incorporated by reference to Exhibit 3.1 to United States Steel Corporation's Form 8-K filed on November 2, 2016, Commission File Number 1-16811. |

4. Instruments Defining the Rights of Security Holders, Including Indentures

- | | | |
|-----|---|---|
| (a) | Indenture dated as of May 21, 2007 between United States Steel Corporation and The Bank of New York Mellon, formerly known as The Bank of New York. | Incorporated by reference to Exhibit 4.1 to United States Steel Corporation's Form 8-K filed on May 22, 2007, Commission File Number 1-16811. |
| (b) | First Supplemental Indenture dated as of May 21, 2007, between United States Steel Corporation and The Bank of New York Mellon, formerly known as The Bank of New York, regarding 5.65% Senior Notes due June 1, 2013, 6.05% Senior Notes due June 1, 2017 and 6.65% Senior Notes due June 1, 2037. | Incorporated by reference to Exhibit 4.2 to United States Steel Corporation's Form 8-K filed on May 22, 2007, Commission File Number 1-16811. |
| (c) | Fourth Supplemental Indenture dated as of March 19, 2010, between United States Steel Corporation and The Bank of New York Mellon, formerly known as The Bank of New York, regarding 7.375% Senior Notes due April 1, 2020. | Incorporated by reference to Exhibit 4.1 to United States Steel Corporation's Form 8-K filed on March 23, 2010, Commission File Number 1-16811. |
| (d) | United States Steel Corporation Certificate of Elimination filed with the Secretary of State of the State of Delaware on December 5, 2007. | Incorporated by reference to Exhibit 3.1 to United States Steel Corporation's Form 8-K filed on December 6, 2007, Commission File Number 1-16811. |
| (e) | Eighth Supplemental Indenture, dated August 4, 2017, by and among United States Steel Corporation and the Bank of New York Mellon as trustee. | Incorporated by reference to Exhibit 4.1 to United States Steel Corporation's Form 8-K filed on August 4, 2017, Commission File Number 1-16811. |
| (f) | Ninth Supplemental Indenture, dated March 15, 2018, by and among United States Steel Corporation and the Bank of New York Mellon as trustee. | Incorporated by reference to Exhibit 4.1 to United States Steel Corporation's Form 8-K filed on March 15, 2018, Commission File Number 1-16811. |
| (g) | Indenture, dated as of October 21, 2019, by and between the Corporation and The Bank of New York Mellon | Incorporated by reference to Exhibit 4.1 to United States Steel Corporation's Form 8-K filed on October 21, 2019, Commission File Number 1-16811. |

Certain long-term debt instruments are omitted pursuant to Item 601(b)(4)(iii) of Regulation S-K. U. S. Steel agrees to furnish to the Commission on request a copy of any instrument defining the rights of holders of long-term debt of U. S. Steel and of any subsidiary for which consolidated or unconsolidated financial statements are required to be filed.

10. Material Contracts

- | | | |
|-----|---|--|
| (a) | United States Steel Corporation Supplemental Retirement Account Program.** | Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 10-Q for the quarter ended September 30, 2015, Commission File Number 1-16811. |
| (b) | United States Steel Corporation Executive Management Supplemental Pension Program.** | Incorporated by reference to Exhibit 10.2 to United States Steel Corporation's Form 8-K filed on August 21, 2015, Commission File Number 1-16811. |
| (c) | United States Steel Corporation Supplemental Thrift Program.** | Incorporated by reference to Exhibit 10.7 to United States Steel Corporation's Form 10-Q for the quarter ended September 30, 2013, Commission File Number 1-16811. |
| (d) | United States Steel Corporation Deferred Compensation Program for Non-Employee Directors, a program under the 2005 Stock Incentive Plan.** | Incorporated by reference to Exhibit 10(d) to United States Steel Corporation's Form 10-K for the year ended December 31, 2011, Commission File Number 1-16811. |
| (e) | Form of Offer Letter to David B. Burritt.** | Incorporated by reference to Exhibit 10.2 to United States Steel Corporation's Form 8-K filed on August 20, 2013, Commission File Number 1-16811. |
| (f) | Financial Matters Agreement between USX Corporation (renamed Marathon Oil Corporation) and United States Steel Corporation. | Incorporated by reference to Exhibit 99.5 to United States Steel Corporation's Form 8-K filed on January 3, 2002, Commission File Number 1-16811. |
| (g) | Third Amended and Restated Credit Agreement dated as of July 27, 2015, among United States Steel Corporation, the Lenders party thereto, the LC Issuing Banks party thereto and JPMorgan Chase Bank, National Association as Administrative Agent and Collateral Agent. | Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 10-Q for the quarter ended June 30, 2015, Commission File Number 1-16811. |
| (h) | Amendment No. 1 to Third Amended and Restated Credit Agreement, dated as of February 24, 2016. | Incorporated by reference to Exhibit 10(L) to United States Steel Corporation's Form 10-K for the year ended December 31, 2015, Commission File Number 1-16811. |
| (i) | Amended and Restated Security Agreement dated as of July 27, 2015, between United States Steel Corporation and JPMorgan Chase Bank, National Association as Collateral Agent. | Incorporated by reference to Exhibit 10.2 to United States Steel Corporation's Form 10-Q for the quarter ended June 30, 2015, Commission File Number 1-16811. |
| (j) | EUR 200,000,000 multicurrency revolving credit facility agreement dated February 22, 2016, among U. S. Steel Košice, s.r.o., and ING Bank N.V., Commerzbank Aktiengesellschaft, Slovenská sporiteľňa, a.s., Komerční banka, a.s. and Citibank Europe plc. | Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 8-K filed on February 24, 2016, Commission File Number 1-16811. |
| (k) | United States Steel Corporation Non Tax-Qualified Pension Plan.** | Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 8-K filed on August 21, 2015, Commission File Number 1-16811. |
| (l) | United States Steel Corporation Non Tax-Qualified Retirement Account Program. | Incorporated by reference to Exhibit 10(dd) to United States Steel Corporation's Form 10-K for the year ended December 31, 2013, Commission File Number 1-16811. |

(m)	United States Steel Corporation 2005 Stock Incentive Plan.**	Incorporated by reference to Appendix B to United States Steel Corporation's Definitive Proxy Statement on Schedule 14A filed on March 11, 2005, Commission File Number 1-16811.
(n)	United States Steel Corporation 2005 Stock Incentive Plan, Amended and Restated, April 27, 2010.**	Incorporated by reference to Appendix A to United States Steel Corporation's Definitive Proxy Statement on Schedule 14A filed on March 12, 2010, Commission File Number 1-16811.
(o)	United States Steel Corporation 2005 Stock Incentive Plan, Amended and Restated, April 29, 2014.**	Incorporated by reference to Appendix A to United States Steel Corporation's Definitive Proxy Statement on Schedule 14A filed on March 14, 2014, Commission File Number 1-16811.
(p)	Administrative Regulations for the Long-Term Incentive Compensation Program under the United States Steel Corporation 2005 Stock Incentive Plan, Amended and Restated, May 28, 2013.**	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 8-K filed on May 30, 2013, Commission File Number 1-16811.
(q)	Administrative Regulations for the Long-Term Incentive Compensation Program under the United States Steel Corporation 2005 Stock Incentive Plan, Amended and Restated, February 25, 2014.**	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 8-K filed on March 3, 2014, Commission File Number 1-16811.
(r)	Administrative Procedures for the Long-Term Incentive Compensation Program under the United States Steel Corporation 2005 Stock Incentive Plan, as Amended and Restated, and under the United States Steel Corporation 2010 Annual Incentive Compensation Plan, as amended February 24, 2015.**	Incorporated by reference to Exhibit 10.3 to United States Steel Corporation's Form 10-Q for the quarter ended March 31, 2015, Commission File Number 1-16811.
(s)	Form of stock option grant under the Long-Term Incentive Compensation Program, a program under the 2005 Stock Incentive Plan.**	Incorporated by reference to Exhibit 10(x) to United States Steel Corporation's Form 10-K for the year ended December 31, 2006, Commission File Number 1-16811.
(t)	Form of Performance Award Grant Agreement under the 2005 Stock Incentive Plan.**	Incorporated by reference to Exhibit 10.3 to United States Steel Corporation's Form 10-Q for the quarter ended March 31, 2011, Commission File Number 1-16811.
(u)	Form of Stock Option Grant Agreement under the 2005 Stock Incentive Plan.**	Incorporated by reference to Exhibit 10.2 to United States Steel Corporation's Form 10-Q for the quarter ended March 31, 2011, Commission File Number 1-16811.
(v)	Form of Restricted Stock Unit Retention Grant Agreement under the 2005 Stock Incentive Plan.**	Incorporated by reference to Exhibit 10.5 to United States Steel Corporation's Form 10-Q for the quarter ended March 31, 2011, Commission File Number 1-16811.
(w)	Form of Restricted Stock Unit Annual Grant Agreement under the 2005 Stock Incentive Plan.**	Incorporated by reference to Exhibit 10.4 to United States Steel Corporation's Form 10-Q for the quarter ended March 31, 2011, Commission File Number 1-16811.
(x)	Form of Retention Performance Award Grant Agreement.**	Incorporated by reference to Exhibit 10.5 to United States Steel Corporation's Form 8-K filed on July 2, 2012, Commission File Number 1-16811.

(y)	Form of Non-Qualified Stock Option Grant Agreement.**	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 10-Q for the quarter ended March 31, 2015, Commission File Number 1-16811.
(z)	Form of Incentive Award Agreement, 2010 Annual Incentive Compensation Plan.**	Incorporated by reference to Exhibit 10.2 to United States Steel Corporation's Form 10-Q for the quarter ended March 31, 2015, Commission File Number 1-16811.
(aa)	United States Steel Corporation 2010 Annual Incentive Compensation Plan.**	Incorporated by reference to Appendix B to United States Steel Corporation's Definitive Proxy Statement on Schedule 14A filed on March 12, 2010, Commission File Number 1-16811.
(bb)	Administrative Regulations for the Executive Management Annual Incentive Compensation Plan under the 2010 Annual Incentive Compensation Plan.**	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 8-K filed on January 31, 2014, Commission File Number 1-16811.
(cc)	Administrative Procedures for the Executive Management Annual Incentive Compensation Program under the United States Steel Corporation 2010 Annual Incentive Compensation Plan, as amended January 27, 2015**.	Incorporated by reference to Exhibit 10.4 to United States Steel Corporation's Form 10-Q for the quarter ended March 31, 2015, Commission File Number 1-16811.
(dd)	United States Steel Corporation Change in Control Severance Plan effective January 1, 2016.**	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 8-K filed on November 6, 2015, Commission File Number 1-16811.
(ee)	Administrative Procedures for the Long-Term Incentive Compensation Program under the United States Steel Corporation 2005 Stock Incentive Plan, as Amended and Restated, and under the United States Steel Corporation Annual Incentive Compensation Plan, as amended February 22, 2016.**	Incorporated by reference to Exhibit 10(kk) to United States Steel Corporation's Form 10-K for the year ended December 31, 2015, Commission File Number 1-16811.
(ff)	Administrative Procedures for the Executive Management Annual Incentive Compensation Program under the United States Steel Corporation Annual Incentive Compensation Plan, as amended February 22, 2016.**	Incorporated by reference to Exhibit 10(ll) to United States Steel Corporation's Form 10-K for the year ended December 31, 2015, Commission File Number 1-16811.
(gg)	United States Steel Corporation 2016 Omnibus Incentive Compensation Plan.**	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 10-Q for the quarter ended March 31, 2016, Commission File Number 1-16811.
(hh)	United States Steel Corporation 2016 Omnibus Incentive Compensation Plan Restricted Stock Unit Grant Agreement - Retention Grant Form**.	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 10-Q for the quarter ended June 30, 2016, Commission File Number 1-16811.
(ii)	United States Steel Corporation 2016 Omnibus Incentive Compensation Plan Restricted Stock Unit Grant Agreement - Annual Grant Form**.	Incorporated by reference to Exhibit 10.2 to United States Steel Corporation's Form 10-Q for the quarter ended June 30, 2016, Commission File Number 1-16811.
(jj)	United States Steel Corporation 2016 Omnibus Incentive Compensation Plan - Stock Option Grant Form.**	Incorporated by reference to Exhibit 10.3 to United States Steel Corporation's Form 10-Q for the quarter ended June 30, 2016, Commission File Number 1-16811.

(kk)	Administrative Procedures for the Executive Management Annual Incentive Compensation Program under the United States Steel Corporation Annual Incentive Compensation Plan, as amended November 1, 2016.**	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 10-Q for the quarter ended September 30, 2016, Commission File Number 1-16811.
(ll)	United States Steel Corporation Non Tax-Qualified Retirement Account Program, amended effective as of January 1, 2016.**	Incorporated by reference to Exhibit 10.2 to United States Steel Corporation's Form 10-Q for the quarter ended September 30, 2016, Commission File Number 1-16811.
(mm)	United States Steel Corporation Supplemental Thrift Program, as amended November 1, 2016.**	Incorporated by reference to Exhibit 10.3 to United States Steel Corporation's Form 10-Q for the quarter ended September 30, 2016, Commission File Number 1-16811.
(nn)	First Amendment to United States Steel Corporation 2016 Omnibus Incentive Compensation Plan.**	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 10-Q filed on April 26, 2017, Commission File Number 1-16811.
(oo)	Fourth Amended and Restated Credit Agreement dated as of February 26, 2018, among United States Steel Corporation, the Lenders party thereto, the LC Issuing Banks party thereto and JPMorgan Chase Bank, National Association as Administrative Agent and Collateral Agent.	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 8-K filed on March 2, 2018, Commission File Number 1-16811.
(pp)	Amended and Restated Borrower Security Agreement dated as of February 26, 2018, between United States Steel Corporation and JPMorgan Chase Bank, National Association as Collateral Agent.	Incorporated by reference to Exhibit 10.2 to United States Steel Corporation's Form 8-K filed on March 2, 2018, Commission File Number 1-16811.
(qq)	Amended and Restated Subsidiary Security Agreement dated as of February 26, 2018, between the guarantors identified herein and JPMorgan Chase Bank, National Association as Collateral Agent.	Incorporated by reference to Exhibit 10.3 to United States Steel Corporation's Form 8-K filed on March 2, 2018, Commission File Number 1-16811.
(rr)	Underwriting Agreement, by and among United States Steel Corporation and J.P. Morgan Securities LLC, dated March 13, 2018.	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 8-K filed on March 15, 2018, Commission File Number 1-16811.
(ss)	Form of United States Steel Corporation 2016 Omnibus Incentive Compensation Plan Restricted Stock Unit Grant Agreement (Annual Grant)**	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 10-Q filed on April 27, 2018, Commission File Number 1-16811.
(tt)	Form of United States Steel Corporation 2016 Omnibus Incentive Compensation Plan Restricted Stock Unit Grant Agreement (Retention Grant)**	Incorporated by reference to Exhibit 10.2 to United States Steel Corporation's Form 10-Q filed on April 27, 2018, Commission File Number 1-16811.
(uu)	Form of United States Steel Corporation 2016 Omnibus Incentive Compensation Plan Performance Share Award Grant Agreement (TSR Grant)**	Incorporated by reference to Exhibit 10.3 to United States Steel Corporation's Form 10-Q filed on April 27, 2018, Commission File Number 1-16811.
(vv)	Form of United States Steel Corporation 2016 Omnibus Incentive Compensation Plan Performance Share Award Grant Agreement (ROCE Grant)**	Incorporated by reference to Exhibit 10.4 to United States Steel Corporation's Form 10-Q filed on April 27, 2018, Commission File Number 1-16811.

(ww)	Administrative Procedures for the Executive Management Annual Compensation Incentive Program under the United States Steel Corporation 2016 Omnibus Incentive Compensation Plan as approved on February 27, 2018**	Incorporated by reference to Exhibit 10.5 to United States Steel Corporation's Form 10-Q filed on April 27, 2018, Commission File Number 1-16811.
(xx)	EUR 460,000,000 multicurrency revolving credit facility agreement dated September 26, 2018, among U. S. Steel Košice, s.r.o., and Commerzbank Aktiengesellschaft, ING Bank N.V., Komerční banka, a.s., Slovenská sporiteľňa, a.s., Unicredit Bank Czech Republic and Slovakia, a.s., ěeskoslovenská Obchodná Banka, a.s., and Citibank Europe plc.	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 8-K filed on October 2, 2018, Commission File Number 1-16811.
(yy)	Amendment No. 1 to the Fourth Amended and Restated Credit Agreement dated as of February 26, 2018, by and among United States Steel Corporation, a Delaware corporation (the "Borrower"), the Lenders and LC Issuing Banks from time to time party thereto and JPMorgan Chase Bank, N.A., as administrative agent and collateral agent.	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 10-K filed on February 15, 2019, Commission File Number 1-16811.
(zz)	Form of Offer Letter to Duane D. Holloway.**	Incorporated by reference to Exhibit 10.2 to United States Steel Corporation's Form 10-K filed on February 15, 2019, Commission File Number 1-16811.
(aaa)	Letter Agreement, dated December 21, 2018, between United States Steel Corporation and Douglas R. Matthews**	Incorporated by reference to Exhibit 10.3 to United States Steel Corporation's Form 10-K filed on February 15, 2019, Commission File Number 1-16811.
(bbb)	United States Steel Corporation Deferred Compensation Program for Non-Employee Directors, effective as of July 26, 2016, as amended on October 30, 2018**	Incorporated by reference to Exhibit 10.4 to United States Steel Corporation's Form 10-K filed on February 15, 2019, Commission File Number 1-16811.
(ccc)	Summary of Non-Employee Director Fee Arrangements**	Incorporated by reference to Exhibit 10.5 to United States Steel Corporation's Form 10-K filed on February 15, 2019, Commission File Number 1-16811.
(ddd)	Form of United States Steel Corporation 2016 Omnibus Incentive Compensation Plan Performance Share Award Grant Agreement (TSR Grant).**	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 10-Q filed on May 3, 2019, Commission File Number 1-16811.
(eee)	Administrative Procedures for the Executive Management Annual Incentive Compensation Plan under the United States Steel Corporation 2016 Omnibus Incentive Compensation Plan, as approved on February 26, 2019.**	Incorporated by reference to Exhibit 10.2 to United States Steel Corporation's Form 10-Q filed on May 3, 2019, Commission File Number 1-16811.
(fff)	United States Steel Corporation Non Tax-Qualified Retirement Account Program, Amended and Restated Effective January 1, 2019.**	Incorporated by reference to Exhibit 10.3 to United States Steel Corporation's Form 10-Q filed on May 3, 2019, Commission File Number 1-16811.
(ggg)	United States Steel Corporation Supplemental Thrift Program, Amended and Restated Effective January 1, 2019.**	Incorporated by reference to Exhibit 10.4 to United States Steel Corporation's Form 10-Q filed on May 3, 2019, Commission File Number 1-16811.

(hhh)	United States Steel Corporation Supplemental Retirement Account Program, Amended and Restated Effective January 1, 2019.**	Incorporated by reference to Exhibit 10.5 to United States Steel Corporation's Form 10-Q filed on May 3, 2019, Commission File Number 1-16811.
(iii)	Recapitalization and Equity Purchase Agreement, dated September 30, 2019, by and among U. S. Steel Holdco LLC, BRS Stock Holdco LLC, Big River Steel Holdings LLC, the stockholders and members of Big River Steel Corp. and Big River Steel Holdings LLC and United States Steel Corporation.	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 8-K filed on October 1, 2019, Commission File Number 1-16811.
(jjj)	Purchase and Sale Agreement, dated September 30, 2019, by and among U. S. Steel Holdco LLC, United States Steel Corporation and TPG Growth II BDH, L.P.	Incorporated by reference to Exhibit 10.2 to United States Steel Corporation's Form 8-K filed on October 1, 2019, Commission File Number 1-16811.
(kkk)	Purchase Agreement, dated as of October 16, 2019, by and between the Corporation and the representatives of the several Initial Purchasers	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 8-K filed on October 21, 2019, Commission File Number 1-16811.
(lll)	Fifth Amended and Restated Credit Agreement dated as of October 25, 2019, among United States Steel Corporation, the Lenders party thereto, the LC Issuing Banks party thereto, and JPMorgan Chase Bank, N.A., as Administrative and Collateral Agent.	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 8-K filed on October 28, 2019, Commission File Number 1-16811.
(mmm)	Second Amended and Restated Borrower Security Agreement dated as of October 25, 2019, among United States Steel Corporation and JPMorgan Chase Bank, N.A., as Collateral Agent	Incorporated by reference to Exhibit 10.2 to United States Steel Corporation's Form 8-K filed on October 28, 2019, Commission File Number 1-16811.
(nnn)	Second Amended and Restated Subsidiary Security Agreement dated as of October 25, 2019, among the Subsidiary Guarantors and JPMorgan Chase Bank, N.A., as Collateral Agent.	Incorporated by reference to Exhibit 10.3 to United States Steel Corporation's Form 8-K filed on October 28, 2019, Commission File Number 1-16811.
(ooo)	Agreement of Sale dated as of October 1, 2019 between the Corporation and The Industrial Development Board of the City of Hoover regarding \$275 million 5.750% Environmental Improvement Revenue Bonds, Series 2019 (United States Steel Corporation Project).	Incorporated by reference to Exhibit 10.4 to United States Steel Corporation's Form 8-K filed on October 28, 2019, Commission File Number 1-16811.
(ppp)	Loan Agreement dated as of October 1, 2019 between the Corporation and the Allegheny County Industrial Development Authority regarding \$92.63 million Environmental Improvement Refunding Revenue Bonds, Series 2019 (United States Steel Corporation Project).	Incorporated by reference to Exhibit 10.5 to United States Steel Corporation's Form 8-K filed on October 28, 2019, Commission File Number 1-16811.
(qqq)	Supplemental Agreement, dated December 23, 2019, between U.S. Steel Košice, s.r.o., Ferroenergy s.r.o. and Commerzbank Finance & Covered Bond S.A. as facility agent	Incorporated by reference to Exhibit 10.1 to United States Steel Corporation's Form 8-K filed on December 23, 2019, Commission File Number 1-16811.

- 4.1 [Description of Securities.](#)
- 10.1. [United States Steel Corporation Deferred Compensation Program for Non-Employee Directors, effective as of July 26, 2016, as amended on October 28, 2019**](#)
- 10.2 [United States Steel Corporation Non-Employee Director Stock Program of the 2016 Omnibus Incentive Compensation Plan, as amended November 1, 2019**](#)
- 10.3 [Separation Agreement and Release, by and between Kevin P. Bradley and United States Steel Corporation, as of October 7, 2019.](#)
- 10.4 [Credit Agreement, dated December 10, 2019, by and among United States Steel Corporation, KfW IPEX-Bank GMBH, as Mandated Lead Arranger and ECA Structuring Bank, KfW IPEX-Bank as Facility Agent, KfW IPEX-Bank as ECA Agent, and the financial institutions listed therein as lenders, and other parties party thereto from time to time](#)
- 21. [List of Subsidiaries](#)
- 23. [Consent of PricewaterhouseCoopers LLP](#)
- 24. [Powers of Attorney](#)
- 31.1. [Certification of Chief Executive Officer required by Rules 13a-14\(a\) or 15d-14\(a\) of the Securities Exchange Act of 1934, as promulgated by the Securities and Exchange Commission pursuant to Section 302 of the Sarbanes-Oxley Act of 2002](#)
- 31.2. [Certification of Chief Financial Officer required by Rules 13a-14\(a\) or 15d-14\(a\) of the Securities Exchange Act of 1934, as promulgated by the Securities and Exchange Commission pursuant to Section 302 of the Sarbanes-Oxley Act of 2002](#)
- 32.1. [Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002](#)
- 32.2. [Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002](#)
- 95. [Mine Safety Disclosure required under Section 1503 of the Dodd-Frank Wall Street Reform and Consumer Protection Act](#)
- 101. The following financial information from United States Steel Corporation's Annual Report on Form 10-K for the year ended December 31, 2019 formatted in Inline XBRL (Extensible Business Reporting Language) includes: (i) the Consolidated Statement of Operations, (ii) the Consolidated Statement of Comprehensive Income (Loss), (iii) the Consolidated Balance Sheet, (iv) the Consolidated Statement of Cash Flows, and (v) Notes to the Consolidated Financial Statements.
- 104. **Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)**

* Portions of the exhibit have been omitted pursuant to a request for confidential treatment

** Indicates management contract or compensatory plan or arrangement.

SCHEDULE II – VALUATION AND QUALIFYING ACCOUNTS AND RESERVES
YEARS ENDED DECEMBER 31, 2019, 2018 AND 2017
(Millions of Dollars)

Description	Balance at Beginning of Period	Additions		Deductions		Balance at End of Period
		Charged to Costs and Expenses	Charged to Other Accounts	Charged to Costs and Expenses	Charged to Other Accounts	
Year ended December 31, 2019:						
Reserves deducted in the balance sheet from the assets to which they apply:						
Allowance for doubtful accounts	\$ 29	\$ —	\$ —	\$ —	\$ 1	\$ 28
Investments and long-term receivables reserve	5	—	—	—	—	5
Deferred tax valuation allowance:						
Domestic	211	349	—	—	—	560
Foreign	3	—	—	—	—	3
Year ended December 31, 2018:						
Reserves deducted in the balance sheet from the assets to which they apply:						
Allowance for doubtful accounts	\$ 28	\$ 5	\$ —	\$ —	\$ 4	\$ 29
Investments and long-term receivables reserve	11	—	—	—	6	5
Deferred tax valuation allowance:						
Domestic	604	—	—	393	—	211
Foreign	4	—	—	1	—	3
Year ended December 31, 2017:						
Reserves deducted in the balance sheet from the assets to which they apply:						
Allowance for doubtful accounts	\$ 25	\$ 2	\$ 2	\$ —	\$ 1	\$ 28
Allowance for related party doubtful accounts	265	—	—	—	265	—
Investments and long-term receivables reserve	10	—	1	—	—	11
Long-term receivables from related parties reserve	1,627	—	—	—	1,627	—
Deferred tax valuation allowance:						
Domestic	1,109	42	—	373	174	604
Foreign	4	—	—	—	—	4

Item 16. FORM 10-K SUMMARY

None.

GLOSSARY OF CERTAIN DEFINED TERMS

The following definitions apply to terms used in this document:

2019 Environmental Revenue Bonds	two series of environmental revenue bonds that will mature between 2024 and 2049
2026 Senior Convertible Notes	Senior Convertible Notes due November 1, 2026
401(k) plans	defined contribution plans
ABO	Accumulated Benefit Obligation
ACHD	Allegheny County Health Department
AD	antidumping
AHSS	advanced high-strength steels
AMT	Alternative Minimum Tax
AOCI	Accumulated Other Comprehensive Income
ARO	Asset Retirement Obligation
ASC	Accounting Standards Codification
ASU	Accounting Standards Update
BART	Best Available Retrofit Technology
BAT	Best Available Technique
BGE	Butch Gilliam Enterprises, Inc.
BOF	Basic Oxygen Furnace Steelmaking
CAA	Clean Air Act
CAD	Canadian dollars
CAFC	U.S. Court of Appeals for the Federal Circuit
CAFE	Corporate Average Fuel Economy
CAL	continuous annealing line
CAMU	Corrective Action Management Unit
CDC	Chrome Deposit Corporation
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CGL	continuous galvanizing line
CIT	U.S. Court of International Trade
CMS	Corrective Measure Study
CO2	carbon dioxide
COSO	Committee of Sponsoring Organizations of the Treadway Commission
CVD	countervailing duties
CWA	Clean Water Act
DEC	Department of Environmental Conservation
DESCO	Double Eagle Steel Coating Company
DOC	U.S. Department of Commerce
DOJ	The United States Department of Justice
Double G	Double G Coatings Company LLC
EAF	Electric Arc Furnace
EBITDA	earnings before interest, taxes, depreciation and amortization
EC	European Commission
ECA	Export Credit Agreement
ECT	East Chicago Tin
EGLLE	Environment, Great Lakes and Energy
ERISA	Employee Retirement Income Security Act of 1974
ERW	electric resistance welded
ETS	Emissions Trading System
EU	European Union
EUA	European Union Allowances
FASB	Financial Accounting Standards Board
FIFO	first in, first out

Fifth Credit Facility Agreement	\$2.0 billion five-year senior secured asset-based revolving credit facility
FIP	Federal Implementation Plan
Flat-Rolled	North American Flat-Rolled segment
FPC	Feralloy Processing Company
FX	foreign exchange
GBC	general business credits
GDPR	General Data Protection Regulation
GHG	greenhouse gas
GLNPO	Great Lakes National Program Office
HDC	Hibbing Development Company
Hibbing	Hibbing Taconite Company
IEPA	Illinois Environmental Protection Agency
IM	interim measures
IRS	Internal Revenue Service
ISO	International Organization for Standardization
ITC	U.S. International Trade Commission
KDHE	Kansas Department of Health & Environment
Keetac	U. S. Steel's iron ore operations at Keewatin, Minnesota
LIFO	last in, first out
LMF	ladle metallurgy facility
MACT	Maximum Achievable Control Technology
Midwest	Midwest Plant
Minntac	U. S. Steel's iron ore operations at Mt. Iron, Minnesota
MPCA	Minnesota Pollution Control Agency
NAAQS	National Ambient Air Quality Standards
NAV	net asset value
NESHAP	National Emission Standards for Hazardous Air Pollutants
NFR	No Further Remediation
NGO	non-grain oriented
non-GAAP	Non-Generally Accepted Accounting Principles
NOV	Notice of Violation
NOx	nitrogen oxide
O.D.	outer diameter
OCTG	oil country tubular goods
OEPA	Ohio Environmental Protection Agency
OPEB	other post-employment benefits
Other Benefits	defined benefit retiree health care and life insurance plans
PADEP	Pennsylvania Department of Environmental Protection
PATH Act	Protecting Americans from Tax Hikes Act
Patriot	Patriot Premium Threading Services, LLC
PBGC	Pension Benefit Guarantee Corporation
PBO	Projected Benefit Obligations
PCAOB	Public Company Accounting Oversight Board (United States)
PII	Personally Identifiable Information
PM	Particulate Matter
POSCAL	POSCO-California Corporation, a subsidiary of POSCO
PPA	Pension Protection Act of 2006
ppb	parts per billion
PRO-TEC	PRO-TEC Coating Company, U. S. Steel and Kobe Steel Ltd. joint venture
PRP	potentially responsible party
PSU	Performance Share Awards
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
ROCE	Return On Capital Employed

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RP	Rehabilitation plan
RSU	Restricted Stock Units
RTR	Residual Risk and Technology Review
S&P's	Standard & Poor's
SEC	Securities and Exchange Commission
SIP	State Implementation Plan
SO ₂	Sulfur dioxide
SPT	Steelworkers Pension Trust
SSB	Salomon Smith Barney Holdings, Inc.
SWMU	Solid Waste Management Units
the 2018 Labor Agreements	collective bargaining agreements with United Steelworkers effective September 1, 2018
the Committee	Compensation & Organization Committee of the Board of Directors
the Exchange Act	the Securities Exchange Act of 1934
the Omnibus Plan	2016 Omnibus Incentive Compensation Plan
the USSK Credit Agreement	USSK €460 million revolving credit facility
Tilden	Tilden Mining Company, L.C.
TRQ	tariff rate quotas
TSR	Total Shareholder Return
Tubular	Tubular Products segment
U. S. Steel	United States Steel Corporation
U.S. EPA	United States Environmental Protection Agency
U.S. GAAP	accounting standards generally accepted in the United States
UDEQ	Utah Department of Environmental Quality
ug/m ³	micrograms per cubic meter
UPI	USS-POSCO Industries, U. S. Steel and POSCO joint venture
USD	U.S. dollars
USSC	U. S. Steel Canada Inc.
USSE	U. S. Steel Europe segment
USSK	U. S. Steel Košice
USSTP	U. S. Steel Tubular Products
USW	United Steelworkers
Worthington	Worthington Specialty Processing, U. S. Steel and Worthington Industries, Inc. joint venture
WTO	World Trade Organization

**DESCRIPTION OF THE REGISTRANT'S SECURITIES
REGISTERED PURSUANT TO SECTION 12 OF THE
SECURITIES EXCHANGE ACT OF 1934**

As of December 31, 2019, United States Steel Corporation ("U.S. Steel," the "Company," "we," "our," "us") has one class of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"): our Common Stock, \$1.00 par value per share ("Common Stock").

DESCRIPTION OF COMMON STOCK

The following description of certain terms of our Common Stock does not purport to be complete and is subject to, and qualified in its entirety by reference to, our restated certificate of incorporation, as amended (the "Certificate of Incorporation") and our amended and restated by-laws, as amended (the "By-Laws"), each of which are incorporated by reference as an exhibit to the Annual Report on Form 10-K of which this Exhibit 4.1 is a part. We encourage you to read our Certificate of Incorporation, our By-Laws and the applicable provisions of the Delaware General Corporation Law (the "DGCL") for additional information.

General

Under the Certificate of Incorporation, we are authorized to issue up to 440,000,000 shares of capital stock, consisting of 400,000,000 shares of Common Stock and 40,000,000 shares of preferred stock, without par value ("Preferred Stock"). As of February 10, 2020, there were 170,047,076 shares of Common Stock outstanding and no shares of Preferred Stock outstanding. The shares of Common Stock currently outstanding are fully paid and non-assessable.

Voting Rights

The holders of Common Stock are entitled to one vote per share on all matters voted on by the stockholders, including the election of directors. Our Common Stock does not have cumulative voting rights.

Dividend Rights

The holders of Common Stock are entitled to receive dividends when, as and if declared by the U. S. Steel board of directors out of funds legally available therefor, subject to the rights of any shares of Preferred Stock at the time outstanding.

Liquidation Rights

In the event of dissolution, liquidation or winding up of U. S. Steel, holders of the Common Stock will be entitled to share ratably in any assets remaining after the satisfaction in full of the prior rights of creditors, including holders of any then outstanding indebtedness, and subject to the aggregate liquidation preference and participation rights of any Preferred Stock then outstanding.

Other Rights and Preferences

Our Common Stock has no sinking fund or redemption provisions or preemptive, conversion or exchange rights.

Delaware Law, Our Certificate of Incorporation and By-Laws Contain Provisions That May Have an Anti-Takeover Effect

Delaware Law. As a Delaware corporation, we are subject to the provisions of Section 203 of the DGCL. In general, Section 203 prohibits a publicly-held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years following the time that the person became an interested stockholder, unless:

- Prior to the time that the person became an interested stockholder the corporation's board of directors approved either the business combination or the transaction that resulted in the stockholders becoming an interested stockholder;
- Upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the stockholder owned at least 85% of the outstanding voting stock of the corporation at the time the transaction commenced, excluding for the purpose of determining the number of shares outstanding those shares owned by the corporation's officers and directors and by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- At or subsequent to the time, the business combination is approved by the corporation's board of directors and authorized at an annual or special meeting of its stockholders, and not by written consent, by the affirmative vote of at least 66% of its outstanding voting stock that is not owned by the interested stockholder.

A "business combination" includes, among other things, mergers, asset sales or other transactions resulting in a financial benefit to the stockholder. An "interested stockholder" is a person who, together with affiliates and associates, owns (or within three years did own) 15% or more of the corporation's voting stock.

Certificate of Incorporation and By-Laws. Various provisions contained in the Certificate of Incorporation and the By-laws could delay or discourage stockholder actions with respect to transactions involving an actual or potential change in control of us or a change in our management and may limit the ability of our stockholders to remove current management or approve transactions that our stockholders may deem to be in their best interests. Among other things, these provisions:

- require that any action required or permitted to be taken by our stockholders must be effected at a duly called annual or special meeting and may not be taken by written consent;
- provide that special meetings of stockholders may be called only by the board of directors and not by the stockholders;
- do not permit cumulative voting for directors;
- permit the issuance of Preferred Stock, at the discretion of our board of directors, from time to time, in one or more series, without further action by our stockholders, unless approval of our stockholders is deemed advisable by our board of directors or required by applicable law, regulation or stock exchange listing requirements; and
- provide that vacancies in our board of directors may be filled only by the affirmative vote of a majority of the remaining directors.

Listing

The principal market on which the Common Stock is traded is the New York Stock Exchange, where it trades under trading symbol "X". The Common Stock is also traded on the Chicago Stock Exchange under the symbol "X".

Stock Transfer Agent and Registrar

EQ Shareowner Services, 1110 Centre Pointe Curve Suite 101, Mendota Heights MN 55120-4100, serves as transfer agent and registrar for the Common Stock.

**UNITED STATES STEEL CORPORATION
DEFERRED COMPENSATION PROGRAM
FOR NON-EMPLOYEE DIRECTORS**

(Effective as of July 26, 2016, as amended on October 28, 2019)

1. **Purpose.** The United States Steel Corporation Deferred Compensation Program for Non-Employee Directors, a program under the United States Steel Corporation 2016 Omnibus Incentive Compensation Plan, is intended to enable the Corporation to attract and retain non-employee Directors and to enhance the long-term mutuality of interest between such Directors and shareholders of the Corporation.
2. **Definitions.** Unless otherwise defined herein, capitalized terms shall have the meanings set forth in the Plan. The following definitions apply to this Program and to the Deferral Election Forms:
 - a) **Base Retainer** means the means that portion of a Participant's compensation that is fixed and paid without regard to his/her attendance at meetings, as such amount is established for or during the Deferral Year, subject to Section 4(c), exclusive of fees paid to chairs of committees or the Board.
 - b) **Beneficiary** or **Beneficiaries** means a person or persons or other entity designated on a Beneficiary Designation Form by a Participant as allowed in subsection 7(c) of this Program to receive Deferred Stock Benefit payments. If there is no valid designation by the Participant, or if the designated Beneficiary or Beneficiaries fail to survive the Participant or otherwise fail to take the Deferred Stock Benefit, the Participant's Beneficiary is the Participant's surviving spouse or, if there is no surviving spouse, the Participant's estate.
 - c) **Beneficiary Designation Form** means that portion of the Deferral Election Form that is used by a Participant according to this Program to name his/her Beneficiary or Beneficiaries.
 - d) **Board** means the board of directors of United States Steel Corporation.
 - e) **Committee** means the Corporate Governance & Sustainability Committee of the Board.
 - f) **Common Stock** means the common stock of the Corporation, par value \$1.00 per share.
 - g) **Common Stock Unit** shall have the meaning assigned to it in Section 6(a).
 - h) **Corporation** means United States Steel Corporation.
 - i) **Deferral Election Form** means a document governed by the provisions of Section 4 of this Program by which a Participant elects the portion of his or her Retainer Fee to be deferred and designates a Beneficiary.
 - j) **Deferral Year** means a calendar year for which a Participant has a Deferred Stock Benefit.
 - k) **Deferred Stock Account** means that bookkeeping record established for each Participant to reflect the status of his/her Deferred Stock Benefits under this Program. A Deferred Stock Account is established only for purposes of measuring a Deferred Stock Benefit and not to segregate assets or to identify assets that may or must be used to satisfy a Deferred Stock Benefit. A Deferred Stock Account will be credited with that portion of the Participant's Retainer Fee deferred as a Deferred Stock Benefit according to a Deferral Election Form and according to Sections 3 and 6 of this Program. A Deferred Stock Account will also be adjusted periodically with amounts specified under subsections 6(a)(iii) through 6(a)(v) of this Program.
 - l) **Deferred Stock Benefit** means the benefit that results in distributions governed by sections 6 and 7.
 - m) **Directors** means those duly named members of the Board.
 - n) **Election Date** means the date established by this Program as the date before which a Participant must submit a valid Deferral Election Form to the Committee. For the Deferral Year during which an individual first becomes a Participant, the Election Date is the earlier of (i) 30 days following the date on which the individual becomes a Participant and (ii) December 31 of such Deferral Year. For each subsequent Deferral Year, the Election Date is December 31 of the preceding calendar year. Despite the two preceding sentences, the Committee may set an earlier date as the Election Date for any Deferral Year.
 - o) **Participant** means a Director who is not simultaneously an employee of the Corporation.
 - p) **Plan** means the United States Steel Corporation 2016 Omnibus Incentive Compensation Plan, or any successor plan.
 - q) **Program** means the United States Steel Corporation Deferred Compensation Program for Non-Employee Directors under the Plan.
 - r) **Retainer Fee** means the Base Retainer together with any additional amounts paid to chairs of the committees of the Board or the chairman of the Board.
 - s) **Terminate, Terminating, or Termination**, with respect to a Participant, means cessation of his/her relationship with the Corporation as a Director

whether by resignation, retirement, death, disability or severance for any other reason. The terms “Terminate”, “Terminating”, and “Termination”, when used in the context of a condition to, or timing of, payment hereunder, shall be interpreted to mean a “separation from service” as that term is used in Section 409A of the Internal Revenue Code of 1986, as amended (“Section 409A”).

3. **Minimum Stock-Based Compensation.** Each Person who becomes a Participant is required to defer at least 55% of his/her Retainer Fee in the form of Common Stock Units and may increase such amount pursuant to a Deferral Election.
4. **Deferral Election.** A deferral election is valid when a Deferral Election Form is completed, signed by the Participant, and received by the Committee or its designee. Deferral elections are governed by the provisions of this section.
 - a) A Participant may elect a Deferred Stock Benefit for any Deferral Year, subject to the Election Date Requirements, if he/she is a Participant at the beginning of that Deferral Year or becomes a Participant during the Deferral Year.
 - b) Before each Deferral Year’s Election Date, each Participant will be provided with a Deferral Election Form. Subject to Section 3, a Participant may elect on or before the Election Date to defer until Termination the receipt of all or part of his/her Retainer Fee for the Deferral Year in the form of a Deferred Stock Benefit; provided, however, that no deferral election shall be effective for any portion of a Retainer Fee earned prior to the completion of the deferral election.
 - c) A Participant may not revoke or amend a Deferral Election Form after the Deferral Year begins with respect to such Deferral Year, and no re-allocation between fixed and variable compensation (if any) otherwise payable during the year shall be permitted to indirectly amend such Deferral Election Form or the amount of Retainer Fees subject thereto. Any revocation before the beginning of the Deferral Year is the same as a failure to submit a Deferral Election Form. Any writing signed by a Participant expressing an intention to revoke his/her Deferral Election Form and delivered to the Committee or its designee before the close of business on the relevant Election Date is a revocation.
5. **Effect of No Election.** In the case of a person who does not submit a valid Deferral Election Form on or before the relevant Election Date, the minimum required portion of such Participant’s Retainer Fee will become a Deferred Stock Benefit, in accordance with Section 3.

6. **Deferred Stock Benefits**

- a) Deferred Stock Benefits will consist of Common Stock Units and will be recorded in a Deferred Stock Account for each Participant. “Common Stock Unit” shall mean a book-entry unit equal in value to a share of Common Stock on the date specified below. Each Common Stock Unit will increase or decrease in value by the same amount and with the same frequency as the fair market value of a share of Common Stock. Each Deferred Stock Account will be credited or adjusted as follows:
 1. Participant’s First Deferral Year. For the Deferral Year during which an individual first becomes a Participant, on the 15th day of the month following the Election Date, the Participant’s Deferred Stock Account will be credited with a quantity of Common Stock Units, including fractional units, determined by dividing (A) the amount of the Retainer Fee that the Participant has elected to defer (or if a valid Deferral Election Form has not been submitted on or before the relevant Election Date, the amount specified in Section 5 above) by (B) the closing price of a share of Common Stock on the New York Stock Exchange (“NYSE”) on the Election Date (or if such date was not a trading day on the immediately preceding trading day).
 2. Subsequent Deferral Years. On January 15th of each subsequent Deferral Year during which the Participant remains a Director (or, if such day is not a business day, on the next succeeding business day), the Participant’s Deferred Stock Account will be credited with a quantity of Common Stock Units, including fractional units, determined by dividing (A) the amount of the Retainer Fee that the Participant has elected to defer (or if a valid Deferral Election Form has not been submitted on or before the relevant Election Date, the amount specified in Section 5 above) by (B) the closing price of a share of Common Stock on the NYSE on the last trading day of the preceding calendar year.
 3. Cash Dividends. Each Deferred Stock Account will be credited each calendar quarter, on the date on which cash dividends are reinvested under the Corporation’s dividend reinvestment and stock purchase plans (the “Investment Date”), with a quantity of additional Common Stock Units, including fractional units, determined by dividing (A) the Dividend Payment Amount by (B) the Stock Purchase Price. “Dividend Payment Amount” means the product of the number of Common Stock Units in the Deferred Stock Account on the dividend payment date times the amount of the cash dividend payable on a share of Common Stock. “Stock Purchase Price” means the closing price of a share of Common Stock on the NYSE on the most recent trading day preceding the Investment Date.
 4. Stock Dividends, Stock Splits and Reverse Stock Splits. In the event of a stock dividend, stock split, reverse stock split or similar event affecting the Common Stock, the number of Common Stock Units in the Deferred Stock Account shall be adjusted in an equitable and proportional manner to reflect such event in order to prevent the dilution or enlargement of Participant’s rights.
 5. Other Adjustments to Deferred Stock Account. Amounts credited to a Participant’s Deferred Stock Account pursuant to this Section 6 are based upon the assumption that the amount of the Retainer Fee which the Participant is entitled to receive will remain unchanged during the Deferral Year. However, it is possible that certain events may occur which change the amount of the Retainer Fee that the Participant is entitled to receive. Accordingly, the number of Common Stock Units in a Participant’s Deferred Stock Account shall be adjusted from time to time in an equitable and proportional manner consistent with Section 409A to reflect the occurrence of any the following events and the effect that such an event has

on the actual amount of the Retainer Fee which the Participant is entitled to receive during the Deferral Year:

- A. a prospective uniform increase or decrease in the amount of the Retainer Fee applicable to all Participant's, excluding any reallocation between fixed and variable compensation during a Deferral Year;
- B. the Termination of a Participant;
- C. the appointment or resignation of a Participant as the Presiding Director, a Committee Chairperson or other similar position resulting in a prospective increase or decrease in the amount of the Retainer Fee applicable to such Participant; or
- D. any other similar event or circumstance.

Such upward adjustments shall be made as follows: on the 15th day of the month following the effective date of the change causing the adjustment, the Participant's Deferred Stock Account will be credited with a quantity of Common Stock Units, including fractional units, determined by dividing (A) the amount of the Retainer Fee that the Participant has elected to defer (or if a valid Deferral Election Form has not been submitted on or before the relevant Election Date, the amount specified in Section 5 above) by (B) the closing price of a share of Common Stock on the NYSE on the effective date of the change causing the adjustment (or if such date was not a trading day on the immediately preceding trading day).

Downward adjustments due to a retirement or resignation during the year shall be made by deducting a quantity of Common Stock Units, including fractional units, determined by (A) dividing the number of full months not serving as a Director by 12, and (B) multiplying by the number of Common Stock Units credited in January of the retirement year.

- b) If a trust is established under section 8(b), an electing Participant may advise the trustee under the governing trust agreement as to the voting of shares of the Common Stock allocated to that Participant's separate account under the trust according to this subsection and provisions of the governing trust agreement. Before each annual or special meeting of the Corporation's shareholders, the trustee under the governing trust agreement must furnish each Participant with a copy of the proxy solicitation and other relevant material for the meeting as furnished to the trustee by the Corporation, and a form addressed to the trustee requesting the Participant's confidential advice as to the voting of shares of the Common Stock allocated to his/her account as of the valuation date established under the governing trust agreement preceding the record date.

7. Distributions

- a) Except as set forth in Section 7(d), a Deferred Stock Benefit will be distributed in shares of Common Stock equal to the number of, the whole Common Stock Units credited to the Participant's Deferred Stock Account; provided, however, cash will be paid in lieu of fractional shares of the Common Stock otherwise distributable, calculated on the basis of the closing price of a share of Common Stock on the NYSE on the date of Termination (or if such date is not a trading day on the immediately preceding trading day).
- b) Delivery of Common Stock and any cash payable in lieu of fractional shares will be made on the first business day of the seventh month following the Participant's Termination.
- c) Deferred Stock Benefits may not be assigned by a Participant or Beneficiary. A Participant may use a Beneficiary Designation Form to designate one or more Beneficiaries for all of his/her Deferred Stock Benefits; such designations are revocable. Each Beneficiary will receive his/her portion of the Participant's otherwise unpaid Deferred Stock Account on the scheduled payment date as set forth in Section 7(b).
- d) Upon the occurrence of a Change in Control resulting in a Participant's Termination, the Corporation shall pay such Participant, on or before the fifth business day following such Termination, cash in an aggregate amount equal to the value of such Participant's Deferred Stock Account on the date of the Change in Control, as determined using the higher of the closing price of the Common Stock on the NYSE on such date or the highest per-share price actually paid in connection with the consummation of such Change in Control. For purposes of this Program, "Change in Control" shall mean a change in control of a nature that would be required to be reported in response to Item 6(e) of Schedule 14A of Regulation 14A promulgated under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), whether or not the Corporation is then subject to such reporting requirement; provided, that, without limitation, such a change in control shall be deemed to have occurred if:
 - 1. any person (as defined in Sections 13(d) and 14(d) of the Exchange Act) (a "Person") is or becomes the "beneficial owner" (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of securities of the Corporation representing twenty percent (20%) or more of the combined voting power of the Corporation's then outstanding voting securities; provided, however, that for purposes of this Program the term "Person" shall not include (i) the Corporation or any of its subsidiaries, (ii) a trustee or other fiduciary holding securities under an employee benefit plan of the Corporation or any of its subsidiaries, (iii) an underwriter temporarily holding securities pursuant to an offering of such securities, or (iv) a corporation owned, directly or indirectly, by the stockholders of the Corporation in substantially the same proportions as their ownership of stock of the Corporation; or
 - 2. the following individuals cease for any reason to constitute a majority of the number of directors then serving: individuals who, on the date hereof, constitute the Board and any new director (other than a director whose initial assumption of office is in connection with an actual or

threatened election contest including but not limited to a consent solicitation, relating to the election of directors of the Corporation) whose appointment or election by the Board or nomination for election by the Corporation's stockholders was approved by a vote of at least two-thirds (2/3) of the directors then still in office who either were directors on the date hereof or whose appointment, election or nomination for election was previously so approved; or

3. there is consummated a merger or consolidation of the Corporation or a subsidiary thereof with any other corporation, other than a merger or consolidation which would result in the holders of the voting securities of the Corporation outstanding immediately prior thereto holding securities which represent immediately after such merger or consolidation at least 50% of the combined voting power of the voting securities of the entity surviving the merger or consolidation (or the parent of such surviving entity) or the shareholders of the Corporation approve a plan of complete liquidation of the Corporation, or there is consummated the sale or other disposition of all or substantially all of the Corporation's assets.

8. Corporation's Obligation

- a) The Program is unfunded. A Deferred Stock Benefit is at all times solely a contractual obligation of the Corporation. A Participant and his/her Beneficiaries have no right, title or interest in the Deferred Stock Benefits or any claim against them. Except according to section 8(b), the Corporation will not segregate any funds or assets for Deferred Stock Benefits nor issue any notes or security for the payment of any Deferred Stock Benefit.
 - b) The Corporation may establish a grantor trust and transfer to that trust shares of Common Stock or other assets. The governing trust agreement must require a separate account to be established for each electing Participant. The governing trust agreement must also require that all Corporation assets held in trust remain at all times subject to the Corporation's judgment creditors.
9. **No Control by Participant.** A Participant has no control over Deferred Stock Benefits except according to his/her Deferral Election Forms and Beneficiary Designation Form.
10. **Claims Against Participant's Deferred Stock Benefits.** A Deferred Stock Account relating to a Participant under this Program is not subject in any manner to anticipation, alienation, sale, transfer, assignment, pledge, encumbrance, or charge, and any attempt to do so is void. A Deferred Stock Benefit is not subject to attachment or legal process for a Participant's debts or other obligations. Nothing contained in this Program gives any Participant any interest, lien or claim against any specific asset of the Company. A Participant or his/her beneficiary has no rights other than as a general creditor.
11. **Amendment or Termination.** This Program may be altered, amended, suspended, or terminated at any time by the Board.
12. **Notices.** Notices and elections under this Program must be in writing. A notice or election is deemed delivered if it is delivered personally or if it is mailed by registered or certified mail to the person at his/her last known business address.
13. **Waiver.** The waiver of a breach of any provision in this Program does not operate as and may not be construed as a waiver of any later breach.
14. **Construction.** This Program is created, adopted, maintained and governed according to the laws of the State of Delaware. Headings and captions are only for convenience; they do not have substantive meaning. If a provision of this Program is not valid or not enforceable, the validity or enforceability of any other provision is not affected. Use of one gender includes all, and the singular and plural include each other.
15. **Effective Date.** This Program shall be effective as a program under the 2016 Omnibus Incentive Compensation Plan as of July 26, 2016.

United States Steel Corporation
Non-Employee Director Stock Program
of the 2016 Omnibus Incentive Compensation Plan

While this Program is in effect, United States Steel Corporation will supplement the fees paid to each non-employee director of the Corporation with a one-time grant of shares of common stock of the Corporation. The number of shares of common stock to be granted shall be equal to that number of shares purchased in an open market transaction or transactions by the director during the six months following the effective date on which such non-employee director first becomes a member of the Board of Directors, up to a maximum grant of 1,000 shares of common stock. If the non-employee director is prohibited from making an open market purchase due to a special trading blackout period imposed under the Corporation's Insider Trading Policy during any portion of the six-month period, the six-month period shall be extended by the number of days during which purchases were prohibited due to that special trading blackout. The grant will be made no later than the fifth business day following the date on which open market shares were purchased.

The shares issued under this Program will be registered under the Securities Act of 1933; however, these shares will be subject to the provisions of the securities laws pertaining to shares acquired from an issuer, including Rule 144 of the Securities and Exchange Commission, which laws affect the transferability of such shares.

Effective November 1, 2019.

SEPARATION AGREEMENT AND RELEASE

This Separation Agreement and Release ("Agreement") is made and entered into by and between Kevin P. Bradley ("Bradley") and UNITED STATES STEEL CORPORATION (the "Company") as of the date of Bradley's signature set forth below (the "Execution Date").

- SEPARATION.** Bradley notified the Company, and the Company acknowledges, that he is voluntarily resigning from the position of Executive Vice President & Chief Financial Officer effective November 5, 2019, but, at the Company's request, will remain an employee with the Company to assist with the transition until he voluntarily resigns all positions, titles, duties, authorities, and responsibilities with, arising out of, or relating to, his employment with the Company on December 31, 2019 (the "Separation Date"). During the period between November 5, 2019 and the Separation Date (the "Transition Period"), Bradley has agreed to remain an employee of the Company and on the Company's payroll as a special advisor to the CEO and provide transitional services, assisting with specified strategic goals, and will make himself available for consultation, as needed.

In addition, Bradley acknowledges, understands and agrees that:

- All of his service, compensation and benefit accruals from the Company and its compensation and benefit plans shall cease as of the Separation Date.
 - Following the Separation Date, he will have the opportunity to continue coverage under the applicable group health plan in accordance with the Consolidated Omnibus Budget Reconciliation Act of 1985 ("COBRA").
 - He is eligible to receive accrued and vested benefits to the extent provided in accordance with the terms of the United States Steel Corporation Savings Fund Plan for Salaried Employees (understanding that the retirement and matching contribution accounts are not vested under the plan and will be forfeited).
 - He is eligible to receive payment for (1) all earned but unpaid base salary through his Separation Date and (2) accrued and unused vacation time as of the Separation Date (which is understood and agreed to be 5 weeks as of the Execution Date and which Bradley may use during the Transition Period).
 - Given that Bradley initiated the separation, he is not eligible for and will not receive any benefits under the United States Steel Corporation Supplemental Unemployment Benefit Program for Non-Union Employees or any other severance benefits except as set forth in this Agreement.
 - He is not eligible for and will not receive a payment under the Executive Management Annual Incentive Compensation Program for calendar year 2019.
 - Except as set forth in Paragraph 2 below, he is not eligible for and will not receive a distribution under the United States Steel Corporation Supplemental Retirement Account Program, the United States Steel Corporation Supplemental Thrift Program, and the United States Steel Corporation Non Tax-Qualified Retirement Account Program (together, the "Non-Qualified Deferred Compensation Plans").
 - Except as set forth in Paragraph 2 below, for purposes of the Long-Term Incentive Program (the "LTIP"), any unvested stock options, restricted stock units ("RSUs"), and Total Shareholder Return ("TSR") and Return on Capital Employed ("ROCE") performance awards (collectively, "Performance Awards") will be forfeited as of the Separation Date, and he will have 90 days after the Separation Date to exercise any vested stock options.
 - Bradley will not receive any Performance Awards, RSU grants, and/or stock option awards that have not yet been granted to him as of the Execution Date.
- CONSIDERATION.** Bradley acknowledges, understands and agrees that the Company is not obligated to pay him any type of severance payments or benefits. However, in consideration for executing this Agreement and the General Release attached hereto as Attachment A no sooner than the day after the Separation Date and otherwise on or before January 6, 2020, and not revoking this Agreement and the General Release in accordance with the terms therein, and abiding by all terms and conditions contained herein, the Company agrees as follows:
 - Bradley's voluntary resignation will be treated as a "termination with consent" and consequently Bradley will be fully vested for purposes of the Non-Qualified Deferred Compensation Plans. Pursuant to Section 409A of the Internal Revenue Code of 1986, as amended (the "Code"), payments under the Non-Qualified Deferred Compensation Plans, for which the payment event is a separation of service (within the meaning of such programs), shall be made on the first business day of the seventh month following Bradley's separation from service (or, if earlier, the last business day of the calendar month following the month of his death). During this six-month delay, interest will accrue and be payable in accordance with terms of the applicable plan.
 - Bradley will receive pro-rata vesting of the outstanding RSU grants and stock option awards made under the LTIP, calculated in each case as of the Separation Date. Based on a Separation Date of December 31, 2019, Bradley will vest in an additional 2,185 stock options and 16,114 RSUs. In accordance with the terms of the grant agreements, any RSUs that are accelerated will not be paid to Bradley until the first business day of the seventh month following Bradley's Separation Date. The options will become exercisable on the next scheduled vesting date, which for the 2017 award is August 1, 2020. Bradley will have until the fifth anniversary of the Separation Date to exercise any vested stock options.
 - Based on a Separation Date of December 31, 2019, Bradley will receive pro-rata vesting of the target number of shares or target amount of the Performance Awards made under the LTIP, as follows:
 - 13,080 shares of 2017 TSR performance awards
 - \$262,500 of 2017 ROCE performance cash awards
 - 6,573 shares of 2018 TSR performance awards
 - 9,547 shares of 2018 ROCE performance equity awards
 - 7,187 shares of 2019 TSR performance awards
 - 8,780 shares of 2019 ROCE performance equity awardsThe payout for the vested Performance Awards, if any, will be calculated based on the Company's achievement of the performance goals specified in the relevant award agreement, and any such payout will be made at the end of the relevant performance period as provided in the respective award agreement, which for the 2017 performance awards would be 2020, for the 2018 performance awards would be 2021, and for the 2019 performance awards would be 2022.
 - The Company will pay Bradley a severance benefit in the total amount of One Million Four Hundred Thousand Dollars (\$1,400,000), which represents the equivalent, in the aggregate, to one year of Bradley's current base salary plus one year of target bonus equal to one hundred percent (100%) of such base salary. The foregoing amount will be paid in a lump sum on the first regular payroll date following the General Release Effective Date (as defined below).
 - The Company will pay Bradley the total amount of Fifty Thousand Dollars (\$50,000) for additional incidental expenses and services. Such payment will constitute taxable income to Bradley to the extent required by law and will be paid in a single lump sum upon the first payroll date following the General Release Effective Date.

- (vi) The payments referenced above will not be treated as covered compensation under any of the Company's compensation, retirement, or benefit programs. These payments will be subject to all applicable tax and other withholdings and deductions. These payments are also conditioned upon Bradley complying with his obligations under this Agreement. If Bradley materially breaches any such obligations at any time, these payments will be forfeited, and the Company will be entitled to repayment of any amounts it already paid, including equity or cash amounts Bradley receives pursuant to any LTIP award vesting.
- (vii) If Bradley elects to continue his healthcare coverage (including family coverage) under the COBRA continuation provisions of the Company's group health plans following the General Release Effective Date, the Company will reimburse Bradley for a period of up to twelve (12) months for the cost of such coverage. No reimbursement will be made for COBRA continuation coverage after the date that Bradley becomes eligible for group health coverage provided by another employer. The Company will treat the reimbursements as taxable income to Bradley to the extent required by law.
- (viii) Bradley understands, acknowledges and agrees that the Company is not required to provide any of the consideration described above if he does not execute this Agreement, and therefore, it represents valuable consideration which is in addition to anything else of value to which he was already entitled.
- (ix) Bradley acknowledges, understands and agrees that, except as otherwise set forth in this Agreement, he will not receive, nor is he entitled to receive, any other consideration, payments, incentive payments, reimbursements, bonuses, stock, stock options, equity interests, or other benefits or compensation of any kind. Bradley also acknowledges that, except as otherwise expressly set forth herein, he is forfeiting, for no consideration other than what is paid or otherwise provided under this Agreement, all of his unvested restricted stock, stock options, performance units, and other equity or incentive-based awards.
- (x) This Agreement will not affect any rights Bradley may have to receive his vested benefits under the terms of the United States Steel Corporation Savings Fund Plan for Salaried Employees.

3. **RELEASE.** In exchange for the Consideration provided under Paragraph 2 of this Agreement, Bradley, on behalf of himself and his agents, representatives, attorneys, heirs, executors, administrators, survivors, trustees, beneficiaries, and assigns, of his own free will and in good faith, completely, irrevocably and unconditionally releases and discharges forever the Company and its successors, assigns, divisions, subsidiaries, related or affiliated companies, past and present officers, directors, shareholders, members, employees, representatives and agents (separately and collectively, the "Company Releasees") from all causes of action, claims, charges, demands, costs and expenses for damages which he now has, or may have hereafter, whether known or unknown, whether asserted or not, arising out of or on account of his employment relationship with the Company, or his separation from employment with the Company, or any other transactions, occurrences, acts or omissions or any loss, damage, or injury whatsoever, known or unknown, suspected or unsuspected, resulting from any act or omission on the part of the Company, committed or omitted as of the Execution Date (collectively, the "Company Released Claims").

The Company Released Claims include, but are not limited to, any claims of discrimination on any basis, including age, race, color, national origin, religion, sex, gender or gender identity, sexual orientation, veteran's status, whistleblower status, disability or handicap arising under any federal, state, or local statute, ordinance, order or law, including but not limited to the Age Discrimination in Employment Act ("ADEA") as applicable, Title VII of the Civil Rights Act of 1964, as amended, Sections 1981 and 1983 of the Civil Rights Act of 1866, the Americans with Disabilities Act, the Uniformed Services Employment and Reemployment Rights Act, and the Employee Retirement Income Security Act; any claims under the Worker Adjustment and Retraining Notification Act; the Family and Medical Leave Act; the Pennsylvania Human Relations Act; the Pennsylvania Whistleblower Law; any claim that the Company breached any contract or promise express or implied, or any term or condition of employment; any claim for wages, benefits, bonus, severance pay or compensation of any kind (except as specifically provided herein); any torts or any claims for promissory estoppel; any claim of wrongful discharge, and/or any other claims under any federal, state or local laws arising out of or related to his employment or separation from employment with the Company. It is expressly understood and agreed that the foregoing is a general release of all claims and rights against the Company Releasees, except those claims that may not be waived as a matter of law.

Subject to the Executive Officer Recoupment (Clawback) Policy, which Bradley agrees will apply to him even after the Separation Date, and to the extent permitted by law, in exchange for and in consideration of Bradley's promises and post-employment obligations (including the release of the Company Released Claims) herein, the Company of its own free will and in good faith, completely, irrevocably and unconditionally releases and discharges forever Bradley, his successors, assigns, heirs, representative and estate (the "Employee Releasees") from all causes of action, claims, charges, demands, costs and expenses for damages which it now has, or may have hereafter, whether known or unknown, whether asserted or not, arising out of or on account of Bradley's employment relationship with the Company, or his separation from employment with the Company, or any other transactions, occurrences, acts or omissions or any loss, damage, or injury whatsoever, known or unknown, suspected or unsuspected, resulting from any act or omission on the part of Bradley, committed or omitted as of the Execution Date.

Notwithstanding the foregoing, this release shall not apply to: (i) any rights of the parties that arise after the Execution Date, including rights and obligations contained in this Agreement; (ii) any rights that cannot be waived as a matter of law; (iii) with respect to Bradley, any rights to unemployment, state disability, paid family leave or COBRA insurance benefits; (iv) with respect to Bradley, any rights that he would otherwise have to be protected or indemnified by the Company against claims by third parties related to his employment under and subject to applicable law, applicable corporate bylaws, and directors and officers (D&O) liability policies; (v) with respect to Bradley, any rights as a holder of securities of the Company; (vi) with respect to the Company, any claim that relates to or arises from an act or omission by Bradley that is an act of fraud, embezzlement or willful misconduct by Bradley or that would constitute a crime committed by Bradley under applicable federal, state or local law.

Bradley also agrees that no sooner than the day after the Separation Date and in any event no later than January 6, 2020, Bradley will execute and deliver to the Company an additional General Release, in the form attached hereto as Attachment A, that provides the same release of any and all claims and rights against the Company Releasees. The Company also agrees that it will execute the additional General Release in the form attached hereto as Attachment A promptly upon receiving the executed General Release from Bradley. The parties acknowledge that this Agreement provides them with adequate consideration to execute the subsequent General Release.

- 4. **PROCEEDINGS AND COOPERATION.** Bradley presently affirms that he has not filed or caused to be filed, and is not presently a party to, any claim against the Company Releasees with any local, state, or federal court, or any governmental, administrative, investigative, or other agency or board. Furthermore, Bradley also agrees to reasonably cooperate with and assist the Company in matters concerning prior business arrangements, investigations, pending litigation or litigation which may arise in the future concerning matters about which he has personal knowledge or which were within the purview of his job responsibilities at the Company. Bradley agrees to assist in the prosecution or defense of such claims involving the Company, whether or not such claims involve litigation, including giving truthful testimony as needed. The Company agrees to reimburse Bradley for any reasonable out-of-pocket expenses incurred in complying with his obligations under this Paragraph 4.
- 5. **REPRESENTATIONS.** Bradley represents that: (i) the Company does not owe him any compensation, wages, vacation, incentive pay, commissions, bonuses, expense reimbursements or other amounts, other than that specifically provided for in this Agreement; (ii) he has been granted all leaves of absences to which he is entitled; (iii) he has reported to the Company any and all work-related injuries that he has suffered or sustained during his employment with the Company up to the Execution Date; (iv) Bradley is not aware of any factual basis that would provide the Company with "cause" within the meaning of any Company plan or equity-based award agreement with him; (v) in connection with any matter involving or concerning any governmental regulatory, or enforcement authority or agency, he is not aware of any factual or legal basis for any legitimate claim that the Company or any of its affiliated entities is in violation of any international, federal, state or local law, rule or regulation.
- 6. **NON-DISPARAGEMENT.** Bradley agrees to refrain from making, whether verbally or in writing, any critical, denigrating, disparaging, defamatory or slanderous comments, references or characterizations concerning the Company and/or its former or current officers, directors, employees, independent contractors, agents, products, or services. Bradley further agrees that he shall not provide any information, make any statements or take any action that would cause the Company, its directors, officers, employees, agents and/or independent contractors embarrassment or humiliation or otherwise cause or contribute to the Company's being held in disrepute. Bradley understands that nothing in this Agreement is intended to prevent him from making truthful statements in any legal proceeding or as otherwise required by law.

The Company agrees to advise its directors and executive officers to refrain from making or approving disparaging comments regarding Bradley, except as may be required in any legal proceeding or as otherwise required by law, subpoena, court or arbitral order, agency or regulatory request, or the like.

- 7. **NON-SOLICITATION.** Bradley agrees that for two (2) years after the date he executes this Agreement, he will not solicit or attempt to solicit any person or entity who is a director, officer, employee, independent contractor, representative or agent of the Company to cease or reduce the extent of their relationship with the Company.
- 8. **NON-COMPETITION.** Bradley agrees that for a period of twelve (12) months immediately following the Separation Date, he shall not, unless acting pursuant to the prior written

consent of the Company's Board of Directors, directly or indirectly (a) own, manage, operate, finance, join, control or participate in the ownership, operation, management, financing or control of, or be connected as an officer, director, employee, partner, principal, agent, representative, consultant or otherwise with, or use or permit his name to be used in connection with any Competing Business, or (b) solicit or divert to any Competing Business any individual or entity which is then a customer of the Company. The term "Competing Business" shall mean any business or enterprise engaged in the manufacture or sale of flat-rolled or tubular steel products within any state of the United States, the District of Columbia or any foreign country in which (i) the Company has engaged in any such business within twelve (12) months prior to his separation, (ii) or within the twelve (12) month period immediately following his separation. In the event that the provisions of this section should ever be adjudicated to exceed the time, geographic, product or other limitations permitted by applicable law in any jurisdiction, then such provisions shall be deemed reformed in such jurisdiction to the maximum time, geographic, product or other limitations permitted by applicable law. Notwithstanding the foregoing, ownership of one percent (1%) or less of any class of outstanding securities of a Competing Business shall not be deemed a violation of this Paragraph.

9. **PROTECTION OF COMPANY INFORMATION.** Bradley acknowledges that he received and was provided valuable non-public information obtained, possessed or developed by the Company in the ordinary course of its business and that the protection of such "Confidential Information" is of vital importance to the Company's business and interests. All such Confidential Information, whether written or not and whether marked as confidential or not, is presumed to be confidential. Examples of Confidential Information include, but are not limited to, non-public information concerning the Company's employees, directors, officers, customers, prices, sales techniques, estimating and pricing systems, internal cost controls, production processes and methods, employment practices, product planning and development programs, possible divestitures and acquisitions, marketing plans, product information, inventions, blueprints and sketches, technical and business concepts, training programs, legal, compliance and regulatory matters, regardless of whether devised, developed, produced, worked on, or invented in whole or in part by himself or others, and whether or not copyrightable, trademarkable, licensable, or reduced to practice. Notwithstanding the foregoing, Confidential Information shall not include information that is or becomes generally available to the public other than as a result of any disclosure resulting from an act or omission by Bradley. Bradley acknowledges and agrees that as an employee of the Company, he has been under a legal obligation to respect and protect such Confidential Information. Bradley agrees that he will not, directly or indirectly, at any time or in any manner whatsoever, use any such Confidential Information for his personal use or advantage, or disclose or make such Confidential Information available to others, regardless of how or when he came into possession of such Confidential Information. Subject to the provision of Paragraph 8 (Non- Competition), nothing herein prevents Bradley from using his general knowledge, skill, and experience in gainful employment by a third party after his employment with the Company.

Bradley represents that he has not, and will not, download, transfer, or take with him any Confidential Information or other Company property, documents, data or information. To the extent he has not done so prior to the Separation Date, Bradley agrees to immediately return to the Company all Confidential Information and all Company property, documents, data and other information, including but not limited to computers, electronic equipment, cell phones, badges, credit cards, which are or have been in his possession or control, whether or not they contain Confidential Information or relate to the Company's business. Nothing in this Agreement shall preclude Bradley from retaining, and using appropriately, documents and information relating to his personal entitlements and obligations (including, without limitation, any compensation and benefit plans and related documents) or any documents or information that solely contain personal information, it being understood that Bradley's obligations as to any Confidential Information contained in such retained documents and information shall persist as to such Confidential Information.

Bradley understands that pursuant to 18 U.S.C. § 1833(b), an individual will not be held criminally or civilly liable under any federal or state trade secret law for any disclosure of a trade secret that: (i) is made in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney solely for the purpose of reporting or investigating a suspected violation of law; or (ii) is made in a complaint or other document that is filed under seal in a lawsuit or other proceeding. Additionally, an individual suing an employer for retaliation for reporting a suspected violation of law may disclose a trade secret to his or her attorney and use the trade secret information in the court proceeding, provided the individual files any document containing the trade secret under seal and does not disclose the trade secret, except pursuant to court order.

10. **GOVERNMENT INVESTIGATIONS.** Bradley understands that nothing in this agreement shall be construed to prohibit him from reporting conduct to, providing truthful information to or participating in any investigation or proceeding conducted by any federal or state government agency or self-regulatory organization.
11. **REMEDIES.** Bradley understands the provisions in the above paragraphs are material to this Agreement, and that a material violation of which would constitute a material breach of this Agreement. In the event of a material breach or a threatened material breach by Bradley of any of the provisions of Paragraphs 6 (Nondisparagement), 7 (Non-Solicitation), 8 (Non-Competition), or 9 (Protection of Confidential Information), the Company, in addition and supplementary to other rights and remedies existing in its (or their) favor, shall be entitled to specific performance of each of such Paragraphs, including temporary, preliminary and/or permanent injunctive or other equitable relief from a court of competent jurisdiction in order to stop and/or prevent any violations of the provisions hereof (without posting a bond or other security), and shall also be entitled to require Bradley to account for and pay over to the Company all compensation, profits, moneys, accruals, increments or other benefits derived from or received as a result of any transactions constituting a material breach of the covenants contained herein, and shall also be entitled to cease paying or providing and be entitled to require Bradley to repay all amounts paid pursuant to Paragraph 2 (Consideration) of this Agreement, other than the \$50,000 under Paragraph 2(v), which shall serve as consideration for the Release in Paragraph 3. In addition, in the event of an alleged material breach or material violation by Bradley of Paragraph 8 (Non- Competition) of this Agreement, the restricted periods set forth therein shall be tolled until such material breach or violation has been duly cured.
12. **ADEA.** With specific regard to this Agreement, Bradley understands and acknowledges that:
- This Agreement constitutes an enforceable contract, and by signing this Agreement, he is waiving rights that he may have against the Company Releasees as of the Execution Date, including claims under the Age Discrimination in Employment Act ("ADEA") as applicable, as well as other federal, state and local laws, based on his employment or separation from employment with the Company;
 - He understands that he is not releasing any claims that may arise after the Effective Date (as defined in Paragraph 16 below);
 - He is receiving, in exchange for this Agreement, valuable consideration in addition to anything of value to which he is already entitled;
 - The Company has advised him to consult with an attorney prior to executing this Agreement;
 - He has a period of **21 calendar days** from the date he receives this Agreement, or so much of such 21-day period as he cares to utilize, to review, consider and sign this Agreement;
 - He may revoke this Agreement at any time within **seven (7) calendar days** after the Execution Date by delivering a written notice of revocation to the Company's General Counsel;
 - If he does not execute and deliver this Agreement within the 21-day period referenced in (e) above, or if he revokes this Agreement after signing it within the 7-day period referenced in (f) above, he will be ineligible to receive any of the consideration under this Agreement; and
 - The Company's obligation to provide the consideration under this Agreement is contingent upon
 - his execution of this Agreement and the expiration of the associated revocation period without his revocation of the Agreement, and
 - his execution of the General Release (pursuant to the last paragraph of Paragraph 3 above) and the expiration of the associated revocation period without his revocation of the General Release.
13. **NO ADMISSION.** Bradley acknowledges that nothing in this Agreement constitutes an admission by the Company of any liability or of any violation of any applicable law or regulation.
14. **MODIFICATION.** The provisions of this Agreement may not be modified by any subsequent agreement unless specifically approved in writing that is executed by the Company's General Counsel.
15. **SEVERABILITY.** Except as stated below with respect to the release set forth in Paragraph 3 and the General Release, each provision of this Agreement shall be enforceable independently of every other provision. If one or more provisions of this Agreement shall for any reason be held invalid, illegal, or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect or impair any other provision of this Agreement, but this Agreement shall be construed as if such invalid, illegal, or unenforceable provision had not been contained herein. To the extent that the Release set forth in Paragraph 3 above or the General Release is deemed to be illegal, invalid, or unenforceable, the parties will negotiate in good faith to amend such Release or General Release, and if unable to amend for any reason, Company shall not be obligated to honor any of the terms set forth herein and Bradley agrees to immediately return any amounts paid to Bradley by the Company pursuant to Paragraph 2 (Consideration) of this Agreement, to the maximum extent permitted by applicable law.
16. **EFFECTIVE DATE.** The "Effective Date" of this Agreement shall be the date that Bradley signs this Agreement, as reflected in the signature block hereto, unless timely

revoked in accordance with the provisions of Paragraph 12(f) above. The "General Release Effective Date" shall be the date that Bradley timely executes and delivers the General Release, as reflected in the signature block thereto, unless timely revoked in accordance with the provisions thereof.

17. **GOVERNING LAW; VENUE.** This Agreement, and any disputes arising from, relating to or touching upon the Agreement shall be construed under and governed by the laws of the Commonwealth of Pennsylvania except to the extent preempted by federal law and the venue for any such dispute shall be exclusively in the State or Federal Courts located in Allegheny County, Pennsylvania.
18. **ENTIRE AGREEMENT.** This Agreement constitutes the entire agreement between Bradley and the Company; this Agreement has been executed based upon the terms set forth herein; neither Bradley nor the Company have relied on any prior agreement or representation, whether oral or written, which is not set forth in this Agreement; no prior agreement, whether oral or written, shall have any effect on the terms and provisions of this Agreement; and all prior agreements, whether oral or written, relating to the subject matter hereof are expressly superseded and/or revoked by this Agreement.
19. **SECTION 409A.** Notwithstanding anything set forth in this Agreement, no amount payable pursuant to or as provided in this Agreement which constitutes a "deferral of compensation" within the meaning of Section 409A of the Code shall be paid unless and until Bradley has incurred a "separation from service" to the extent required to avoid adverse income tax consequences under Section 409A. Further, to the extent that Bradley is a "specified employee" within the meaning of Section 409A as of the date of Bradley's separation from service, no amount which constitutes nonqualified deferred compensation which is payable on account of Bradley's separation from service shall be paid to Bradley before the date (the "Delayed Payment Date") which is the first day of the seventh month after the date of Bradley's separation from service or, if earlier, the date of Bradley's death following such separation from service. The reimbursement of expenses or in-kind benefits, if any, provided pursuant to this Agreement shall be subject to the following conditions: (1) the expenses eligible for reimbursement or in-kind benefits in one taxable year shall not affect the expenses eligible for reimbursement or in-kind benefits in any other taxable year; (2) the reimbursement of eligible expenses or in-kind benefits shall be made promptly, subject to the Company's policies, but in no event later than the end of the year following the year in which such expense was incurred; and (3) the right to reimbursement or in-kind benefits shall not be subject to liquidation or exchange for another benefit.
20. **CONSTRUCTION.** No provision or construction of this Agreement shall be interpreted or construed against any party because that party or its legal representative drafted that provision. The captions and headings of the Paragraphs of this Agreement are for convenience only and are not to be considered in construing this Agreement. Unless the context of this Agreement clearly requires otherwise: (a) references to the plural include the singular, the singular the plural, and the part the whole; (b) references to one gender include all genders; (c) "or" has the inclusive meaning frequently identified with the phrase "and/or"; (d) "including" has the inclusive meaning frequently identified with the phrase "including but not limited to" or "including without limitation," (e) references to "hereunder," "herein" or "hereof" relate this Agreement as a whole, and (f) the terms "dollars" and "\$" refer to United States dollars. Paragraph, subparagraph, exhibit and schedule references are to this Agreement as originally executed unless otherwise specified. Any reference herein to any statute, rule, regulation, or Agreement, including this Agreement, shall be deemed to include such statute, rule, regulation or agreement as it may be modified, varied, amended or supplemented from time to time. Any reference herein to any person shall be deemed to include the heirs, personal representatives, successors and permitted assigns of such person.
21. **ASSIGNABILITY; BINDING NATURE.** This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors, assigns, heirs and permitted assigns. The Company shall require any legal successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to the business and/or assets of the Company to assume and perform this Agreement in the same manner and to the same extent that the Company would have been required to perform it if no succession had taken place. No rights or obligations of Bradley under this Agreement may be assigned or transferred by Bradley other than his rights to compensation and benefits, which may be transferred only by will or operation of law.
22. **COUNTERPARTS.** This Agreement and the General Release may be executed and delivered by exchange of facsimile copies or portable document format ("PDF") copies showing the signatures of each applicable party, and those signatures need not be affixed to the same copy. The facsimile copies or PDF copies showing the signatures of the parties together, as applicable, shall constitute one instrument. The facsimile or PDF copy of any party shall be treated as an original signature.
23. **VOLUNTARY EXECUTION.** After utilizing as much of the 21-day period above as he deems necessary to consider this matter, and after consulting with an attorney if he so elected, Bradley has freely executed and delivered this Agreement so as to secure the consideration provided hereunder.

Bradley and the Company have read and understand the provisions set forth above, and agree to be legally bound by this Agreement.

/s/ Kevin P. Bradley
Kevin P. Bradley

For the Company:

Date: 10/7/2019

/s/ Duane D. Holloway
Duane Holloway
Senior Vice President, General Counsel,
Date: 10/7/2019

Chief Ethics & Compliance Officer and Corporate Secretary

Attachment A General Release

In exchange for good and valuable consideration as described in Paragraph 2 (Consideration) of that certain Separation Agreement and Release ("Agreement") entered into between Kevin P. Bradley ("Bradley") and United States Steel Corporation (the "Company") to which this Attachment A is attached, Bradley on behalf of himself and his agents, representatives, attorneys, heirs, executors, administrators, survivors, trustees, beneficiaries, and assigns, of his own free will and in good faith, completely, irrevocably and unconditionally releases and discharges forever the Company and its successors, assigns, divisions, subsidiaries, related or affiliated companies, past and present officers, directors, shareholders, members, employees, representatives and agents (separately and collectively, the "Company Releasees") from all causes of action, claims, charges, demands, costs and expenses for damages which he now has, or may have hereafter, whether known or unknown, whether asserted or not, arising out of or on account of his employment relationship with the Company, or his separation from employment with the Company, or any other transactions, occurrences, acts or omissions or any loss, damage, or injury whatsoever, known or unknown, suspected or unsuspected, resulting from any act or omission on the part of the Company, committed or omitted as of the date of his execution and delivery of this General Release (the "General Release Execution Date") (collectively, the "Company Released Claims").

The Company Released Claims include, but are not limited to, any claims of discrimination on any basis, including age, race, color, national origin, religion, sex, gender or gender identity, sexual orientation, veteran's status, whistleblower status, disability or handicap arising under any federal, state, or local statute, ordinance, order or law, including but not limited to the Age Discrimination in Employment Act ("ADEA") as applicable, Title VII of the Civil Rights Act of 1964, as amended, Sections 1981 and 1983 of the Civil Rights Act of 1866, the Americans with Disabilities Act, the Uniformed Services Employment and Reemployment Rights Act, and the Employee Retirement Income Security Act; any claims under the Worker Adjustment and Retraining Notification Act; the Family and Medical Leave Act; the Pennsylvania Human Relations Act; the Pennsylvania Whistleblower Law; any claim that the Company breached any contract or promise express or implied, or any term or condition of employment; any claim for wages, benefits, bonus, severance pay or compensation of any kind (except as specifically provided herein); any torts or any claims for promissory estoppel; any claim of wrongful discharge, and/or any other claims under any federal, state or local laws arising out of or related to his employment or separation from employment with the Company. It is expressly understood and agreed that the foregoing is a general release of all claims and rights against the Company Releasees, except those claims that may not be waived as a matter of law.

Subject to the Executive Officer Recoupment (Clawback) Policy, which Bradley agrees will apply to him even after the Separation Date, and to the extent permitted by law, and in exchange for and in consideration of Bradley's promises and post-employment obligations (including the release of the Company Released Claims) in the Agreement, the Company, of its own free will and in good faith, completely, irrevocably and unconditionally releases and discharges forever Bradley, his successors, assigns, heirs, representatives and estate (the "Employee Releasees") from all causes of action, claims, charges, demands, costs and expenses for damages which it now has, or may have hereafter, whether known or unknown, whether asserted or not, arising out of or on account of his employment relationship with the Company, or his separation from employment with the Company, or any other transactions, occurrences, acts or omissions or any loss, damage, or injury whatsoever, known or unknown, suspected or unsuspected, resulting from any act or omission on the part of Bradley, committed or omitted as of the General Release Execution Date.

Notwithstanding the foregoing, this release shall not apply to: (i) any rights of the parties that arise after the General Release Execution Date, including rights and obligations contained in this Agreement; (ii) any rights that cannot be waived as a matter of law; (iii) with respect to Bradley, any rights to unemployment, state disability, paid family leave or COBRA insurance benefits; (iv) with respect to Bradley, any rights that he would otherwise have to be protected or indemnified by the Company against claims by third parties related to his employment under and subject to applicable law, applicable corporate bylaws, and directors and officers (D&O) liability policies; (v) with respect to Bradley, any rights as a holder of securities of the Company; (vi) with respect to the Company, any claim that relates to or arises from an act or omission by Bradley that is an act of fraud, embezzlement or willful misconduct by Bradley or that would constitute a crime committed by Bradley under applicable federal, state or local law.

ADEA. With specific regard to this General Release, Bradley understands and acknowledges that:

- a. This General Release constitutes an enforceable contract, and by signing this General Release, he is waiving rights that he may have against the Company Releasees as of the General Release Execution Date, including claims under the Age Discrimination in Employment Act ("ADEA") as applicable, as well as other federal, state and local laws, based on his employment or separation from employment with the Company;
- b. He understands that he is not releasing any claims that may arise after the General Release Execution Date;
- c. He is receiving, in exchange for this General Release, valuable consideration in addition to anything of value to which he is already entitled;
- d. The Company has advised him to consult with an attorney prior to executing this General Release;
- e. He has had a period of **21 calendar days** from the date he received this General Release, or so much of such 21-day period as he cares to utilize, to review, consider, and sign this General Release;
- f. He may revoke this General Release at any time within **seven (7) calendar days** of the General Release Execution Date by delivering a written notice of revocation to the Company's General Counsel;
- g. If he does not execute and deliver this General Release within the 21-day period referenced in paragraph (e), or if he revokes this General Release after signing it within the 7-day period referenced in (f) above, he will be ineligible to receive any of the consideration set forth in Paragraph 2 of the Agreement;
- h. The Company's obligation to provide the consideration under the Agreement is contingent upon his execution of this General Release and the expiration of the revocation period without him having revoked this General Release.

GENERAL RELEASE EXECUTION DATE. The earliest date on which Bradley may sign and deliver this General Release is the day after Bradley's last day of employment and the latest date on which Bradley may sign and deliver this General Release is January 6, 2020.

All terms and conditions in the Agreement continue to remain in full effect.

VOLUNTARY EXECUTION. After utilizing as much of the 21-day period above as he deems necessary to consider this matter, and after consulting with an attorney if he so elected, Bradley has freely executed this General Release so as to secure the consideration provided hereunder.

Bradley and the Company have read and understand the provisions set forth above, and agree to be legally bound by this General Release.

Date: ____

Kevin P. Bradley

For the Company:

Date: _____

Duane Holloway
Senior Vice President, General Counsel
Chief Compliance Officer and Corporate Secretary

CREDIT AGREEMENT

December 10, 2019

among

UNITED STATES STEEL CORPORATION
as Borrower

Arranged by

KFW IPEX-BANK GMBH
as Mandated Lead Arranger and ECA Structuring Bank

KFW IPEX-BANK GMBH
as Facility Agent and ECA Agent

– and –

Lenders party hereto from time to time

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CREDIT AGREEMENT, dated as of December 10, 2019 (this "**Agreement**"), among **UNITED STATES STEEL CORPORATION**, a corporation that is duly incorporated and validly existing under the laws of Delaware (the "**Borrower**"); **KFW IPEX-BANK GMBH** ("**KfW IPEX-Bank**"), as Mandated Lead Arranger and ECA Structuring Bank; **KFW IPEX-BANK**, as Facility Agent (in such capacity together with its permitted successors and assigns, the "**Facility Agent**"); **KFW IPEX-BANK**, as ECA Agent (in such capacity together with its permitted successors and assigns, the "**ECA Agent**"); **THE FINANCIAL INSTITUTIONS** listed on Schedule A (*Commitments*) as lenders (each, a "**Lender**" and together, the "**Lenders**"); and other parties party hereto from time to time. Capitalized terms shall be defined as set forth in Section 1.1 (*Definitions*).

WHEREAS, the Borrower has entered into the Project Equipment Supply Agreement with the Exporter for the supply of certain equipment and services from suppliers within Austria in connection with certain upgrades at the Mon Valley Works Project in Braddock, Pennsylvania;

WHEREAS, in order to confirm its commitment to the Project Upgrades, the Exporter has executed and delivered to the Facility Agent the Exporter's Undertaking and the Exporter's Certificate;

WHEREAS, in order to finance the Project Upgrades, the Borrower has requested that the Lenders make available to it two loan commitments consisting of (a) covered loan commitments not to exceed \$250,000,000, the purpose of which is to finance (i) 85% of the Eligible Project Costs and (ii) 100% of the OeKB Guarantee Premium and (b) commercial loan commitments not to exceed the Down Payment; and

WHEREAS, in order to induce the Lenders to provide such covered loan commitments, the OeKB Guarantor has agreed to guarantee the covered obligations.

NOW, THEREFORE, THIS AGREEMENT WITNESSES that, in consideration of the covenants and agreements herein contained and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto agree as follows:

Article 1
INTERPRETATION

1.1 Definitions.

For the purposes of this Agreement:

“**Actions**” means any legal, governmental or regulatory actions, claims, suits, arbitrations or proceedings.

“**Administrative Party**” means any of the Mandated Lead Arranger or an Agent.

“**Affiliate**” means, with respect to any Person, any other Person which directly or indirectly, through one or more intermediaries, Controls, or is Controlled by, or is under common Control with, such Person.

“**Agents**” means the ECA Agent and the Facility Agent, and “**Agent**” means either the ECA Agent or the Facility Agent.

“**Agreement**” has the meaning given to it in the introductory paragraph hereto.

“**Anti-Corruption Laws**” means any laws, rules or regulations relating to corruption or bribery, including the FCPA.

“**Anti-Money Laundering Laws**” means any rules or regulations relating to money laundering, terrorism financing, or transactions involving the proceeds of illegal activities, including the US Bank Secrecy Act, USA PATRIOT Act, US Money Laundering Control Act and all related implementing regulations.

“**Applicable Law**” means any law (including common law and equity), any international or other treaty, any domestic or foreign constitution or any multinational, federal, provincial, territorial, state, municipal, county or local statute, law, ordinance, code, rule, regulation, Order (including any securities laws or requirements of stock exchanges and any consent, decree or administrative Order), or Authorization of a Governmental Body in any case applicable to any specified Person, property, transaction or event, or any such Person’s property or assets (and, in the case of Section 7.3 (*Change in Circumstances*), whether or not having the force of law), including the Occupational Safety and Health Act of 1970 and other applicable law relating to safety, labor and employee matters and related rules and standards.

“**Applicable Margin**” has the meaning given to it in Schedule E of the Credit Agreement.

“**Applicable Percentage**” means, with respect to any Lender at any time, the percentage of the total principal amount of the Loans held by such Lender or, if at such time, no Loans have yet been advanced, the percentage of the Total Commitments of all Lenders held by such Lender at such time.

“**Attributable Debt**” means, with respect to any sale and leaseback transaction, at the time of determination, the lesser of (a) the sale price of the property so leased multiplied by a fraction the numerator of which is the remaining portion of the base term of the lease included in such transaction and the denominator of which is the base term of such lease, and (b) the total obligation (discounted to the present value at the implicit interest factor, determined in accordance with GAAP, included in the rental payments) of the lessee for rental payments (other than amounts required to be paid on account of property Taxes as well as maintenance, repairs, insurance, water rates and other items which do not constitute payments for property rights) during the remaining portion of the base term of the lease included in such transaction.

“**Authorization**” means any authorization, approval, consent, concession, exemption, license, permit, franchise or no-action letter from any Governmental Body.

“**Authorized Officer**” means, with respect to any Person, the principal executive officer, principal financial officer, corporate secretary, assistant corporate secretary or principal accounting officer or any attorney-in-fact of such Person.

“**Bail-In Action**” means the exercise of any Write-down and Conversion Powers.

“**Bail-In Legislation**” means in relation to an EEA Member Country which has implemented, or which at any time implements, Article 55 of Directive 2014/59/EU establishing a framework for the recovery and resolution of credit institutions and investment firms, the relevant implementing law or regulation as described in the EU Bail-In Legislation Schedule from time to time.

“**Base Reference Bank Rate**” means the arithmetic mean of the rates (rounded upwards, if necessary, to the next 1/16th of 1%) as supplied to the Facility Agent at its request by the Reference Banks; *provided*, that such rate shall in no case be lower than 0.00% per annum:

(a)(other than where paragraph (b) below applies) as the rate at which the relevant Reference Bank could borrow funds in the London interbank market in U.S. Dollars and for the relevant period were it to do so by asking for and then accepting interbank offers for deposits in reasonable market size in U.S. Dollars for that period (or, to the extent such rate is unavailable, Section 5.8 (*Cost of Funds*) shall apply); or

(b)if different, as the rate (if any and applied to U.S. Dollars and the relevant Reference Bank period) which contributors to the applicable Screen Rate are asked to submit to the relevant administrator.

“**Beneficial Ownership Certification**” means a certification regarding beneficial ownership as required by the Beneficial Ownership Regulation.

“**Beneficial Ownership Regulation**” means 31 C.F.R. § 1010.230.

“**Benefit Plan**” means any of (A) an “employee benefit plan” (as defined in ERISA) that is subject to Title I of ERISA, (B) a “plan” as defined in Section 4975 of the Code or (C) any person or entity whose assets include (for purposes of ERISA Section 3(42) or otherwise for purposes of Title I of ERISA or Section 4975 of the Code) the assets of any such “employee benefit plan” or “plan”.

“**Board of Directors**” means either the board of directors of the Borrower or any duly authorized committee of that board.

“**Borrower**” has the meaning given to it in the introductory paragraph hereto.

“**Borrower’s Latest Form 10-K**” means the Borrower’s annual report on Form 10-K for the year ended December 31, 2018.

“**Borrower’s Latest Form 10-Q**” means the Borrower’s quarterly report on Form 10-Q for the quarter ended September 30, 2019.

“**Break Costs**” means the amount (if any) by which:

(a) the interest which a Lender should have received for the period from the date of funding (or proposed funding) of all or any part of its participation in the Loan to the last day of the current Interest Period in respect of the Loan, had the Loan been made and the principal amount been paid on the last day of such Interest Period;

exceeds:

(b) the sum of the amount it did receive as interest plus the amount which such Lender would be able to obtain by placing an amount equal to the principal amount received by it on deposit with a leading bank in the London interbank market for a period starting on the Business Day following receipt or recovery and ending on the last day of the current Interest Period (or, to the extent such rate is unavailable, Section 5.8 (*Cost of Funds*) shall apply).

“**Business Day**” means any day, other than a Saturday, Sunday or statutory holiday in any one of New York City, New York or Frankfurt am Main, Germany or a day on which banks are generally closed in any one of those cities.

“**Capital Lease Obligations**” of any Person, means obligations of such Person to pay rent or other amounts under any lease of (or other arrangement conveying the right to use) real or personal property, or a combination thereof, which obligations are required under GAAP to be classified and accounted for as capital leases on a balance sheet of such Person; *provided* that all leases of any Person that are or would have been characterized as operating leases in accordance with GAAP as in effect immediately prior to the Effective Date shall continue to be accounted for as operating leases (and not capital leases) for purposes of this Agreement regardless of any change in GAAP following the date that would otherwise require such leases to be recharacterized as capital leases. The amount of such obligations will be the capitalized amount thereof determined in accordance with GAAP.

“**Change of Control**” means and shall occur if:

(a) any “person” (as such term is used in Sections 13(d) and 14(d) of the Exchange Act) is or becomes the “beneficial owner” (as defined in Rules 13d-3 and 13d-5 under the Exchange Act, except that for purposes of this clause (a) such person shall be deemed to have “beneficial ownership” of all shares that any such person has the right to acquire, whether

such right is exercisable immediately or only after the passage of time), directly or indirectly, of more than 35% of either the aggregate ordinary voting power or the aggregate equity value represented by the issued and outstanding Equity Interests of the Borrower;

(b) individuals who on the Closing Date constituted the Board of Directors (together with any new directors whose election by such Board of Directors or whose nomination for election by the shareholders of the Borrower was approved by a vote of a majority of the directors of the Borrower then still in office who were either directors on the Closing Date or whose election or nomination for election was previously so approved) cease for any reason to constitute a majority of the Board of Directors then in office;

(c) the adoption of a plan relating to the liquidation or dissolution of the Borrower; or

(d) the merger or consolidation of the Borrower with or into another Person or the merger of another Person with or into the Borrower, or the sale of all or substantially all the assets of the Borrower (determined on a consolidated basis) to another Person, other than a merger or consolidation transaction in which shareholders that represented 100% of the Equity Interests of the Borrower immediately prior to such transaction (or other securities into which such securities are converted as part of such merger or consolidation transaction) own directly or indirectly at least a majority of the voting power of the Equity Interests of the surviving Person in such merger or consolidation transaction immediately after such transaction and in substantially the same proportion as before the transaction.

“**Claim**” means any claim, loss or liability of any nature whatsoever, including but not limited to administrative, regulatory enforcement or judicial or equitable action, claim, suit, or judgment by any other Person or any written notice by any Governmental Body, other than any Tax that does not represent a claim, loss or liability arising from a non-Tax claim.

“**Class**” when used in reference to any Loan or borrowing, means whether such Loan, or the Loans constituting such borrowing, are Covered Loans or Commercial Loans; or when used in reference to any Commitment, refers to whether such Commitment is a Covered Loan Commitment or Commercial Loan Commitment.

“**Closing Date**” has the meaning given to it in Section 11.1 (*Conditions Precedent to the Closing Date*).

“**Code**” means the U.S. Internal Revenue Code of 1986, as amended.

“**Commercial Lenders**” means the banks and financial institutions listed on Schedule A (*Commitments*) under the heading “Commercial Loan Commitments” (and any other bank and financial institution that shall become a Commercial Lender pursuant to Section 13.1 (*Assignment by Lenders*)).

“**Commercial Loan**” has the meaning given to it in Section 2.1(b) (*Commercial Loans*).

“**Commercial Loan Additional Closing Date**” has the meaning given to it in Section 11.3 (*Additional Conditions Precedent to Commercial Loans*).

“**Commercial Loan Commitment**” means the commitment of a Commercial Lender to make Commercial Loans to the Borrower, up to an aggregate amount, at any one time outstanding, not in excess of such Commercial Lender’s Proportionate Share of the Total Commercial Loan Commitment at such time.

“**Commercial Loan Commitment Fee**” means the commitment fee payable to the Lenders in respect of the Commercial Loan Commitment in accordance with Section 5.10(b) (*Commercial Loan Commitment Fee*).

“**Commercial Loan Commitment Period**” means the period from and including the Closing Date to and including the earliest of:

- (a) the date the Commercial Loans are drawn in full;
- (b) the termination or cancellation in full of the Commercial Loan Commitments hereunder; and
- (c) in any case, no later than 42 months following the Effective Date.

provided that, in each case, if any such date is not a Business Day, the last day of the Commercial Loan Commitment Period shall be the immediately preceding Business Day.

“**Commercial Loan Utilization Request**” means a written notice (substantially in the form set out on Schedule C-2 (*Commercial Loan Utilization Request*)) requesting a Utilization in accordance with Section 3.1 (*Delivery of a Utilization Request*).

“**Commitment**” means, in respect of each applicable Lender at any time, the amount specified with respect to such (a) Covered Lender on Schedule A (*Commitments*) under the heading “Covered Loan Commitments” and (b) such Commercial Lender on Schedule A (*Commitments*) under the heading “Commercial Loan Commitments” (in each case, as shall be amended in accordance with Section 13.1 (*Assignment by Lenders*)) and distributed to all parties by the Facility Agent from time to time to reflect any changes thereto, as such amount may be reduced from time to time by such Lender’s Applicable Percentage of any cancellation of any unused portion of the Commitment.

“**Commitment Fee**” means the commitment fee payable to the Lenders in accordance with Section 5.10(a) (*Covered Loan Commitment Fee*) and Section 5.10(b) (*Commercial Loan Commitment Fee*).

“**Completion Certificate**” means a certificate signed by the Borrower and Exporter in the form set out on Schedule D – Part III (*Completion Certificate*).

“**Compliance Certificate**” means a certificate of an Authorized Officer of the Borrower in the form set out on Schedule F (*Compliance Certificate*).

“**Confidential Information**” has the meaning given to it in Section 20.1 (*Confidential Information*).

“**Connection Income Taxes**” means Other Connection Taxes that are imposed on or measured by net income (however denominated) or that are franchise Taxes or branch profit Taxes.

“**Consolidated Net Tangible Assets**” means, as of the time of determination, the aggregate amount of the assets of the Borrower and the assets of its consolidated Subsidiaries after deducting (a) all goodwill, trade names, trademarks, service marks, patents, unamortized debt discount and expense and other intangible assets and (b) all current liabilities, as reflected on the most recent consolidated balance sheet prepared by the Borrower in accordance with GAAP and provided to the Facility Agent pursuant to Section 10.1(a)(i) (*Quarterly Statements*) or Section 10.1(a)(ii) (*Annual Consolidated Statements*) (and not subsequently disclaimed as not being reliable by the Borrower) by the Borrower prior to the time as of which “Consolidated Net Tangible Assets” is being determined.

“**Contractual Obligation**” means, as to any Person, any provision of any security issued by such Person or of any agreement, instrument or undertaking to which such Person is a party or by which it or any of the property owned by it is bound.

“**Control**” means, in respect of a particular Person, the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of such Person, whether through the ability to exercise voting power including the ownership of voting securities, by contract or otherwise in respect of both ordinary and extraordinary matters (including reorganization, restructuring and the amendment of any applicable constitutional document). “**Controlled**” shall have the meaning correlative thereto.

“**Covered Lenders**” means the banks and financial institutions listed on Schedule A (*Commitments*) under the heading “Covered Loan Commitments” (and any other bank and financial institution that shall become a Covered Lender pursuant to Section 13.1 (*Assignment by Lenders*)).

“**Covered Loan**” has the meaning given to it in Section 2.1(a)(ii) (*Premium Loans*).

“**Covered Loan Additional Closing Date**” has the meaning given to it in Section 11.2 (*Additional Conditions Precedent to Covered Loans*).

“**Covered Loan Commitment**” means the commitment of a Covered Lender to make Covered Loans to the Borrower, up to an aggregate amount, at any one time outstanding, not in excess of such Covered Lender’s Proportionate Share of the Total Covered Loan Commitment at such time.

“**Covered Loan Commitment Fee**” means the commitment fee payable to the Lenders in respect of the Covered Loan Commitment in accordance with Section 5.10(a) (*Covered Loan Commitment Fee*).

“**Covered Loan Commitment Period**” means the period from and including the Closing Date to and including the earliest of:

- (i) the date the Covered Loans are drawn in full;

(ii) the termination or cancellation in full of the Covered Loan Commitments hereunder; and

(iii) in any case, no later than 42 months following the Effective Date.

provided that, in each case, if any such date is not a Business Day, the last day of the Covered Loan Commitment Period shall be the immediately preceding Business Day.

“**Covered Loan Utilization Request**” means a written notice (substantially in the form set out on Schedule C-1 (*Covered Loan Utilization Requests*)) requesting a Utilization, as the context may require, in accordance with Section 3.1 (*Delivery of a Utilization Request*).

“**Default**” means any event or condition which, upon notice, lapse of time, or both, would constitute an Event of Default.

“**Defaulting Lender**” has the meaning given to it in Section 2.2(a) (*Finance Parties’ Rights and Obligations*).

“**Down Payment**” means an amount equal to 15% of the Eligible Project Costs.

“**ECA Agent**” has the meaning given to it in the introductory paragraph hereto.

“**ECA Mandatory Prepayment Event**” means each of the following events or circumstances:

- (a) it is or becomes unlawful for the OeKB Guarantor to perform any of its obligations under the OeKB Guarantee or for the Covered Lenders to receive the benefit of the OeKB Guarantee;
- (b) any obligation or obligations of the OeKB Guarantor under the OeKB Guarantee are not or cease to be legal, valid, binding or enforceable or the OeKB Guarantee is not or ceases to be in full force and effect; or
- (c) the OeKB Guarantor avoids, rescinds, repudiates, suspends, cancels or terminates all or part of the OeKB Guarantee or evidences an intention to or purports to avoid, rescind, repudiate, suspend, cancel or terminate all or a part of the OeKB Guarantee.

“**EEA Member Country**” means any member state of the European Union, Iceland, Liechtenstein and Norway, as well as any other country which becomes an EEA Member Country in the future.

“**Effective Date**” means the date of signing of this Agreement.

“**Eligible Goods and Services**” means goods and services including third country supply that are eligible for support under the terms of the OeKB Guarantee and the OECD 1981 Arrangement on Guidelines for Officially Supported Export Credits Consensus (as amended).

“**Eligible Local Costs**” means any expenditure in respect of Local Costs in the total amount not exceeding the lower of:

- (a) \$48,808,685.84; and
- (b) 23% of the Export Contract Value.

“**Eligible Project Costs**” means the amount payable for Eligible Goods and Services and Eligible Local Costs under the Project Equipment Supply Agreement that is eligible for financing under the limits and under the conditions contained in the OeKB Guarantee in the total amount not exceeding \$250,300,953.02.

“**Eligible Project Cost Loan**” has the meaning given to it in Section 2.1(a)(i) (*Eligible Project Cost Loans*).

“**Entitled Person**” has the meaning given to it in Section 22.7 (*Judgment Currency*).

“**Environment**” means all or any of the following media:

- (a) air (including, without limitation, air within natural or man-made structures, whether above or below ground);
- (b) water (including, without limitation, territorial, coastal and inland waters, water under or within land and water in drains and sewers);
- (c) land (including, without limitation, land under water); and
- (d) any ecological systems, animals, plants and all other living organisms supported by these media.

“**Environmental Claim**” means any action, proceeding, litigation or claim by any Person, or investigation by any Governmental Body, alleging or asserting that the Borrower or its Subsidiaries is in violation of Environmental Law or with respect to any release of, or exposure to, Hazardous Materials.

“**Environmental Law**” means any and all laws, rules and regulations, and any lawful Orders of any Governmental Body, in each case as now or hereafter in effect and applicable to the Borrower or any of its Subsidiaries, relating to the protection of the Environment or biodiversity, the effects of the environment on health and safety (including the conditions of the workplace) or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials.

“**Environmental Matter**” means any:

- (a) release of Hazardous Materials;
- (b) failure to conserve, preserve or protect the Environment or any wildlife supported by the Environment; or
- (c) violation of Environmental Law.

“Environmental Permits” means any Authorization required under any Environmental Law for the operation of the business of the Borrower conducted on or from the properties owned or used by the Borrower.

“Equator Principles” means those principles entitled “The Equator Principles June 2013: A financial industry benchmark for determining, assessing and managing environmental and social risk in projects” and developed and adopted by the International Finance Corporation and various other financial institutions available at <https://equator-principles.com/>.

“Equity Interests” means shares of capital stock, partnership interests, membership interests in a limited liability company, beneficial interests in a trust or other equity ownership interests in a Person, and any warrants, options or other rights entitling the holder thereof to purchase or acquire any such equity interest.

“ERISA” means the Employee Retirement Income Security Act of 1974, as amended.

“ERISA Affiliate” means any trade or business (whether or not incorporated) treated as a single employer or under common control with the Borrower for the purpose of Section 414 of the Code or Section 4001 of ERISA.

“ERISA Event” means (a) the occurrence of a reportable event specified as such in Section 4043 of ERISA or any related regulation, other than an event in relation to which the requirement to give notice of that event is waived by any regulation as in effect on the date of such occurrence with respect to a Plan (other than a Multiemployer Plan), (b) (i) a failure to meet the minimum funding standard with respect to a Plan (other than a Multiemployer Plan) under Section 412 of the Code or Section 302 of ERISA, whether or not there has been any waiver of notice (as referred to in subsection (a) above) or waiver of the minimum funding standard under Section 412 of the Code or Section 302 of ERISA, (ii) the filing pursuant to Section 412(c) of the Code or Section 302(c) of ERISA of an application for a waiver of the minimum funding standard with respect to any Plan or (iii) the failure to make by its due date a required installment under Section 430(j) of the Code with respect to any Plan (other than a Multiemployer Plan) or the failure to make any required contribution to a Multiemployer Plan, (c) any termination of, withdrawal from or other event or condition with respect to any Plan which would reasonably be expected to result in liability of the Borrower or ERISA Affiliate under Title IV of ERISA (other than premiums to the Pension Benefit Guaranty Corporation or its successor), (d) a determination that a Multiemployer Plan is or is expected to be “insolvent” (within the meaning of Section 4245 of ERISA), or in “endangered” or “critical” status (within the meaning of Section 432 of the Code or Section 305 of ERISA), (e) a determination that any Plan (other than a Multiemployer Plan) is considered an “at-risk” plan within the meaning of Section 430 of the Code or Section 303 of ERISA, (f) the occurrence of an act or omission which would reasonably be expected to give rise to the imposition on the Borrower or any of its ERISA Affiliates of fines, penalties, taxes or related charges under Chapter 43 of the Code or under Section 409, Section 502(c), (i) or (l), or Section 4071 of ERISA in respect of any Plan, (g) any fact or circumstance exists that would reasonably be expected to result in the imposition of a lien pursuant to ERISA or Section 430(k) of the Code or a violation of Section 436 of the Code with respect to any Plan, (h) with respect to any Plan that is intended to be a qualified plan under Section 401(a) of the Code (other than a Multiemployer Plan), any occurrence or event that results

or would reasonably be expected to result in the loss of the Plan's qualified status or (i) the occurrence of a non-exempt prohibited transaction (within the meaning of Section 406 of ERISA or Section 4975 of the Code) with respect to a Plan (other than a Multiemployer Plan).

“**ESP Amendment**” has the meaning given to it in the definition of Project Equipment Supply Agreement.

“**EU Anti-Boycott Regulations**” means (a) the Council Regulation (*EC*) No 2271/96 of 22 November 1996 protecting against the effects of the extra-territorial application of legislation adopted by a third country, and actions based thereon or resulting therefrom and (b) Section 7 of the German Foreign Trade Regulation (*Außenwirtschaftsverordnung* or *AWV*) in connection with the German Foreign Trade Law (*Außenwirtschaftsgesetz* or *AWG*) or any similar applicable anti-boycott statute.

“**EU Bail-In Legislation Schedule**” means the document described as such and published by the Loan Market Association (or any successor person) from time to time.

“**Event of Default**” has the meaning given to it in Section 12.1 (*Events of Default*).

“**Exchange Act**” means the Securities Exchange Act of 1934, as amended from time to time.

“**Excluded Taxes**” means any of the following Taxes imposed on or with respect to a Recipient or required to be withheld or deducted from a payment to a Recipient, (a) Taxes imposed on or measured by net income (however denominated), franchise Taxes, and branch profits Taxes, in each case, (i) imposed as a result of such Recipient being organized under the laws of, or having its principal office or, in the case of any Lender, its applicable lending office located in, the jurisdiction imposing such Tax (or any political subdivision thereof) or (ii) that are Other Connection Taxes, (b) in the case of a Lender, U.S. federal withholding Taxes imposed on amounts payable to or for the account of such Lender with respect to an applicable interest in a Loan or Commitment pursuant to a law in effect on the date on which (i) such Lender acquires such interest in the Loan or Commitment or (ii) such Lender changes its lending office, except in each case to the extent that, pursuant to Article 6 (*Taxes*), amounts with respect to such Taxes were payable either to such Lender's assignor immediately before such Lender became a party hereto or to such Lender immediately before it changed its lending office, (c) Taxes attributable to such Recipient's failure to comply with Article 6(g) (*Status of Lenders*) and (d) any withholding Taxes imposed under FATCA.

“**Existing Lender**” has the meaning given to it in Section 13.1(b) (*Assignment to by Lenders*).

“**Export Contract Value**” means the total amount to be paid by or on behalf of the Borrower for Eligible Goods and Services exported, excluding Local Costs, in the total amount not exceeding \$201,492,267.18.

“**Exporter**” means Primetals.

“**Exporter's Certificate**” means a notice substantially in the form set out in Schedule D (*Form of Exporter's Certificate*) or in such other form as may be agreed by the Exporter and the Facility Agent.

“**Exporter’s Declaration**” means a letter of indemnity from the Exporter to the ECA Agent (Exporteurerklärung) with respect to the Project Upgrades.

“**Exporter’s Undertaking**” means a letter of indemnity (“Rückgarantie (G3)”) from the Exporter to the OeKB Guarantor with respect to the Project Upgrades.

“**Facility Agent**” has the meaning given to it in the introductory paragraph hereto.

“**Facility Agent’s Account**” means the account of the Facility Agent at Citibank N.A. New York, SWIFT Number: CITIUS33, Account Holder: KfW, Frankfurt am Main (BIC: KFWIDEFF), Account Number: 10926093, Reference: 8137749064 United States Steel KV29458, or such other account as may be designated by the Facility Agent to the Borrower.

“**FATCA**” means Sections 1471 through 1474 of the Code, as of the date of this Agreement (or any amended or successor version that is substantively comparable and not materially more onerous to comply with), any current or future regulations or official interpretations thereof, any agreements entered into pursuant to Section 1471(b)(1) of the Code and any fiscal or regulatory legislation, rules or practices adopted pursuant to any intergovernmental agreement, treaty or convention among Governmental Bodies and implementing such Sections of the Code.

“**FCPA**” means the U.S. Foreign Corrupt Practices Act of 1977, as amended (15 U.S.C. §§ 78dd 1 et seq.)

“**Fee Letters**” means any letter entered into by reference to this Agreement between one or more of the Finance Parties and the Borrower setting out the amount of any fees referred to in this Agreement, including, without limitation the IPEX Fee Letter.

“**Final Acceptance**” means the Mon Valley Works Final Acceptance.

“**Final Maturity Date**” means (a) for the Covered Loans, the fifteenth (15th) following the occurrence of the First Repayment Date and (b) for the Commercial Loans, the ninth (9th) Interest Payment Date following the occurrence of the First Repayment Date.

“**Finance Documents**” means:

- (a) this Agreement;
- (b) the Fee Letters;
- (c) any Transfer Certificate;
- (d) any Notes;

and all other agreements, instruments and documents from time to time (both before and after the date of this Agreement) designated as such by the Facility Agent and the Borrower.

“**Finance Parties**” means each Lender and Administrative Party and “Finance Party” means any Lender or Finance Party.

“**Financial Statements**” means the financial statements delivered on the Closing Date and those required to be delivered pursuant to Section 10.1 (*Reporting Requirements; Notices*).

“**First Repayment Date**” means the earlier of the date falling six months after the Starting Point of Credit and October 31, 2023.

“**Fiscal Quarter**” means each calendar quarter ending on March 31, June 30, September 30 and December 31 of each year.

“**Fiscal Year**” means the period of January 1 to December 31 of each year.

“**Fitch**” means Fitch, Inc. or any successor to its rating business.

“**Foreign Lender**” means a Lender that is not a U.S. Person.

“**GAAP**” means generally accepted accounting principles set forth in the opinions and pronouncements of the Financial Accounting Standards Board or in such other statements by such other entity as have been approved by a significant segment of the accounting profession.

“**Governmental Body**” means the government of the United States of America or any other nation, or of any political subdivision thereof, whether state, provincial or local, and any agency, authority, instrumentality, regulatory body, court, arbitrator or arbitrators, tribunal, central bank or enterprise that is owned, sponsored, or controlled by any government, or any other entity exercising executive, legislative, judicial or arbitral, taxing, regulatory or administrative powers or functions or pertaining to government (including any applicable stock exchange and supranational bodies such as the European Union or the European Central Bank) and in each case having jurisdiction over the Borrower, the Project Upgrades or the Finance Documents, as the context may require.

“**Guarantee**” means any obligation, contingent or otherwise, of any Person directly or indirectly guaranteeing any Indebtedness of any other Person and any obligation, direct or indirect, contingent or otherwise, of such Person (a) to purchase or pay (or advance or supply funds for the purchase or payment of) such Indebtedness of such other Person (whether arising by virtue of partnership arrangements, or by agreement to keep well, to purchase assets, goods, securities or services, to take or pay or to maintain financial statement conditions or otherwise) or (b) entered into for purposes of assuring in any other manner the obligee of such Indebtedness of the payment thereof or to protect such obligee against loss in respect thereof (in whole or in part); *provided, however*, that the term “Guarantee” shall not include endorsements for collection or deposit in the ordinary course of business. The term “Guarantee,” when used as a verb, has a correlative meaning.

“**Hazardous Material**” means any pollutant, contaminant or toxic or hazardous material or substance or waste that is now or hereafter prohibited, limited or regulated under any Environmental Law.

“**Hedging Agreement**” means any interest rate protection agreement, foreign currency exchange agreement, commodity price protection agreement or other interest rate, currency exchange rate or commodity price hedging arrangement.

“**Impaired Agent**” means the ECA Agent, at any time when:

- (a) it has failed to make (or has notified a party that it shall not make) a payment required to be made by it under the Finance Documents by the due date for payment unless the ECA Agent notifies the Borrower in writing that one or more of the conditions precedent to funding has not been satisfied, unless:
 - (i) its failure to pay is caused by administrative or technical error and payment is made within three (3) Business Days of its due date; or
 - (ii) the ECA Agent is disputing in good faith whether it is contractually obliged to make the payment in question; or
- (b) the ECA Agent otherwise rescinds or repudiates a Finance Document; or
- (c) (if the ECA Agent is also a Lender) it is a Defaulting Lender; or
- (d) with respect to the ECA Agent, or its direct or indirect parent company, (i) an Insolvency Event has occurred and is continuing or (ii) has become the subject of a Bail-In Action.

“**Impairment**” means the rescission, termination, cancellation, repeal, invalidity, suspension, injunction, inability to satisfy stated conditions to effectiveness or amendment, modification or supplementation.

“**Incur**” means issue, assume, guarantee or otherwise become liable; and the terms “**Incurred**” and “**Incurrence**” have meanings correlative to the foregoing.

“**Indebtedness**” of any Person means, without duplication, (a) all obligations of such Person for borrowed money or with respect to deposits or advances of any kind (other than unspent cash deposits held in escrow by or in favor of such Person, or in a segregated deposit account controlled by such Person, in each case in the ordinary course of business to secure the performance obligations or, damages owing from, one or more third parties), (b) all obligations of such Person evidenced by bonds, debentures, notes or similar instruments, (c) all obligations of such Person on which interest charges are customarily paid (other than obligations where interest is levied only on late or past due amounts), (d) all obligations of such Person under conditional sale or other title retention agreements relating to property acquired by such Person, (e) all obligations of such Person in respect of the deferred purchase price of property or services (excluding current accounts payable incurred in the ordinary course of business), (f) all Indebtedness of others secured by (or for which the holder of such Indebtedness has an existing right, contingent or otherwise, to be secured by) any Lien on property owned or acquired by such Person, whether or not the Indebtedness secured thereby has been assumed, (g) all Guarantees by such Person of Indebtedness of others, (h) all Capital Lease Obligations of such Person, (i) all unpaid obligations, contingent or otherwise, of such Person as

an account party in respect of letters of credit and letters of guaranty (other than cash collateralized letters of credit to secure the performance of workers' compensation, unemployment insurance, other social security laws or regulations, bids, trade contracts, leases, environmental and other statutory obligations, surety and appeal bonds, performance bonds and other obligations of a like nature, in each case, obtained in the ordinary course of business), (j) all capital stock of such Person which is required to be redeemed or is redeemable at the option of the holder if certain events or conditions occur or exist or otherwise, and (k) all obligations, contingent or otherwise, of such Person in respect of bankers' acceptances. The Indebtedness of any Person shall include the Indebtedness of any other entity (including any partnership in which such Person is a general partner) to the extent such Person is liable therefor as a result of such Person's ownership interest in or other relationship with such entity, except (i) to the extent that contractual provisions binding on the holder of such Indebtedness provide that such Person is not liable therefor, and (ii) in the case of general partnerships where the interest is held by a Subsidiary with no other significant assets. Notwithstanding the foregoing, the term "Indebtedness" will exclude obligations that are no longer outstanding under the applicable indenture or instruments therefor. Notwithstanding the foregoing, in connection with the purchase by the Borrower or any Subsidiary of any business, the term "Indebtedness" will exclude post-closing payment adjustments to which the seller may become entitled to the extent such payment is not determinable and, to the extent such payment thereafter becomes fixed and determined, the amount is paid when due.

"Indemnified Party" has the meaning given to it in Section 7.5(a) (*Indemnities*).

"Indemnified Taxes" means (a) Taxes, other than Excluded Taxes, imposed on or with respect to any payment made by or on account of any obligation of the Borrower under any Finance Document and (b) to the extent not otherwise described in clause (a), Other Taxes.

"Insolvency Event" in relation to any Lender means that such Lender or its parent company is the subject of a bankruptcy, insolvency, reorganization, liquidation or similar proceeding, or a receiver, trustee, conservator, intervenor or sequestrator or the like has been appointed for such Lender or its parent company, or such Lender or its parent company has taken any action in furtherance of or indicating its consent to or acquiescence in any such proceeding or appointment.

"Intellectual Property" means patents, patent applications, trademarks, service marks, trade names, trademark registrations, service mark registrations, domain names and other source indicators, copyrights and copyrightable works, know-how, trade secrets, systems, procedures, proprietary or confidential information and all other intellectual property, industrial property and proprietary rights.

"Interest Payment Date" means, subject to Article 5 (*Interest, Interest Periods and Fees*), of this Agreement, the last day of each Interest Period.

"Interest Period" means each period determined in accordance with Article 5 (*Interest, Interest Periods and Fees*) of this Agreement and, in relation to overdue amounts, each period determined in accordance with Section 5.2 (*Default Interest*).

"Interpolated Screen Rate" means the rate (rounded to the same number of decimal places as the two relevant Screen Rates) which results from interpolating on a linear basis between:

(a) the applicable Screen Rate for the longest period (for which that Screen Rate is available) which is less than the Interest Period of that Loan; and
(b) the applicable Screen Rate for the shortest period (for which that Screen Rate is available) which exceeds the Interest Period of that Loan,
each as of the specified time for the currency of that Loan; *provided*, that such rate shall in no case be lower than zero.

“**IPEX Fee Letter**” means the IPEX fee letter, dated on or around the date of this Agreement, between the Borrower and KfW IPEX-Bank.

“**IRS**” means the United States Internal Revenue Service.

“**Judgment Currency**” has the meaning assigned to that term in Section 22.7 (*Judgment Currency*).

“**KfW IPEX-Bank**” has the meaning given to it in the introductory paragraph hereto.

“**Lenders**” means each Person that is a party on the date hereof to this Agreement as an “initial Lender” and each other lender party hereto from time to time pursuant to Section 13.1 (*Assignment by Lenders*), and their respective permitted successors and assigns.

“**LIBOR**” means, rounded upwards, if necessary, to the next 1/16th of 1%.

(a) the applicable Screen Rate as of the specified time for the currency of that Loan and for a period equal in length to the Interest Period of that Loan; or

(b) as otherwise determined pursuant to Section 5.6 (*Unavailability of Screen Rate*), and if, in either case, that rate is less than zero, LIBOR shall be deemed to be 0.00%.

“**Lien**” means any Indebtedness secured by a mortgage, security interest, pledge, lien, charge or other similar encumbrance.

“**Loans**” means loans provided under this Agreement pursuant to Article 2 (*Loans*).

“**Local Costs**” means any expenditure in relation to goods or services supplied or rendered or to be supplied or rendered by the Exporter pursuant to the Project Equipment Supply Agreement in the buyer’s country. These exclude commissions payable to the Exporter’s agent in the buying country.

“**Majority Lenders**” means, at any time, one or more Lenders holding more than 50% of the Commitments or, if Loans have been made, of the outstanding principal amount of Loans at such time. The “**Majority Lenders**” of a particular Class of Loans means, at any time, one or more Lenders holding more than 50% of the Commitments of such Class or, if Loans have been made, of the outstanding principal amount of the Loans of such Class at such time.

“**Material Adverse Effect**” means a material adverse effect on:

- (a) the financial condition, business, properties or results of operations of the Borrower and its Subsidiaries, taken as a whole, since September 30, 2019;
- (b) the validity, legality or enforceability of any Transaction Documents or the OeKB Guarantee; or
- (c) the rights and remedies of the Facility Agent or Lenders under any of the Transaction Documents.

“**Material Indebtedness**” means Indebtedness (other than the (a) Loans and (b) Indebtedness owed by the Borrower or one of its Subsidiaries solely to the Borrower or another Subsidiary of the Borrower), or obligations in respect of one or more Hedging Agreements, of any one or more of the Borrower and its Subsidiaries, in an aggregate principal amount exceeding \$100,000,000 (or the equivalent in other currencies). For purposes of determining Material Indebtedness, the “principal amount” of the obligations of any Person in respect of any Hedging Agreement at any time shall be the maximum aggregate amount (after giving effect to any enforceable netting agreements) that such Person would be required to pay if such Hedging Agreement were terminated at such time.

“**Mon Valley Works Final Acceptance**” means an Acceptance Certificate or a Deemed Acceptance Certificate (each as defined in the Project Equipment Supply Agreement).

“**Mon Valley Works Project**” means the Borrower’s Mon Valley Works premises located in or around Braddock, Pennsylvania.

“**Moody’s**” means Moody’s Investors Service, Inc.

“**Multiemployer Plan**” means any multiemployer plan as defined in Section 3(37) of ERISA to which the Borrower or ERISA affiliate thereof is obligated to contribute.

“**Notes**” means any note issued under Section 2.5(b) (*Evidence of Indebtedness*).

“**Obligations**” means all indebtedness, liabilities, indemnities and other obligations owed by the Borrower to any Finance Party hereunder, under any other Finance Document or under the OeKB Guarantee (pursuant to the terms of the Finance Documents), including interest and fees occurring during the pendency of any bankruptcy, insolvency, receivership or other similar proceeding, regardless of whether allowed or allowable in such proceeding whether actual or contingent, direct or indirect, matured or not, now existing or hereafter arising (including any fees or premium payable under the OeKB Guarantee (and in the case of the OeKB Guarantee Premium, only to the extent payable in accordance with Section 5.10(c) (*OeKB Guarantee Premium*)).

“**OECD**” means the Organization for Economic Co-operation and Development.

“**OeKB General Terms and Conditions**” means *Allgemeine Geschäftsbedingungen betreffend Garantien für gebundene Finanzkredite (G 3) und Forderungsankäufe (G 9)*, April 1999.

“**OeKB Guarantee**” means the Guarantee (*Endgültige Deckungszusage*), in form and substance satisfactory to each of the Lenders, to be issued to the Lenders by the OeKB Guarantor in connection with the Covered Loans under this Agreement, such guarantee and the coverage thereunder being subject to the terms and conditions set forth in a final guarantee confirmation, the OeKB General Terms and Conditions, the OeKB Guarantor’s general conditions and any other conditions, guidelines or directives whatsoever which are binding on the Covered Lenders in relation to the Covered Loans hereunder.

“**OeKB Guarantee Premium**” means the insurance premium payable by the Covered Lenders under and in respect of the OeKB Guarantee and which amount the Borrower agrees herein to pay on behalf of the Covered Lenders as a condition for the Covered Lenders to make funds available for the financing of the Project Upgrades.

“**OeKB Guarantor**” means Oesterreichische Kontrollbank AG.

“**OFAC**” means the Office of Foreign Assets Control of the U.S. Department of the Treasury.

“**Officer’s Certificate**” means a certificate in form satisfactory to the Facility Agent, acting reasonably, signed by a principal executive officer, principal financial officer, treasurer or principal accounting officer and which shall list any officer or Authorized Officer who has been given sufficient powers and authority under Applicable Law and the Borrower’s constitutional documents (or powers of attorney or written resolutions executed in accordance with the Borrower’s constitutional documents) and whose name appears on a certificate of incumbency delivered concurrently with the execution of this Agreement, as such certificate of incumbency may be amended from time to time to identify names of the individuals then holding such offices or the names of such representatives and the capacity in which they are acting, in each case as may be acceptable to the Facility Agent.

“**Order**” means any order, directive, decree, judgment, ruling, award, injunction, direction or request of any Governmental Body or other decision-making authority.

“**Other Connection Taxes**” means, with respect to any Recipient, Taxes imposed as a result of a present or former connection between such Recipient and the jurisdiction imposing such Tax (other than connections arising from such Recipient having executed, delivered, become a party to, performed its obligations under, received payments under, received or perfected a security interest under, engaged in any other transaction pursuant to or enforced any Finance Document, or sold or assigned an interest in any Loan or Finance Document).

“**Other Taxes**” means all present or future stamp, court or documentary, intangible, recording, filing or similar Taxes that arise from any payment made under, from the execution, delivery, performance, enforcement or registration of, from the receipt or perfection of a security interest under, or otherwise with respect to, any Finance Document, except any such Taxes that are Other Connection Taxes imposed with respect to an assignment.

“**Participant**” has the meaning given to it in Section 13.1(i) (*Assignment by Lenders*).

“**Participant Register**” has the meaning given to it in Section 13.1(j) (*Assignment by Lenders*).

“**Permitted Liens**” means any of the following:

- (a) leases to which such Person is a party, or deposits to secure public or statutory obligations of such Person or deposits of cash or United States government bonds to secure surety or appeal bonds to which such Person is a party, or deposits as security for contested Taxes or import duties or for the payment of rent, in each case Incurred in the ordinary course of business;
- (b) Liens imposed by law, such as carriers’, warehousemen’s and mechanics’ Liens, in each case for sums not yet overdue by more than 30 days or being contested in good faith by appropriate proceedings or other Liens arising out of judgments or awards against such Person with respect to which such Person shall then be proceeding with an appeal or other proceedings for review and Liens arising solely by virtue of any statutory or common law provision relating to banker’s Liens, rights of set-off or similar rights and remedies as to deposit accounts or other funds maintained with a creditor depository institution; *provided, however*, that such deposit account is not a dedicated cash collateral account and is not subject to restrictions against access by the Borrower in excess of those set forth by regulations promulgated by the Federal Reserve Board;
- (c) Liens for Taxes not yet subject to penalties for non-payment or which are being contested in good faith by appropriate proceedings;
- (d) minor survey exceptions, minor encumbrances, easements or reservations of, or rights of others for, licenses, rights-of-way, sewers, electric lines, telegraph and telephone lines and other similar purposes, or zoning or other restrictions as to the use of real property or Liens incidental to the conduct of the business of such Person or to the ownership of its properties which were not Incurred in connection with Indebtedness and which do not in the aggregate materially adversely affect the value of said properties or materially impair their use in the operation of the business of such Person;
- (e) Liens securing Indebtedness Incurred to finance the construction, purchase or lease of, or repairs, improvements or additions to, property, plant or equipment of such Person; *provided, however*, that the Lien may not extend to any other property owned by such Person at the time the Lien is Incurred (other than assets and property affixed or appurtenant thereto), and the Indebtedness (other than any interest thereon) secured by the Lien may not be Incurred more than 180 days after the later of the acquisition, completion of construction, repair, improvement, addition or commencement of full operation of the property subject to the Lien;
- (f) Liens existing on the Closing Date;
- (g) Liens on property or shares of Equity Interests of another Person at the time such other Person becomes a Subsidiary of such Person; *provided, however*, that the Liens may not

extend to any other property owned by such Person (other than assets and property affixed or appurtenant thereto);

(h) Liens securing industrial revenue or pollution control bonds issued for the benefit of the Borrower;

(i) Liens on property at the time such Person or any of its Subsidiaries acquires the property, including any acquisition by means of a merger or consolidation with or into such Person or a Subsidiary of such Person; *provided, however*, that the Liens may not extend to any other property owned by such Person (other than assets and property affixed or appurtenant thereto);

(j) Liens securing Indebtedness or other obligations of a Subsidiary of such Person owing to such Person or a wholly-owned Subsidiary of such Person;

(k) Liens to secure any Refinancing (or successive Refinancings) as a whole, or in part, of any Indebtedness secured by any Lien referred to in the foregoing clause (e), (f), (g), (h) or (i); *provided, however*, that: (i) such new Lien shall be limited to all or part of the same property and assets that secured or, under the written agreements pursuant to which the original Lien arose, could secure the original Lien (plus improvements and accessions to, such property or proceeds or distributions thereof); and (ii) the Indebtedness secured by such Lien at such time is not increased to any amount greater than the sum of (x) the outstanding principal amount or, if greater, committed amount of the Indebtedness under clause (e), (f), (g), (h) or (i) at the time the original Lien became a Permitted Lien pursuant to this Agreement and (y) an amount necessary to pay any fees and expenses, including premiums, related to such Refinancing, refunding, extension, renewal or replacement; and

(l) Liens on assets subject to a sale and leaseback transaction securing Attributable Debt permitted to be Incurred pursuant to Section 10.6 (*Limitation on Sale and Leaseback Transactions*).

“**Permitted Transferee**” means any assignee or transferee permitted pursuant to Section 13.1 (*Assignment by Lenders*).

“**Person**” means and includes individuals, corporations, bodies corporate, limited or general partnerships, joint stock companies, limited liability companies, joint ventures, associations, companies, trusts, banks, trust companies, funds, Governmental Bodies or any other type of organization or entity, whether or not a legal entity.

“**PESA**” has the meaning given to it in the definition of Project Equipment Supply Agreement.

“**Plan**” means an “employee pension benefit plan” (within the meaning of Section 3(2) of ERISA) that is subject to Title IV or Section 302 of ERISA or Section 412 of the Code), maintained by the Borrower or any ERISA Affiliate; or to which the Borrower has any liability, contingent or otherwise.

“**Premium Loan**” has the meaning given to it in Section 2.1(a)(ii) (*Premium Loans*).

“**Primetals**” means Primetals Technologies Austria GmbH or, as the context may require, Primetals Technologies USA LLC, an Affiliate of Primetals Technologies Austria GmbH, acting as agent therefor.

“**Principal Property**” means any domestic blast furnace or steel producing facility, or casters that are part of a plant that includes such a facility, in each case located in the United States, having a net book value in excess of 1% of Consolidated Net Tangible Assets at the time of determination.

“**Project Equipment Supply Agreement**” means, in each case together with the relevant purchase orders qualifying as Eligible Project Costs, that certain Project Equipment Supply Agreement by and between the Borrower and Primetals dated as of August 15, 2019 (the “**PESA**”), as amended by that certain ESP Amendment to Project Equipment Supply Agreement dated as of August 15, 2019 (the “**ESP Amendment**”) related to the Mon Valley Works Project.

“**Project Upgrades**” means the installation of an endless strip production line at the Mon Valley Works Project supplied by Primetals.

“**Proportionate Share**” means, as to any Lender and its Commitment of any Class, the percentage calculated as such Lender’s unutilized Commitment of such Class divided by all Lenders’ unutilized Commitments of such Class.

“**PTE**” means a prohibited transaction class exemption issued by the United States Department of Labor, as any such exemption may be amended from time to time.

“**Quotation Day**” means, in relation to any period for which an interest rate is to be determined, two Business Days before the first day of that period, unless market practice differs in the London interbank market for U.S. Dollars, in which case the Quotation Day for that currency shall be determined by the Facility Agent in accordance with market practice in the London interbank market (and if quotations would normally be given on more than one day, the Quotation Day shall be the last of those days).

“**Ratings Agency**” means S&P, Moody’s or Fitch.

“**Recipient**” means (a) the Facility Agent or (b) any Lender.

“**Reference Banks**” means the principal offices of JPMorgan Chase Bank, N.A. (London Branch), Crédit Agricole Corporate & Investment Bank and Deutsche Bank AG.

“**Refinancing**” means, in respect of any Indebtedness, to refinance, extend, renew, refund, repay, prepay, redeem, defease or retire, or to issue other Indebtedness in exchange or replacement for, such Indebtedness.

“**Register**” has the meaning given to it in Section 13.1(f) (*Assignment by Lenders*).

“**Repayment Date**” means the First Repayment Date and each subsequent Interest Payment Date thereafter.

“**Repayment Installment**” means each installment of principal that is scheduled to fall due on the Loans on each Repayment Date.

“**Resolution Authority**” means anybody which has authority to exercise any Write-down and Conversion Powers.

“**Restricted Finance Party**” has the meaning given to it in Section 8.1(k) (*Sanctions*).

“**S&P**” means Standard & Poor’s Ratings Services, a Standard & Poor’s Financial Services LLC business or any successor to its rating business.

“**Sale-Leaseback**” means a transaction or arrangement under which title to any property or an interest therein is transferred by or on the direction of a Person (“**X**”) to another Person which leases or otherwise grants the right to use such property, asset or interest (or other property, which X intends to use for the same or a similar purpose) to X (or nominee of X), whether or not in connection therewith X also acquires a right or is subject to an obligation to acquire the property, asset or interest, and regardless of the accounting treatment of such arrangement.

“**Sanctioned Jurisdiction**” means any country or territory that is the subject or target of comprehensive Sanctions (as of the date hereof, Cuba, Iran, North Korea, Syria and the Crimea region of Ukraine).

“**Sanctions**” means any laws, rules, regulations or executive orders relating to economic or financial sanctions or trade embargoes imposed, administered or enforced by the United States (including OFAC and the U.S. Department of State), the European Union, or the Federal Republic of Germany (including the Federal Ministry of Economics and Technology).

“**Sanctions List**” means any list of designated Persons that are the subject or target of Sanctions, including: (a) the Specially Designated Nationals and Blocked Persons List maintained by OFAC; and (b) the consolidated list of persons, groups and entities subject to EU financial sanctions maintained by the European Union.

“**Sanctions Target**” means any Person:

- (a) identified on any Sanctions List;
- (b) that is the government of, or is a governmental agency or instrumentality of, any Sanctioned Jurisdiction;
- (c) 50% or more owned by one or more Persons described in the foregoing clause (a) or (b);
- (d) organized, domiciled or resident in any Sanctioned Jurisdiction; or
- (e) otherwise the target of Sanctions.

“**Screen Rate**” means the London interbank offered rate (rounded upwards, if necessary, to the next 1/16th of 1%) administered by ICE Benchmark Administration Limited (or any other person which

takes over the administration of that rate) for the relevant currency and period displayed (before any correction, recalculation or republication by the administrator) on pages LIBOR01 or LIBOR02 of the Thomson Reuters screen (or any replacement Thomson Reuters page which displays that rate) or on the appropriate page of such other information service which publishes that rate from time to time in place of Thomson Reuters; *provided*, that such rate shall in no case be lower than zero. If such page or service ceases to be available, the Facility Agent may specify another page or service displaying the relevant rate after consultation with the Borrower.

“**Starting Point of Credit**” means, the earlier of:

- (a) The date on which Final Acceptance for the Project Upgrades have been achieved; and
- (b) April 30, 2023.

“**Subsidiary**” means with respect to any Person, any other Person which is Controlled directly or indirectly by that Person, and “**Subsidiaries**” means all of such other Persons.

“**Supporting Documentation**” means, in relation to any payment under the Project Equipment Supply Agreement for Eligible Project Costs to be financed or reimbursed by an Eligible Project Cost Loan, those documents specified in this definition that are relevant to the payment and necessary, in the reasonable opinion of the Facility Agent (and which shall be deemed *prima facie* evidence as to the contents thereof), to:

- (a) identify the goods or services, due shipment, dispatch or provision;
- (b) evidence the amount due and payable and the last date for payment;
- (c) in the case of a Covered Loan Utilization Request – Reimbursement (Schedule C-1, Part II) to the Borrower, evidence receipt by the Exporter of payment from the Borrower,

namely, for a Covered Loan Utilization Request with regard to any Eligible Project Cost Loan (either by way of a disbursement to the Exporter or by reimbursement to the Borrower), one or more of the following, to the extent applicable (as per Schedule G (“*Payment Steps*”)):

- (i) Exporter’s commercial invoice(s);
- (ii) for placement of material for fabrication, relevant documentation of orders placed with sub-suppliers (redacted for commercially sensitive information), and, where applicable, a Completion Certificate, substantially in the form of Schedule D – Part III, in relation to such orders signed by the Borrower and the Exporter;
- (iii) for delivery of goods, a copy of the transport document (e.g. bill of lading, airway bill) and, where applicable, a Completion Certificate, substantially in the form of Schedule D – Part III, in relation to the goods and services signed by the Borrower and the Exporter;

- (iv) for completion of cold commissioning (i.e. “first coil”) a Provisional Acceptance Certificate under the Project Equipment Supply Agreement signed by Primetals Technologies USA LLC and the Borrower or a Deemed Provisional Acceptance Certificate under the Project Equipment Supply Agreement issued by Primetals Technologies USA LLC;
- (v) for maintenance manuals and as-built documentation, a copy of “Primetals Secure File Exchange – Download Notification” or if no download has occurred or remains available within 30 days from issue date “Primetals File Exchange – Initial Report” showing the issue date; or
- (vi) for Final Acceptance, an Acceptance Certificate under the Project Equipment Supply Agreement signed by Primetals Technologies USA LLC and the Borrower or a Deemed Acceptance Certificate under the Project Equipment Supply Agreement issued by Primetals Technologies USA LLC.

“**Taxes**” means all present or future taxes, levies, imposts, duties, deductions, withholdings (including backup withholding), assessments, fees or other charges imposed by any Governmental Body, including any interest, additions to tax or penalties applicable thereto.

“**Total Commercial Loan Commitment**” shall have the meaning given to it in Section 2.1(b) (*Commercial Loans*).

“**Total Commitments**” means the sum of the Total Covered Loan Commitment and the Total Commercial Loan Commitment, *provided* that the Total Commitments shall be reduced in the case of a reduction of the Eligible Project Costs before the Loans are fully drawn or the end of the Commercial Loan Commitment Period and the Covered Loan Commitment Period has been reached, *provided further* that an increase in Eligible Project Costs shall not automatically lead to an increase in the Total Commitments.

“**Total Covered Loan Commitment**” shall have the meaning given to it in Section 2.1(a)(ii) (*Premium Loans*).

“**Total Eligible Project Cost Loan Commitment**” shall have the meaning given to it in Section 2.1(a)(i) (*Eligible Project Cost Loans*).

“**Transaction Documents**” means the Project Equipment Supply Agreement together with the Finance Documents.

“**Transfer Certificate**” means a certificate substantially in the form set out on Schedule B (*Form of Transfer Certificate*) with any amendments which the Facility Agent may approve or reasonably require or any other form agreed between the Facility Agent and the Borrower.

“**Unpaid Sum**” means any sum due and payable but unpaid by the Borrower under the Finance Documents.

“**Unused Commitment**” means, in respect of each Lender at any time, such Lender’s applicable Commitment *minus* the aggregate of (a) the principal amount of Loans then held by such Lender, (b) the principal that was held by such Lender and prepaid by the Borrower and (c) the principal that was held by such Lender and assigned to another Lender.

“**U.S. Person**” means any Person that is a “United States Person” as defined in Section 7701(a)(30) of the Code.

“**U.S. Tax Compliance Certificate**” has the meaning specified in Article 6(g)(ii)(B)(3) (*Status of Lenders*).

“**U.S. Secondary Sanctions**” means any “secondary sanctions” (as such term is construed under U.S. sanctions laws, regulations and executive orders) imposed by the United States (including any such “secondary sanctions” imposed by OFAC or the U.S. Department of State).

“**USA PATRIOT Act**” means the *Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act* of 2001 (Title III of Pub. L. No. 107-56 (signed into law October 26, 2001)), as amended or modified from time to time.

“**Utilization**” means the borrowing of a Loan.

“**Utilization Date**” means the date of a Utilization, being the date on which the relevant Loan is made or is to be made.

“**Utilization Request**” means, as the context may require, a Covered Loan Utilization Request or a Commercial Loan Utilization Request.

“**Write-down and Conversion Powers**” means, in relation to any Bail-In Legislation described in the EU Bail-In Legislation Schedule from time to time, the powers described as such in relation to that Bail-In Legislation in the EU Bail-In Legislation Schedule.

1.2 Certain Rules of Interpretation.

In this Agreement, unless otherwise specifically provided or unless the context otherwise requires:

- (a) the terms “Agreement,” “this Agreement,” “hereto,” “hereof,” “herein,” “hereby,” “hereunder” and similar expressions refer to this Agreement in its entirety and not to any particular Article, Section, Schedule, or other portion hereof or thereof;
- (b) references to a “paragraph,” “Section” or “Article” followed by a number or letter refer to the specified paragraph, Section or Article of this Agreement;
- (c) the division of this Agreement into articles, sections and paragraphs and the insertion of headings are for convenience of reference only and shall not affect the construction or interpretation of this Agreement;

- (d) words importing the singular shall include the plural and *vice versa*, and words importing gender shall include all genders;
- (e) the words “including,” “includes” and “include” shall be deemed to be followed by the words “without limitation”;
- (f) the terms “party” and “the parties” refer to a party or the parties to this Agreement, and references to a Person in this Agreement means such Person or its successors or permitted assigns;
- (g) the term “continuing,” when used in relation to a Default or Event of Default, means that such Default or Event of Default is continuing unremedied or unwaived in accordance with the terms of the Finance Documents;
- (h) the term “repay” (or any derivative form thereof) shall, subject to any contrary indication, be construed to include “prepay” (or, as the case may be, the corresponding derivative form thereof);
- (i) the words “will” and “shall” are to be treated as synonymous;
- (j) references to agreements (including this Agreement) and other contractual instruments shall be deemed to include all subsequent amendments and other modifications thereto, but only to the extent such amendments and other modifications are not prohibited by the terms of this Agreement;
- (k) references to statutes or regulations are to be construed as including all statutory and regulatory provisions consolidating, amending, supplementing, interpreting or replacing the statute or regulation referred to;
- (l) except as otherwise specifically provided herein, where any payment is required to be made or any other action is required to be taken on a particular day and such day is not a Business Day and, as a result, such payment cannot be made or action cannot be taken on such day, then this Agreement shall be deemed to provide that such payment shall be made or such action shall be taken on the next Business Day in the same calendar month (if there is one) or the immediately preceding Business Day (if there is not); *provided*, that any Repayment Date which would otherwise end after the Final Maturity Date shall end on the Final Maturity Date (and if the Final Maturity Date is not a Business Day, the immediately preceding Business Day);
- (m) an amendment includes a supplement, novation, extension (whether of maturity or otherwise), restatement, re-enactment or replacement (however fundamental and whether or not more onerous) and amended will be construed accordingly; and
- (n) a law or provision of law is a reference to that law or provision as amended and includes any subordinate legislation.

1.3 Currency.

Any reference in this Agreement to currency, “Dollar”, “U.S. Dollar” or to “\$”, unless otherwise expressly indicated, shall be to the lawful currency of the United States of America, being referred to herein as United States dollars. Any amounts to be advanced, paid, prepaid, or repaid shall be made in United States dollars.

1.4 Knowledge.

Where any representation or warranty contained in this Agreement is expressly qualified by reference to the “knowledge” of a Person, it shall be deemed to refer to the actual knowledge of any Chief Executive Officer, Chief Financial Officer, General Counsel, any Vice President or any other officer or director (or Person performing any role of substantially the same scope and responsibility of any of the foregoing) of such Person and all information which ought to have been known by any of them after conducting a reasonable inquiry into the matters in question, whether or not any such inquiry was actually made; *provided*, that each such Person shall be deemed to have knowledge of all events, conditions and circumstances described in any notice delivered to the Borrower pursuant to the terms of this Agreement or any other Finance Document.

1.5 Conflict.

In the case of any inconsistency between the terms of this Agreement and any other Finance Document, this Agreement shall prevail.

Article 2 LOANS

2.1 Loans.

(a) Covered Loans.

- (i) **Eligible Project Cost Loans.** Subject to the terms and conditions set forth in this Agreement, each Covered Lender hereby agrees, severally and not jointly, to advance to the Borrower from time to time during the Covered Loan Commitment Period such loans as the Borrower may request under Section 3.1 (*Delivery of a Utilization Request*) (individually, an “**Eligible Project Cost Loan**” and, collectively the “**Eligible Project Cost Loans**”). The aggregate amount of the Eligible Project Cost Loan Commitments shall not exceed 85% of the Eligible Project Costs, in the total amount not exceeding \$212,755,810.07 (such amount, as may be reduced from time to time in accordance with the terms hereof, the “**Total Eligible Project Cost Loan Commitment**”).
- (ii) **Premium Loans.** Subject to the terms and conditions set forth in this Agreement, each Covered Lender hereby agrees, severally and not jointly, to advance to the Borrower from time to time during the Covered Loan Commitment Period such loans as the Borrower may request under Section 3.1 (*Delivery of a Utilization Request*) (individually, a “**Premium Loan**” and, collectively the “**Premium Loans**”, and together with the Eligible Project Cost Loans, each a “**Covered Loan**” and together, the “**Covered Loans**”). Covered Loans shall be made *pro rata* among the Covered Lenders in accordance with their respective Covered Loan Commitment. The principal amount at any time outstanding of the Covered Loans shall not exceed such Covered Lender’s Covered Loan Commitment. The aggregate amount of the

Premium Loans and the Total Eligible Project Cost Loan Commitment shall not exceed \$250,000,000 (such amount, as may be reduced from time to time in accordance with the terms hereof, the “**Total Covered Loan Commitment**”). The aggregate amount of Covered Loans outstanding at any point in time shall not exceed the Total Covered Loan Commitment.

- (b) **Commercial Loans.** Subject to the terms and conditions set forth in this Agreement, each Commercial Lender hereby agrees, severally and not jointly, to advance to the Borrower from time to time during the Commercial Loan Commitment Period such loans as the Borrower may request under Section 3.1 (*Delivery of a Utilization Request*) (individually, a “**Commercial Loan**” and, collectively the “**Commercial Loans**”) in a principal amount at any time outstanding not to exceed such Commercial Lender’s Commercial Loan Commitment. Commercial Loans shall be made *pro rata* among the Commercial Lenders in accordance with their respective Commercial Loan Commitment. The aggregate amount of the Commercial Loan Commitments shall not exceed the Down Payment (such amount, as may be reduced from time to time in accordance with the terms hereof, the “**Total Commercial Loan Commitment**”). The aggregate amount of Commercial Loans outstanding at any point in time shall not exceed the Total Commercial Loan Commitment.

Finance Parties’ Rights and Obligations.

- (a) No Lender shall be responsible for the failure of any other Lender (“**Defaulting Lender**”) to so make its Loans, it being understood that no Lender shall be responsible for making Loans if the corresponding conditions in Article 11 (*Conditions Precedent*) are not met.
- (b) Failure by a Finance Party to perform its obligations under the Finance Documents does not affect the obligations of any other Finance Party under the Finance Documents.
- (c) No Finance Party is responsible for the obligations of any other Finance Party under the Finance Documents.
- (d) The rights of each Finance Party under, or in connection with, the Finance Documents are separate and independent rights.
- (e) Any debt arising under the Finance Documents to a Finance Party from the Borrower is a separate and independent debt in respect of which a Finance Party shall be entitled to enforce its rights in accordance with this paragraph (e). The rights of each Finance Party include any debt owing to that Finance Party under the Finance Documents and, for the avoidance of doubt, any part of a Loan or any other amount owed by the Borrower which relates to a Finance Party’s participation in a Loan or its role under a Finance Document (including any such amount payable to an Agent on its behalf) is a debt owing to that Finance Party by the Borrower.
- (f) The Borrower agrees and acknowledges that (i) the OeKB Guarantee is a separate arrangement and the Borrower shall have no right or recourse against the Lenders in respect of or arising by reason of any payment made by the OeKB Guarantor to any Covered Lender

pursuant to the OeKB Guarantee and (ii) the OeKB Guarantor may, at any time in accordance with the OeKB Guarantee and the OeKB General Terms and Conditions applicable thereto, instruct any one or more of the ECA Agent, the Facility Agent or the Covered Lenders to suspend or cease performing any or all of its obligations contained hereunder and the ECA Agent, the Facility Agent or the Covered Lenders, as applicable, shall be required to comply with such instruction.

Purpose and Use of Proceeds.

- (a) The Borrower shall apply the proceeds of Eligible Project Cost Loans solely to pay Eligible Project Costs.
- (b) The Borrower shall apply the proceeds of the Premium Loans solely to pay the OeKB Guarantee Premium.
- (c) The Borrower shall apply the proceeds of Commercial Loans in accordance with this Agreement and shall use the proceeds of the Commercial Loans solely to pay the Down Payment.

2.4 Monitoring.

No Finance Party is bound to monitor or verify the application of any amount borrowed pursuant to any Finance Document.

2.5 Evidence of Indebtedness.

- (a) Each Lender may maintain in accordance with its usual practice an account or accounts evidencing the Indebtedness of the Borrower to such Lender resulting from each Loan made by such Lender, including the amounts of principal and interest payable and paid to such Lender from time to time hereunder. Such account or accounts shall, to the extent not inconsistent with the notations made by the Facility Agent in the Register, be prima facie evidence of such Indebtedness of the Borrower absent manifest error; *provided*, that the failure of any Lender to maintain such account or accounts or any error in any such account shall not limit or otherwise affect any repayment Obligations of the Borrower hereunder.
- (b) Promptly following the request of any Lender, the Borrower will execute and deliver to such Lender a promissory note in form and substance acceptable ECA Agent (each a “**Note**”) with blanks appropriately completed in conformity herewith to evidence its obligation to pay the principal of, and interest on, the Covered Loan, Commercial Loan and/or Premium Loan, as applicable, made to it by such Lender; *provided, however*, that the decision of any Lender to not request a Note shall in no way detract from the Borrower’s obligation to repay such Loan and other amounts owing by the Borrower to such Lender.

**Article 3
UTILIZATION OF LOANS**

3.1 Delivery of a Utilization Request.

(a) Subject to the conditions referred to in Article 11 (*Conditions Precedent*) having been satisfied in accordance with the provisions of this Agreement and to the provisions of Section 2.1 (*Loans*), the Loans may be utilized by delivery to the Facility Agent, as provided below, of a duly completed Utilization Request not later than 12:00 p.m. New York time (i) in the case of the Covered Loan Utilization Request – Premium Loan, three (3) Business Days prior to the proposed Utilization Date of the Premium Loan and (ii) in the case of all other Utilization Requests, seven (7) Business Days prior to the proposed Utilization Date.

(b) Each Covered Loan Utilization Request shall be substantially in the form of Schedule C-1 (*Covered Loan Utilization Requests*), delivered by the Borrower (or by the Exporter as the case may be); and shall include all certifications and documentation required therein. The Borrower hereby agrees that it will designate in any Covered Loan Utilization Request – Disbursement (*Schedule C-1, Part I*) that (i) all Eligible Project Cost Loans shall be funded (A) directly to the Exporter to such account of the Exporter described in the Covered Loan Utilization Request – Disbursement (*Schedule C-1, Part I*) for the purpose described in Section 2.3(a) (*Purpose and Use of Proceeds*) or (B) in the case of reimbursement of Eligible Project Costs, directly to the Borrower to such account of the Borrower described in the Covered Loan Utilization Request – Reimbursement (*Schedule C-1, Part II*) and (ii) all Premium Loans shall be funded directly to the OeKB Guarantor to satisfy payment of the OeKB Guarantee Premium as described in the Covered Loan Utilization Request – Premium Loan (*Schedule C-1, Part III*).

The Borrower agrees that any Covered Loan Utilization Request – Disbursement (*Schedule C-1, Part I*), including the Exporter's Certificate – Disbursement (*Schedule D, Part I*) and relevant Supporting Documentation, shall be sent directly by the Exporter to the Facility Agent.

(c) Each Commercial Loan Utilization Request shall be substantially in the form of Schedule C-2 (*Commercial Loan Utilization Request*) and shall include all certifications and documentation required therein.

3.2 Completion of a Utilization Request.

(a) Each Utilization Request is irrevocable and shall not be regarded as having been duly completed unless:

(i) solely for a Utilization of Covered Loans, (A)(1) the Covered Loan Utilization Request – Reimbursement (*Schedule C-1, Part II*) includes a certification by the Borrower that the Utilization is required for the purpose set out in Section 2.3(a) (*Purpose and Use of Proceeds*) and (2) the Covered Loan Utilization Request – Disbursement (*Schedule C-1, Part I*) includes, if foreseen under Schedule G "Payment Steps", the Completion Certificate signed by the Borrower and the Exporter and, (B) the Covered Loan Utilization Request includes Supporting Documentation with respect to the Eligible Project Costs to be financed with the applicable Utilization of Covered Loans and, (C) the proposed Utilization Date is a Business Day within the Covered Loan Commitment Period;

(ii)solely for a Utilization of Commercial Loans, (A) the Commercial Loan Utilization Request includes a certification by the Borrower that the Utilization is required for the purpose set out in Section 2.3(c) (*Purpose and Use of Proceeds*) and (B) the proposed Utilization Date is a Business Day within the Commercial Loan Commitment Period;

(iii)the currency and amount of the Utilization comply with Section 3.3 (*Currency and Amount*);

(iv)the Utilization Request specifies the account or bank to which the proceeds of the Loan are to be credited;

(v)the proposed Interest Period specified therein complies with Article 5 (*Interest, Interest Periods and Fees*); and

(vi)the Utilization Request is executed by a Person duly authorized to do so on behalf of the Borrower as evidenced by an up-to-date Officer's Certificate or by an Exporter authorized person;

(b)Only four (4) Utilization Requests (which may consist of no more than (i) two (2) Utilizations from the Borrower and (ii) two (2) Utilizations from the Exporter) may be delivered in any calendar month. For the avoidance of doubt, the delivery of a Covered Loan Utilization Request – Premium Loan (*Schedule C-1, Part III*) shall not count towards the limitation as described under this Section 3.2(b) (*Completion of a Utilization Request*).

3.3Currency and Amount.

(a)The currency specified in a Utilization Request shall be U.S. Dollars.

(b)The amount of each proposed Utilization shall be a minimum of \$1,000,000 except (i) subject to Section 3.2(b) (*Completion of a Utilization Request*), one (1) Utilization from the Borrower and one (1) Utilization from the Exporter for an amount less than \$1,000,000 in any calendar month; or (ii) an amount equal to the Unused Commitments.

3.4Notification of Utilization of the Loan.

Following the delivery of a duly completed Utilization Request as provided in Section 3.1(b) (*Delivery of a Utilization Request*), the Facility Agent shall promptly, but in all cases, on or prior to 12:00 p.m. New York time on the date that falls three (3) Business Days prior to the proposed Utilization Date for any Loan notify each Lender and, in the case of Covered Loans, the ECA Agent of the proposed Utilization Date, Interest Period and the amount of such Lender's share of the proposed Loan.

3.5Lenders' Participation.

(a)If the conditions set out in this Agreement (including the applicable conditions in Article 11 (*Conditions Precedent*)) have been met, and subject to Article 4 (*Repayment, Prepayment and Cancellation*), each Lender shall make its participation in each Loan available by 10:00

a.m. Frankfurt time, on or prior to the applicable Utilization Date through its lending office to the Facility Agent's Account.

(b) The amount of each Lender's participation in each Loan shall be *pro rata* to its Unused Commitment immediately prior to making such Loan.

3.6 Partial Payments.

If the Facility Agent receives a payment for application against amounts due in respect of this Agreement that is insufficient to discharge all the amounts then due and payable by the Borrower under this Agreement, the Facility Agent shall apply such payment towards the Obligations of the Borrower under this Agreement in the following order:

- (i) **first**, in or towards payment *pro rata* of any unpaid amount owing to the Facility Agent and the ECA Agent under this Agreement;
- (ii) **second**, in or towards payment *pro rata* as between the Covered Loans and Commercial Loans of any accrued interest, fee or commission due but unpaid under this Agreement;
- (iii) **third**, in or towards payment *pro rata* as between the Covered Loans and Commercial Loans of any principal due but unpaid under this Agreement; and
- (iv) **fourth**, in or towards payment *pro rata* as between the Covered Loans and Commercial Loans of any other sum due but unpaid under this Agreement;

Article 4

REPAYMENT, PREPAYMENT AND CANCELLATION

4.1 Repayments.

- (a) The Borrower shall repay the Utilizations made to it in accordance with the terms of this Agreement (irrespective of whether Loan proceeds were made to it or the Exporter as provided in Section 3.1(b) (*Delivery of a Utilization Request*)).
- (b) Except as such repayment may be modified pursuant to Section 4.2 (*Mandatory Prepayment*), Section 4.4 (*Voluntary Prepayment*) or Section 4.9 (*Adjustment in case of disbursement after First Repayment Date*) the Borrower shall, commencing on the First Repayment Date and on each Repayment Date thereafter, make a repayment of the Loans determined in accordance with Section 4.10 (*Repayment Schedules*)).
- (c) The Borrower shall not reborrow any part of the Loans which are repaid or prepaid.
- (d) The Borrower shall repay the aggregate Loans (whether principal, interest, fees or otherwise) in full to the extent they are outstanding under or in respect of the Loan on the Final Maturity Date.

Mandatory Prepayment.

- (a) If an ECA Mandatory Prepayment Event occurs, and without limitation to any other remedies available to the Lenders as a result of any Event of Default triggered by such breach, each Lender's Covered Loan Commitments shall be automatically reduced to zero and within thirty (30) days after the ECA Mandatory Prepayment Event, the Borrower shall prepay in full all amounts outstanding under this Agreement with respect to the Class of Covered Loans in accordance with Section 4.7 (*Application*).
- (b) Upon the receipt of a refund of all or a portion of the OeKB Guarantee Premium from the OeKB Guarantor to the Borrower, the Borrower shall prepay the Covered Loans in an amount equal to such refund.
- (c) Upon any Change of Control, each Lender's Commitments shall be automatically reduced to zero and, within thirty (30) days after the occurrence of such Change of Control, the Borrower shall repay in full all outstanding amounts of each Class of Loans.
- (d) Not later than five (5) Business Days following (A) the Impairment of the Project Equipment Supply Agreement, (B) the reduction of the Eligible Project Costs under the Project Equipment Supply Agreement, (C) a material provision of the Project Equipment Supply Agreement for any reason ceasing to be valid and binding or in full force and effect except upon scheduled termination thereof or (D) it becoming unlawful for the Borrower to perform in any material respect any of its obligations under the Project Equipment Supply Agreement, the Borrower shall notify the Facility Agent thereof and the Facility Agent shall have the right to request the Borrower prepay the Loans (or in the case of a reduction of the Eligible Project Costs, in an amount corresponding to such reduction), each such prepayment to be made by the Borrower no later than thirty (30) days after receipt by the Borrower of notice from the Facility Agent.

4.3 Voluntary Cancellation.

Subject to the other terms of this Agreement, the Borrower may at any time cancel all or any part of the Commitments of any Class; *provided*, that:

- (a) it has given not less than ten (10) Business Days' prior written notice to the Facility Agent; and
- (b) if such cancellation is for only part of the outstanding Commitments:
 - (i) such cancellation shall be in a minimum amount of \$5,000,000 and an integral multiple of \$1,000,000; and
 - (ii) such cancellation will reduce the Commitment of each Lender of such Class *pro rata*.

4.4 Voluntary Prepayment.

Subject to the other terms of this Agreement, the Borrower may prepay all or any part of the Loans of any Class; *provided*, that:

- (a) the Borrower has given not less than ten (10) Business Days' notice to the Facility Agent and, in the case of a prepayment of Covered Loans, the ECA Agent;
- (b) subject to Section 4.8(b) (*Miscellaneous*), the Borrower simultaneously pays all accrued interest on the amount prepaid, together with all out-of-pocket costs and expenses, fees and all other amounts then due and payable under the Finance Documents and, in the case of a prepayment of Covered Loans, the OeKB Guarantee, including Break Costs (if any);
- (c) if such a prepayment is of all of the Loans of any Class then outstanding, the Loans of such Class are all repaid or prepaid simultaneously in full;
- (d) if such a prepayment is a partial prepayment of the Loans of any Class then outstanding:
 - (i) such prepayment shall be in a minimum amount of \$5,000,000 and an integral multiple of \$1,000,000; and
 - (ii) such prepayment will be applied as provided in Section 4.7 (*Application*), and the Borrower shall ensure that such amounts are repaid or prepaid simultaneously; and
- (e) such a prepayment shall not cause or result in a Default or Event of Default immediately prior to and immediately following such a prepayment.

4.5 Automatic Cancellation.

Each (a) Covered Lender's Covered Loan Commitment shall terminate on the last day of the Covered Loan Commitment Period and (b) Commercial Lender's Commercial Loan Commitment shall terminate on the last day of the Commercial Loan Commitment Period, in each case, at 5:00 p.m. Frankfurt time.

4.6 Right of Cancellation and Repayment in Relation to a Single Lender.

- (a) The Borrower may at any time, cancel any available Commitments of any Lender or repay any of the Loans held by an individual Lender (together with any other accrued and unpaid amounts owing to such Lender under the Finance Documents) if such Lender claims indemnification from the Borrower under Section 7.5 (*Indemnities*) or any amount under Section 7.3 (*Change in Circumstances*). The Borrower may, while the circumstances giving rise to the requirement for that increase or indemnification continue, give notice to the Facility Agent, as applicable of cancellation of the Commitment(s) of such Lender and its intention to procure the repayment of the Loans of such Class held by such Lender;
- (b) On receipt of a notice referred to in Section 4.6(a) (*Right of Cancellation and Repayment in Relation to a Single Lender*) in relation to a Lender, the Commitments of such Lender of such Class will immediately be reduced to zero.
- (c) On the last day of the Interest Period in which the Borrower has given notice under Section 4.6(a) (*Right of Cancellation and Repayment in Relation to a Single Lender*) in

relation to a Lender (or, if earlier, the date specified by the Borrower in the notice under Section 4.6(a) (*Right of Cancellation and Repayment in Relation to a Single Lender*)), the Borrower will repay all Loans made by such Lender, together with all interest, Commitment Fees and other amounts accrued under the Finance Documents through and including the date of repayment and, to the extent such Lender is a Covered Lender, under the OeKB Guarantee (if any).

4.7 Application.

(a) Except in the case of a prepayment or repayment under Section 7.2 (*Illegality*) or Section 4.6 (*Right of Cancellation and Repayment in Relation to a Single Lender*):

(i) any cancellation pursuant to this Article 4 (*Repayment, Prepayment and Cancellation*) shall:

(A) be applied *pro rata* between each Lender of the applicable Class; and

(B) if in part, reduce the Commitment of each Lender of such Class *pro rata*; and

(ii) any prepayment pursuant to this Article 4 (*Repayment, Prepayment and Cancellation*) shall be applied *pro rata* between each Loan of such Class.

(b) If any Loan is prepaid in accordance with Section 4.2 (*Mandatory Prepayment*), such prepayment will be applied (i) in inverse chronological order to the then remaining Repayment Installments or (ii) at the Borrower's option, subject to the OeKB Guarantor's prior approval, ratably to the then remaining Repayment Installments.

(c) If any Loan is prepaid in accordance with Section 4.4 (*Voluntary Prepayment*), such prepayment will be applied (i) in inverse chronological order to the then remaining Repayment Installments or (ii) at the Borrower's option, subject to the OeKB Guarantor's prior approval, ratably to the then remaining Repayment Installments.

4.8 Miscellaneous.

(a) Any written notice of cancellation or prepayment under this Article 4 (*Repayment, Prepayment and Cancellation*):

(i) is irrevocable; and

(ii) unless a contrary indication appears in this Agreement, shall specify:

(A) the date upon which the relevant cancellation or prepayment is to be made; and

(B) the amount of that cancellation or prepayment.

- (b) Subject to the requirements of the other provisions of this Article 4 (*Repayment, Prepayment and Cancellation*), any prepayment under this Agreement is without premium or penalty other than Break Costs to the extent that the prepayment is made on a date other than on the last day of the current Interest Period.
- (c) Any prepayment under this Agreement shall be made together with accrued and unpaid interest through but not including such date.
- (d) No prepayment, repayment or cancellation is allowed except at the times and in the manner expressly provided for in this Agreement.
- (e) No amount of the Commitments cancelled under this Agreement may be subsequently reinstated.
- (f) If the Facility Agent receives a notice under this Article 4 (*Repayment, Prepayment and Cancellation*), it shall promptly forward a copy of that notice to each Lender.

4.9 Adjustment in case of disbursement after First Repayment Date.

If any Covered Loan is disbursed after the First Repayment Date, then every Repayment Installment then outstanding with respect to a Covered Loan will be increased by the amount of such Utilization divided by the number of such outstanding Repayment Installments. Where such Utilization of a Covered Loan is effected within a period of one (1) month prior to the Repayment Date, then the Repayment Installments will be adjusted only as from the second Repayment Date following the Utilization of such Covered Loan.

4.10 Repayment Schedules.

Prior to the First Repayment Date, the Facility Agent shall provide the Borrower a repayment schedule with respect to each of the Covered Loans and the Commercial Loans, which shall be aligned with the then existing Interest Payment Dates and form an integral part of this Agreement after the Borrower's written confirmation thereof (and, for the avoidance of doubt, as countersigned by the Facility Agent). In the event that this Section 4.10 (*Repayment Schedules*) applies, the Facility Agent shall provide to the Borrower a revised repayment schedule for the Covered Loans, which shall become an integral part of this Agreement after the Borrower's written confirmation thereof (and, for the avoidance of doubt, as countersigned by the Facility Agent) and replace any repayment schedule previously agreed with the Borrower, but shall, for the avoidance of doubt, not change the Repayment Dates.

Article 5 INTEREST, INTEREST PERIODS AND FEES

Payment of Interest.

Subject to Sections 5.6 (*Unavailability of Screen Rate*) and 5.7 (*Market Disruption*), interest shall accrue on each Loan at a *per annum* rate during each Interest Period equal to LIBOR for such Interest Period plus the Applicable Margin. The Borrower shall pay accrued interest on the Loans on each Interest Payment Date. Accrued interest shall be calculated on the basis of a 360-day year. Accrued interest shall be paid on the basis of actual days elapsed and shall include the first day of the Interest Period but exclude the last day of such Interest Period.

Default Interest.

- (a) If the Borrower fails to pay any amount payable by it under any Finance Document or under the OeKB Guarantee on its due date, interest shall accrue on the overdue amount from the due date up to but not including the date of actual payment (both before and after judgment) at a rate which, subject to paragraph (b) below, is 2% *per annum* higher than the interest rate deferred at such time pursuant to Section 5.1 (*Payment of Interest*). Any interest accruing under this Section 5.2 (*Default Interest*) shall be immediately payable by the Borrower on written demand by the relevant Agent or Lender.
- (b) If any overdue amount consists of all or part of a Loan which became due on a day which was not the last day of an Interest Period relating to that Loan;
- (i) the first Interest Period for that overdue amount shall have a duration equal to the unexpired portion of the current Interest Period relating to that Loan;
 - (ii) the rate of interest applying to the overdue amount during that first Interest Period shall be 2% *per annum* higher than the rate which would have applied if the overdue amount had not become due; and
 - (iii) default interest (if unpaid) arising on an overdue amount will be compounded with the overdue amount at the end of each Interest Period applicable to that overdue amount but will remain immediately due and payable.
- (c) No accrued interest shall become due and payable other than in accordance with the provisions of Section 5.1 (*Payment of Interest*) or this Section 5.2 (*Default Interest*).

5.3 Limitation on Interest.

If at any time the interest rate applicable to any Loan, together with all other amounts that are treated as interest on such Loan under Applicable Law, exceeds the maximum lawful rate under the laws of New York, the interest payable in respect of such Loan, together with all other amounts treated as interest on such Loan, shall be limited to interest calculated at the maximum lawful rate under the laws of New York.

5.4 Determination of Interest Periods.

- (a) Subject to paragraph (b) below, each Interest Period for any Loan shall be of a duration of six (6) months.
- (b) The first Interest Period applicable to any Loan, whether disbursed in whole or in part, shall start on its respective Utilization Date and end six months thereafter; *provided* that additional disbursements under any Loan made within an Interest Period shall be interpolated to the then next Interest Payment Date. Each subsequent Interest Period for a Loan shall start on an Interest Payment Date and end on the day immediately before the subsequent Interest Payment Date that corresponds to the last day of such Interest Period or, if earlier, the Final Maturity Date.



5.5 Non-Business Days.

If an Interest Period would otherwise end on a day which is not a Business Day, such Interest Period shall instead end on the next Business Day in that calendar month (if there is one) or the immediately preceding Business Day (if there is not).

5.6 Unavailability of Screen Rate.

- (a) *Interpolated Screen Rate*: If no Screen Rate is available for LIBOR for the Interest Period of a Loan, the applicable LIBOR shall be the Interpolated Screen Rate for a period equal in length to the applicable Interest Period.
- (b) *Base Reference Bank Rate*: If no Screen Rate is available for LIBOR for (i) U.S. Dollars, or (ii) the Interest Period of a Loan and it is not possible to calculate the Interpolated Screen Rate, the applicable LIBOR shall be the Base Reference Bank Rate as of 11:00 a.m. (New York time) on the Quotation Day for U.S. Dollars and for a period equal in length to the Interest Period of that Loan.
- (c) If no Base Reference Bank Rate is available for U.S. Dollars for the relevant Interest Period, there shall be no LIBOR for that Loan and Section 5.8 (*Cost of Funds*) shall apply to that Loan for that Interest Period.

5.7 Market Disruption.

If before close of business in New York on the Quotation Day for the relevant Interest Period the Facility Agent receives notifications from a Lender or Lenders (whose participations in a Loan exceed 50% of such Class) that the cost to it of funding its participation in that Loan from whatever source it may reasonably select would be in excess of LIBOR then Section 5.8 (*Cost of Funds*) shall apply to that Class for the relevant Interest Period.

5.8 Cost of Funds.

- (a) If this Section 5.8 (*Cost of Funds*) applies, the rate of interest on the Loan for the relevant Interest Period shall be the percentage rate *per annum* which is the sum of:
 - (i) the Applicable Margin; and
 - (ii) the rate notified to the Facility Agent by each Lender as soon as practicable and in any event by close of business on the date falling fifteen (15) Business Days after the Quotation Day (or, if earlier, on the date falling three (3) Business Days before the date on which interest is due to be paid in respect of that Interest Period), to be that which expresses as a percentage rate *per annum* the cost of the relevant Lender of funding an amount equal to its participation in the Loan from whatever source it may reasonably select.
- (b) If this Section 5.8 (*Cost of Funds*) applies and the Facility Agent or the Borrower so requires, the Facility Agent and the Borrower shall enter into negotiations (for a period of not more than thirty (30) days) with a view to agreeing a substitute basis for determining the rate of interest.
- (c) Any alternative basis agreed pursuant to paragraph (b) above shall, with the prior consent of all the Lenders of such Class and the Borrower, be binding on all parties.
- (d) If this Section 5.8 (*Cost of Funds*) applies but any Lender does not supply a quotation by the time specified in paragraph (a)(ii) above, the rate of interest shall be calculated on the basis of the quotations of the remaining Lenders of such Class.

5.9 Break Costs.

- (a) The Borrower shall indemnify, compensate and reimburse each Lender for all Break Costs which such Lender may sustain:
 - (i) if the Borrower withdraws or reduces the amount specified for a Utilization in a Utilization Request or fails to satisfy any of the conditions precedent specified in Article 11 (*Conditions Precedent*) after delivering a Utilization Request (unless waived by the Lenders pursuant to Section 22.4 (*Amendment and Waiver*)); *provided*, that if the Borrower withdraws or reduces the amount specified for any Utilization Request, then the Applicable Margin shall be included in the calculation of Break Costs but in all other cases (including clauses (ii) and (iii) of this Section 5.9 (*Break Costs*)), the Applicable Margin should not be included in the calculation of Break Costs).
 - (ii) if the Borrower fails to pay any amount of principal of the Loans due and payable under a Finance Document on its due date; or
 - (iii) if any repayment or prepayment (whether mandatory or voluntary) of its Loan occurs on a date that is not the last day of the current Interest Period therefor for the Loan,

in accordance with Article 4 (*Repayment, Prepayment and Cancellation*) of this Agreement.

- (b) Each Lender shall furnish to the Borrower a certificate setting forth in reasonable detail the basis and amount of each request by such Lender for compensation under this Section 5.9 (*Break Costs*), which certificate shall be conclusive and binding on the Borrower in the absence of manifest error. The Borrower shall pay such Lender the amount shown as due on any such certificate within three (3) Business Days after receipt thereof.

5.10 Fees.

- (a) **Covered Loan Commitment Fee.** The Borrower shall pay to the Facility Agent (for the account of each Lender) a Covered Loan Commitment Fee at a rate *per annum* equal to 0.40% of the daily Unused Commitment of Covered Loans of such Covered Lender, for the period from and including the Effective Date to but excluding the last day of the Covered Loan Commitment Period. Accrued Covered Loan Commitment Fees shall be payable quarterly in arrears starting from the Effective Date, or, in the case of the last installment of the Covered Loan Commitment Fee payable hereunder, on the last day of the Covered Loan Commitment Period. No other commitment fees will be payable to the Facility Agent or the Covered Lenders on account of the Covered Loans. Notwithstanding the foregoing, no Covered Lender shall be entitled to receive any commitment fee for any period during which such Covered Lender is a Defaulting Lender (and the Borrower shall not be required to pay any commitment fee that otherwise would have been required to be paid to that Defaulting Lender).
- (b) **Commercial Loan Commitment Fee.** The Borrower shall pay to the Facility Agent (for the account of each Lender) a Commercial Loan Commitment Fee at a rate *per annum* equal to 1.00% of the daily Unused Commitment of Commercial Loans of such Commercial Lender, for the period from and including the Effective Date to but excluding the last day of the Commercial Loan Commitment Period. Accrued Commercial Loan Commitment Fees shall be payable quarterly in arrears starting from the Effective Date, in the case of the last installment of the Commercial Loan Commitment Fee payable hereunder, on the last day of the Commercial Loan Commitment Period. No other commitment fees will be payable to the Facility Agent or the Commercial Lenders on account of the Commercial Loans. Notwithstanding the foregoing, no Commercial Lender shall be entitled to receive any commitment fee for any period during which such Commercial Lender is a Defaulting Lender (and the Borrower shall not be required to pay any commitment fee that otherwise would have been required to be paid to that Defaulting Lender).
- (c) **OeKB Guarantee Premium.** Subject to the issuance of the OeKB Guarantee, the Borrower shall pay the OeKB Guarantee Premium in the amounts, at such time and manner specified in the OeKB Guarantee, which payment shall be made with the proceeds of the Premium Loans after disbursement thereof in accordance with the terms of this Agreement.
- (d) **Other Fees.** The Borrower shall pay such other fees in the amounts and manner agreed between any Finance Party and the Borrower in any Fee Letter.

Article 6 TAXES

- (a) **Defined Terms.** For purposes of this Article 6 (*Taxes*), the term “Applicable Law” includes FATCA.
- (b) **Payments Free of Taxes.** Any and all payments by or on account of any obligation of the Borrower under any Finance Document shall be made without deduction or withholding for

any Taxes, except as required by Applicable Law. If any Applicable Law (as determined in the good faith discretion of the Borrower) requires the deduction or withholding of any Tax from any such payment by the Borrower, then the Borrower shall be entitled to make such deduction or withholding and shall timely pay the full amount deducted or withheld to the relevant Governmental Body in accordance with Applicable Law and, if such Tax is an Indemnified Tax, then the sum payable by the Borrower shall be increased as necessary so that after such deduction or withholding has been made (including such deductions and withholdings applicable to additional sums payable under this Article 6 (*Taxes*)), the applicable Recipient receives an amount equal to the sum it would have received had no such deduction or withholding for Indemnified Taxes been made.

- (c) **Payment of Other Taxes by Borrower.** The Borrower shall timely pay to the relevant Governmental Body in accordance with Applicable Law, or at the option of the Facility Agent timely reimburse it for the payment of, any Other Taxes.
- (d) **Indemnification by Borrower.** The Borrower shall indemnify each Recipient, within ten (10) days after written demand therefor, for the full amount of any Indemnified Taxes (including Indemnified Taxes imposed or asserted on or attributable to amounts payable under this Article 6 (*Taxes*)) payable or paid by such Recipient or required to be withheld or deducted from a payment to such Recipient and any reasonable expenses arising therefrom or with respect thereto, other than any penalties and interest resulting from the willful misconduct or fraud of the Facility Agent or such Lender, and reasonable expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes were correctly or legally imposed or asserted by the relevant Governmental Body. A certificate as to the amount of such payment or liability delivered to the Borrower by a Lender (with a copy to the Facility Agent), or by the Facility Agent on its own behalf or on behalf of a Lender, shall be conclusive absent manifest error.
- (e) **Indemnification by the Lenders.** Each Lender shall severally indemnify the Facility Agent within ten (10) days after demand therefor, for (i) any Indemnified Taxes attributable to such Lender (but only to the extent that the Borrower has not already indemnified the Facility Agent for such Indemnified Taxes and without limiting the obligation of the Borrower to do so), (ii) any Taxes attributable to such Lender's failure to comply with the provisions of Section 13.1(j) (*Assignment by Lenders*) relating to the maintenance of a Participant Register and (iii) any Excluded Taxes attributable to such Lender, in each case, that are payable or paid by the Facility Agent in connection with any Finance Document, and any reasonable expenses arising therefrom or with respect thereto, whether or not such Taxes were correctly or legally imposed or asserted by the relevant Governmental Body. A certificate as to the amount of such payment or liability delivered to any Lender by the Facility Agent shall be conclusive absent manifest error. Each Lender hereby authorizes the Facility Agent to set off and apply any and all amounts at any time owing to such Lender under any Finance Document or otherwise payable by the Facility Agent to the Lender from any other source against any amount due to the Facility Agent under this paragraph (e).

(f) **Evidence of Payments.** As soon as practicable after any payment of Taxes by the Borrower to a Governmental Body pursuant to this Article 6 (*Taxes*), the Borrower shall deliver to the Facility Agent the original or a certified copy of a receipt issued by such Governmental Body evidencing such payment, a copy of the return reporting such payment or other evidence of such payment reasonably satisfactory to the Facility Agent.

(g) **Status of Lenders.** (i) Any Lender that is entitled to an exemption from or reduction of withholding Tax with respect to payments made under any Finance Document shall deliver to the Borrower and the Facility Agent, at the time or times reasonably requested by the Borrower or the Facility Agent, such properly completed and executed documentation reasonably requested by the Borrower or the Facility Agent as will permit such payments to be made without withholding or at a reduced rate of withholding. In addition, any Lender, if reasonably requested by the Borrower or the Facility Agent, shall deliver such other documentation prescribed by Applicable Law or reasonably requested by the Borrower or the Facility Agent as will enable the Borrower or the Facility Agent to determine whether or not such Lender is subject to backup withholding or information reporting requirements. Notwithstanding anything to the contrary in the preceding two sentences, the completion, execution and submission of such documentation (other than such documentation set forth in paragraphs (g)(ii)(A), (ii)(B) and (ii)(D) of this Article 6 (*Taxes*)) shall not be required if in the Lender's reasonable judgment such completion, execution or submission would subject such Lender to any material unreimbursed cost or expense or would materially prejudice the legal or commercial position of such Lender.

(ii) Without limiting the generality of the foregoing,

(A) any Lender that is a U.S. Person shall deliver to the Borrower and the Facility Agent on or about the date on which such Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Facility Agent), executed copies of IRS Form W-9 certifying that such Lender is exempt from U.S. federal backup withholding Tax;

(B) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to the Borrower and the Facility Agent (in such number of copies as shall be requested by the recipient) on or about the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Facility Agent), whichever of the following is applicable:

(1) in the case of a Foreign Lender claiming the benefits of an income Tax treaty to which the United States of America is a party (x) with respect to payments of interest under any Finance Document, executed copies of IRS Form W-8BEN or IRS Form W-8BEN-E establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the "interest" article of such Tax treaty and (y) with respect to any other applicable payments under any Finance Document, IRS Form W-8BEN or IRS Form W-8BEN-E establishing an exemption from, or reduction of,

U.S. federal withholding Tax pursuant to the “business profits” or “other income” article of such Tax treaty;

(2) executed copies of IRS Form W-8ECI;

(3) in the case of a Foreign Lender claiming the benefits of the exemption for portfolio interest under Section 881(c) of the Code, (x) a certificate substantially in the form of Exhibit A-1 to the effect that such Foreign Lender is not a “bank” within the meaning of Section 881(c)(3)(A) of the Code, a “10 percent shareholder” of the Borrower within the meaning of Section 871(h)(3)(B) of the Code, or a “controlled foreign corporation” related to the Borrower as described in Section 881(c)(3)(C) of the Code (a “**U.S. Tax Compliance Certificate**”) and (y) executed copies of IRS Form W-8BEN or IRS Form W-8BEN-E; or

(4) to the extent a Foreign Lender is not the beneficial owner, executed copies of IRS Form W-8IMY, accompanied by IRS Form W-8ECI, IRS Form W-8BEN, IRS Form W-8BEN-E, a U.S. Tax Compliance Certificate substantially in the form of Exhibit A-2 or Exhibit A-3, IRS Form W-9, and other certification documents from each beneficial owner, as applicable; *provided*, that if the Foreign Lender is a partnership and one or more direct or indirect partners of such Foreign Lender are claiming the portfolio interest exemption, such Foreign Lender may provide a U.S. Tax Compliance Certificate substantially in the form of Exhibit A-4 on behalf of each such direct and indirect partner;

(C) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to the Borrower and the Facility Agent (in such number of copies as shall be requested by the recipient) on or about the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Facility Agent), executed copies of any other form prescribed by Applicable Law as a basis for claiming exemption from or a reduction in U.S. federal withholding Tax, duly completed, together with such supplementary documentation as may be prescribed by Applicable Law to permit the Borrower or the Facility Agent to determine the withholding or deduction required to be made; and

(D) each Lender shall deliver to the Borrower and the Facility Agent at the time or times prescribed by law and at such time or times reasonably requested by the Borrower or the Facility Agent such documentation prescribed by Applicable Law (including as prescribed by Section 1471(b)(3)(C)(i) of the Code) and such additional documentation reasonably requested by the Borrower or the Facility Agent as may be necessary for the Borrower and the Facility Agent to comply with their obligations under FATCA and to determine that such Lender has complied with such Lender’s obligations under FATCA or to determine the amount, if any, to deduct and withhold from such payment. Solely for purposes of this clause (D),

“FATCA” shall include any amendments made to FATCA after the date of this Agreement.

Each Lender agrees that if any form or certification it previously delivered expires or becomes obsolete or inaccurate in any respect, it shall update such form or certification or promptly notify the Borrower and the Facility Agent in writing of its legal inability to do so.

(h)**Treatment of Certain Refunds.** If any party determines, in its sole discretion exercised in good faith, that it has received a refund of any Taxes (including any tax credit in lieu of a refund) as to which it has been indemnified pursuant to this Article 6 (*Taxes*) (including by the payment of additional amounts pursuant to this Article 6 (*Taxes*)), it shall pay to the indemnifying party an amount equal to such refund (but only to the extent of indemnity payments made under this Article 6 (*Taxes*) with respect to the Taxes giving rise to such refund), net of all out-of-pocket expenses (including Taxes) of such indemnified party and without interest (other than any interest paid by the relevant Governmental Body with respect to such refund). Such indemnifying party, upon the request of such indemnified party, shall repay to such indemnified party the amount paid over pursuant to this paragraph (h) (plus any penalties, interest or other charges imposed by the relevant Governmental Body) in the event that such indemnified party is required to repay such refund to such Governmental Body. Notwithstanding anything to the contrary in this paragraph (h), in no event will the indemnified party be required to pay any amount to an indemnifying party pursuant to this paragraph (h) the payment of which would place the indemnified party in a less favorable net after-Tax position than the indemnified party would have been in if the Tax subject to indemnification and giving rise to such refund had not been deducted, withheld or otherwise imposed and the indemnification payments or additional amounts with respect to such Tax had never been paid. This paragraph (h) shall not be construed to require any indemnified party to make available its Tax returns (or any other information relating to its Taxes that it deems confidential) to the indemnifying party or any other Person.

(i)**Survival.** Each party’s obligations under this Article 6 (*Taxes*) shall survive the resignation or replacement of the Facility Agent or any assignment of rights by, or the replacement of, a Lender, the termination of the Commitments and the repayment, satisfaction or discharge of all obligations under any Finance Document.

Article 7

OTHER PROVISIONS RELATING TO THE LOANS

Payments Generally.

- (a) The Borrower shall make each payment required to be made by it under this Agreement on the date when due, in immediately available funds, without defense, deduction, recoupment, set-off or counterclaim.
- (b) Any amounts received after close of business on any date may, in the discretion of the Facility Agent, be deemed to have been received on the next succeeding Business Day for purposes of calculating interest thereon.
- (c) All such payments shall be made to the Facility Agent at the Facility Agent’s Account, except that payments pursuant to Sections 7.3 (*Change in Circumstances*), 7.4 (*Payment of Out-of-Pocket Costs and Expenses*) and 7.5 (*Indemnities*) shall be made directly to the Persons entitled thereto.
- (d) The Facility Agent shall distribute any such payments received by it for the account of any other Person to the appropriate recipient promptly following receipt thereof.
- (e) All payments under or in connection with this Agreement shall be made in U.S. Dollars unless otherwise specified.

Illegality.

If any Applicable Law comes into force after the Effective Date, or if any change in any existing Applicable Law or in the interpretation or application thereof by any court of competent jurisdiction or Governmental Body now or hereafter makes it unlawful for a Lender to have advanced or acquired an interest in any of the Loans or to fund or otherwise maintain any of the Loans or to give effect to its obligations in respect thereof, such Lender may, by written notice thereof to the Borrower, declare its obligations under this Agreement to be terminated, and the Borrower shall immediately cancel any available Commitments of such Lender and prepay, within the time required by such law and if not so required by any time, promptly after such notice, the Loans and any other amounts owing under this Agreement (including accrued and unpaid interest) as may be applicable to, but not including, the date of such payment. If any such event shall, in the opinion of such Lender, only affect part of its obligations under this Agreement, the remainder of this Agreement shall be unaffected and the obligations of the Borrower under the Finance Documents shall continue. Each Lender agrees to use commercially reasonable efforts to designate a different lending office if such designation will avoid the need for such notice and will not, in the judgment of such Lender, acting reasonably, otherwise be materially disadvantageous (including among others, reduction in rate of return) to such Lender. The Borrower hereby agrees to pay all reasonable out-of-pocket costs and expenses incurred by any Lender in connection with any such designation or assignment.

Change in Circumstances.

- (a) If the introduction of or any change in any Applicable Law relating to a Lender or any change in the interpretation or application thereof by any Governmental Body or compliance by a Lender with any request or direction of any Governmental Body:
 - (i) subjects such Lender to any Taxes (other than Indemnified Taxes, Taxes described in clauses (b) through (d) of the definition of Excluded Taxes and Connection Income Taxes) on its loans, loan principal, letters of credit, commitments, or other obligations, or its deposits, reserves, other liabilities or capital attributable thereto;
 - (ii) imposes, modifies or deems applicable any reserve, liquidity, cash margin, capital, special deposit, deposit insurance or assessment, or any other regulatory or similar requirement or any additional or increased cost against assets held by, or deposits in or for the account of, or loans by, or any other acquisition of funds for loans by, such Lender or any direct or indirect holding company of such Lender;
 - (iii) imposes on such Lender or any direct or indirect holding company of such Lender or requires there to be maintained by such Lender any capital adequacy, liquidity or additional liquidity capital requirement (including, without limitation, a requirement which affects such Lender’s or such holding company’s allocation of capital resources to its obligations) in respect of such Lender’s obligations hereunder; or
 - (iv) imposes on such Lender any other condition or requirement with respect to this Agreement (provided, however, that this Section 7.3(a)(iv) (*Change in*

Circumstances) shall not apply with respect to any Taxes, but shall not limit any rights or obligations arising under Section 7.3(a)(i) (*Change in Circumstances*);

(b) and subject to paragraph (c) below, such occurrence has the effect of:

- (i) increasing the cost to such Lender of agreeing to make or making, maintaining or funding the Loan or any portion thereof;
- (ii) reducing the amount of the Obligations (including reduction in the rate of return) owing to such Lender;
- (iii) directly or indirectly reducing the effective return to such Lender under this Agreement or on its overall capital as a result of entering into this Agreement or as a result of any of the transactions or obligations contemplated by this Agreement; or
- (iv) causing such Lender to make any payment or to forgo any interest, fees or other return on or calculated by reference to any sum received or receivable by such Lender under this Agreement;

then, upon written request of such Lender, the Borrower will pay to such Lender such additional amount or amounts as will compensate such Lender for such additional costs incurred or reduction suffered. A certificate of a Lender setting forth the amount or amounts necessary to compensate such Lender and delivered to the Borrower, shall be conclusive absent manifest error. The Borrower shall pay such Lender the amount shown as due on any such certificate within ten (10) days after receipt thereof.

(c) For purposes of the foregoing, (i) the Dodd-Frank Wall Street Reform and Consumer Protection Act and all requests, rules, regulations, guidelines, requirements and directives thereunder, issued in connection therewith or in implementation thereof and (ii) all requests, rules, regulations, guidelines or directives whether concerning capital adequacy or liquidity promulgated by the Bank for International Settlements, the Basel Committee on Banking Supervision (or any successor or similar authority) or the United States of America or foreign regulatory authorities, in each case pursuant to Basel III, shall, in each case, be deemed a “change in Applicable Law” regardless of the date enacted, adopted, applied or issued.

Payment of Out-of-Pocket Costs and Expenses.

The Borrower shall pay to the Facility Agent and the Lenders on demand all reasonable out-of-pocket costs and expenses (including, without limitation, all reasonable fees, properly invoiced and documented out-of-pocket expenses and disbursements of outside legal counsel) (other than in the case of Section 7.4(d) (*Payment of Out-of-Pocket Costs and Expenses*) below, in which case the Borrower shall pay the Facility Agent and the Lenders on demand all out-of-pocket costs and expenses) of the Agents and the Lenders and their agents, counsel, and any receiver or receiver-manager appointed by them or by a court in connection with this Agreement and the other Finance Documents and the OeKB Guarantee, including, without limitation:

- (a) the preparation, negotiation, and completion of the Finance Documents and the OeKB Guarantee, or any actual or proposed amendment or modification thereof or any waiver thereunder and all instruments supplemental or ancillary thereto;
- (b) fees and expenses of the Lenders Incurred as part of the Lenders’ due diligence;
- (c) obtaining advice as any Agent’s or the Lenders’ rights and responsibilities under this Agreement or the other Finance Documents or the OeKB Guarantee;
- (d) the defense, establishment, protection or enforcement of any of the rights or remedies of the Lenders under this Agreement or any of the other Finance Documents or the OeKB Guarantee, including all out-of-pocket costs and expenses of establishing the validity and enforceability of, or of collection of amounts owing under, this Agreement; and
- (e) translation costs, including, but not limited to, the translation of the OeKB Guarantee from German into English.

Indemnities.

(a) The Borrower shall indemnify and hold harmless each Agent, each Lender and the OeKB Guarantor and their Affiliates, officers, directors and employees (each, an “**Indemnified Party**”) from all Claims (including the properly invoiced and documented fees, out-of-pocket expenses and disbursements of outside legal counsel to the Lenders and the OeKB Guarantor in each applicable jurisdiction), which may be Incurred by any Indemnified Party as a consequence of or in respect of:

- (i) default by the Borrower in the payment when due of any Obligation or any other Default or Event of Default hereunder which is continuing;
- (ii) the entering into by the relevant Agents and the Lenders of this Agreement and any amendment, waiver or consent relating hereto, and the performance by such Agents and the Lenders of their obligations under this Agreement;
- (iii) failure of the Borrower to comply with any Applicable Law, including, without limitation, any Environmental Law or applicable Anti-Corruption Laws or Sanctions, with respect to the Project Upgrades;
- (iv) any Environmental Matter and Environmental Claim with respect to the Project Upgrades;
- (v) the application by the Borrower of the proceeds of the Loan; or
- (vi) any material Claim arising in connection with the Project Upgrades, except for any such Claim that a final and non-appealable court of competent jurisdiction determined arose primarily on account of the relevant Indemnified Party’s gross negligence or willful misconduct.

(b) In connection with any Claim described in Section 7.5(a) (*Indemnities*) above, the applicable Indemnified Party shall deliver a certificate of an officer of the Facility Agent or the applicable Lender as to:

- (i) any such Claim; and
- (ii) containing reasonable details of the calculation (which calculation shall be, absent manifest error, *prima facie* evidence of the calculation of the amount of such Claim) and any supporting documentation, including but not limited to invoices and receipts.

Article 8
REPRESENTATIONS AND WARRANTIES

8.1 Representations and Warranties of the Borrower.

To induce each Lender to enter into this Agreement and the other Finance Documents to which each such Lender is a party, and to induce each Lender to make available the Loans under this Agreement, the Borrower makes the representations and warranties set forth below to each Lender as of the Closing Date and each Utilization Date.

(a) **Borrower Organization and Good Standing.** The Borrower:

- (i) has been duly incorporated and is an existing corporation in good standing under the laws of the State of Delaware;
- (ii) has the requisite power and authority (corporate and other) to own its properties and conduct its business; and
- (iii) is duly qualified to do business as a foreign corporation in good standing in all other jurisdictions in which its ownership or lease of property or the conduct of its business requires such qualification, except where the failure to so qualify would not reasonably be expected to have a Material Adverse Effect.

(b) **Capitalization.** All outstanding Equity Interests of the Borrower have been duly authorized and are validly issued, fully paid and non-assessable and are not subject to any pre-emptive or similar rights.

(c) **No Consents Required.** No consent, approval, Authorization, or Order of, or filing with, any Governmental Body is required for the execution and delivery by the Borrower of the Transaction Documents or the consummation of the transactions contemplated thereby (including the incurrence of Indebtedness thereunder) except (i) such as have been obtained or (ii) in the case of the Project Equipment Supply Agreement, such consents, approvals, Authorizations, Orders or filings the failure of which to obtain or make would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(d) **No Conflict.** The execution, delivery and performance by the Borrower of the Transaction Documents and compliance by the Borrower with the terms thereof and the consummation of the transactions contemplated by the Transaction Documents, will not result in a breach or violation of any of the terms and provisions of, or constitute a default under:

- (i) any statute, any rule, regulation or Order of any Governmental Body or any court, domestic or foreign, having jurisdiction over the Borrower or any of its properties;
- (ii) any agreement or instrument to which the Borrower is a party or by which the Borrower is bound or to which any of the properties of the Borrower is subject; or
- (iii) the charter, by laws or other organizational document of the Borrower.

(e)**Due Authorization.** The Borrower has full right, power and authority to execute and deliver the Transaction Documents and to perform its Obligations hereunder and thereunder; and all action required to be taken for the due and proper authorization, execution and delivery of each of the Transaction Documents and the consummation of the transactions contemplated thereby has been duly and validly taken.

(f)**Execution; Binding Obligation.** Each of the Transaction Documents to which the Borrower is or will become a party:

(i) has been, or when delivered under or in connection with this Agreement will be, duly executed and delivered by the Borrower; and

(ii) constitutes, or when delivered under or in connection with this Agreement will constitute, a valid and legally binding agreement of the Borrower enforceable against the Borrower in accordance with its terms, except as enforceability may be limited by applicable bankruptcy or insolvency laws, or Applicable Law affecting the enforcement of creditors' rights generally or by equitable principles relating to enforceability.

(g)**No Defaults.**

(i) The Borrower is not:

(A) in violation of its respective charter or by-laws or other organizational documents;

(B) in default in the performance of any obligation, agreement, covenant or condition contained in any indenture, loan agreement, mortgage, lease or other agreement or instrument that is material to the Borrower, to which the Borrower is a party or by which the Borrower or its property is bound; or

(C) in violation of any law or statute or any judgment, Order, rule or regulation of any court or arbitrator or Governmental Body, except for such defaults and violations in the case of these clauses (B) and (C) that would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(ii) No Default or Event of Default has occurred and is continuing.

(h)**Title to Real and Personal Property.**

(i) The Borrower has good and marketable title to all real properties and good and indefeasible title to all other properties and assets owned by it that are material to the business of the Borrower, in each case free from Liens, except such Liens that would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(ii) The Borrower holds its leased real or personal property under valid and enforceable leases free from any Liens that would materially interfere with the business of the Borrower, except such Liens that would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(iii) The Borrower owns or leases all properties and assets necessary to conduct its business.

(i) **Licenses and Permits.** The Borrower possesses all Authorizations required pursuant to Applicable Law necessary to conduct its business, except to the extent that any failure to possess would not reasonably be expected to have a Material Adverse Effect. The Borrower has not received any notice of proceedings relating to the revocation or modification of any such Authorization that, if determined adversely to the Borrower, would reasonably be expected to have a Material Adverse Effect.

(j) **Title to Intellectual Property.** Except as would not reasonably be expected to have a Material Adverse Effect:

(i) the Borrower owns, possesses, has the right to use or can acquire on reasonable terms adequate Intellectual Property to conduct its business;

(ii) the Borrower's conduct of its business does not infringe, misappropriate or otherwise violate any Intellectual Property of any Person;

(iii) the Borrower has not received any written notice of any claim relating to Intellectual Property; and

(iv) to the knowledge of the Borrower, the Intellectual Property of the Borrower is not being infringed, misappropriated or otherwise violated by any Person.

(k) **Sanctions.** Neither the Borrower nor any of its Subsidiaries nor, to the knowledge of the Borrower, any of their respective directors, officers or employees, nor any agent of the Borrower or its Subsidiaries that will act in any capacity in connection with this Agreement, is a Sanctions Target. The Borrower, its Subsidiaries and, to the knowledge of the Borrower, their respective directors, officers, employees and agents are in compliance with applicable Sanctions in all material respects. To the Borrower's knowledge, none of its Subsidiaries or any of the directors, officers, employees or agents of the Borrower or its Subsidiaries has knowingly taken any action that could reasonably be expected to result in penalties being imposed against the Borrower or any of its Subsidiaries or any of their respective directors, officers, employees or agents, as applicable, under U.S. Secondary Sanctions. The Borrower has implemented policies and procedures designed to promote and achieve compliance with applicable Sanctions.

In relation to each Finance Party that notifies the Borrower that it is a Restricted Finance Party (each a "**Restricted Finance Party**"), this Section 8.1(k) (*Sanctions*) shall only apply for the benefit of that Restricted Finance Party to the extent that the acceptance of the

representation in this Section 8.1(k) (*Sanctions*) would not conflict with, or result in any such Restricted Finance Party being in violation of, or subject to liability under, any EU Anti-Boycott Regulation.

In connection with any amendment, waiver, determination or direction relating to any part of this Section 8.1(k) (*Sanctions*) of which a Restricted Finance Party does not have the benefit, the Commitment of that Restricted Finance Party (if any) will be excluded for the purpose of determining whether the consent of the Majority Lenders has been obtained or whether the determination or direction by the Majority Lenders has been made.

- (l) **Anti-Corruption and Money Laundering Laws.** The Borrower, its Subsidiaries and, to the knowledge of the Borrower, their respective directors, officers, employees and agents are in compliance with applicable Anti-Corruption Laws and applicable Anti-Money Laundering Laws in all material respects. The Borrower has implemented policies and procedures designed to promote and achieve compliance with applicable Anti-Corruption Laws and applicable Anti-Money Laundering Laws.
- (m) **Compliance with Laws.** As of the date of this Agreement, the Borrower is in compliance with all Applicable Law (other than Environmental Laws, which are the subject of Section 8.1(n)) (*Environmental Matters*)), including with respect to Project Upgrades, except where such noncompliance has not had and would not reasonably be expected to have a Material Adverse Effect.
- (n) **Environmental Matters.** Except as disclosed on Schedule 8.1(n) (*Environmental Matters*) or as would not reasonably be expected to have a Material Adverse Effect, the Borrower:
- (i) is not in violation of any Environmental Laws or the Equator Principles;
 - (ii) maintains and is in compliance with all requisite Environmental Permits (including with respect to the development, construction and operation of the Project Upgrades);
 - (iii) does not own or operate any real property contaminated with any Hazardous Materials at levels that, to the knowledge of the Borrower, would reasonably be expected to require remedial action by the Borrower pursuant to any Environmental Laws; and
 - (iv) is not liable for any off-site disposal or contamination pursuant to any Environmental Laws, or is subject to any claim relating to any Environmental Laws, which violation, contamination, liability or claim would reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect, and the Borrower is not aware of any pending investigation which would reasonably be expected to lead to such a claim.
- (o) **No Labor Disputes.** No labor dispute with the employees of the Borrower exists or, to the knowledge of the Borrower, is imminent that would reasonably be expected, individually

or in the aggregate, to have a Material Adverse Effect, including with respect to the Project Upgrades.

(p)**Employee Benefit Plans.** Except as would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect:

(i) Each Plan and Multiemployer Plan has been maintained in compliance with its terms and the requirements of any applicable statutes, Orders, rules and regulations, including but not limited to ERISA and the Code.

(ii) No ERISA Event has occurred or is reasonably expected to occur.

(q)**Taxes.** The Borrower has timely filed all material federal, state, local and foreign income Tax returns that have been required to be filed and has paid all material Taxes indicated by such returns and all material assessments received by it to the extent that such material Taxes or assessments have become due and are not being contested in good faith by appropriate proceedings.

(r)**Financial Statements.** The Borrower's Financial Statements present fairly in all material respects the consolidated financial position of the Borrower and its consolidated Subsidiaries as of the dates shown and their results of operations and cash flows for the periods shown, and, except as otherwise disclosed in the Financial Statements, such Financial Statements have been prepared in conformity with GAAP in the United States applied on a consistent basis throughout the periods covered thereby.

(s)**Absence of Material Adverse Effect.** Except as set forth in the Borrower's Latest Form 10-K or the Borrower's Latest Form 10-Q since September 30, 2019:

(i) there has not been any material change in the capital stock or long-term Indebtedness of the Borrower, or any dividend or distribution of any kind declared, set aside for payment, paid or made by the Borrower on any class of capital stock (other than any regular quarterly dividend), or any Material Adverse Effect, or any development involving a prospective Material Adverse Effect, in or affecting the financial markets, business, properties, rights, assets, management, financial position, results of operations or prospects of the Borrower; and

(ii) the Borrower has not entered into any transaction or agreement that is material to the Borrower or Incurred any liability or obligation, direct or contingent, that is material to the Borrower.

(t)**Litigation.** As of the date of this Agreement, there are no Actions or Orders pending to which the Borrower or any of its Subsidiaries is a party or to which any property, right or asset of the Borrower or any of its Subsidiaries is subject that would, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect and neither any such Actions or Orders nor any legal, governmental or regulatory investigations to which the Borrower is a party or to which any property, right or asset of the Borrower is subject that

would, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect, are, to the knowledge of the Borrower, threatened by any Governmental Body or by others.

- (u)**Ranking.** The Loans are direct and unconditional general obligations of the Borrower, and rank and will at all times rank in right of payment and otherwise at least *pari passu* with all other senior unsecured and unsubordinated Indebtedness of the Borrower, whether now existing or hereafter outstanding, except for Indebtedness of the Borrower having priority solely by operation of Applicable Law, such as Indebtedness relating to judicial expenses Incurred for the general benefit of creditors, Taxes payable to Governmental Bodies, and wages, salaries and other social security benefits of the employees of the Borrower.
- (v)**Investment Company Act of 1940.** The Borrower is not, and after giving effect to the transactions contemplated hereby, will not be, subject to registration as an “investment company” or “controlled” by a company subject to registration as an “investment company,” within the meaning of the United States Investment Company Act of 1940, as amended.
- (w)**Margin Regulations.** No part of the application of proceeds of any Loan will violate Regulation T, U or X promulgated by the Board of Governors of the Federal Reserve System of the United States (12 C.F.R. Sections 207, 220, 221 and 224, respectively).
- (x)**Use of Proceeds.** The proceeds of all Utilizations have been and will be used in accordance with the terms and conditions of this Agreement and all applicable Finance Documents and the OeKB Guarantee.
- (y)**No Force Majeure or Early Termination Event:** No event or circumstance has occurred that:
 - (i) gives rise or might reasonably be expected to give rise to a right to terminate early, suspend performance under repudiate or cancel (in each case, in whole or in part) the Project Equipment Supply Agreement, it being understood that the Project Equipment Supply Agreement contains provisions permitting termination for convenience by the Borrower; or
 - (ii) constitutes a force majeure under and as described in the Project Equipment Supply Agreement.

Survival of Representations and Warranties.

- (a) The representations and warranties made in this Agreement are made by the Borrower on the date of this Agreement, the Closing Date, and on each Utilization Date.
- (b) The representations and warranties made in this Agreement are deemed to be made to each Finance Party by reference to the fact and circumstances then existing on each applicable date on which the representations and warranties are made notwithstanding any investigation made at any time by or on behalf of the Facility Agent or the Lenders.

Article 9 OeKB GUARANTEE

Until the Commitments have expired or have been terminated in full and all Obligations have been indefeasibly paid or repaid in full, the Borrower covenants and agrees to each of the following:

9.1 Reimbursement of OeKB Guarantee Premium.

If the OeKB Guarantee Premium or a portion thereof is refunded to the ECA Agent, after application in accordance with Section 4.2 (*Mandatory Prepayment*), the ECA Agent shall reimburse the Borrower in an amount equal to the amount refunded to the ECA Agent by the OeKB Guarantor promptly upon receipt of such refund from the OeKB Guarantor.

9.2 Borrower Payment.

- (a) The ECA Agent shall charge to the Borrower all out-of-pocket costs and expenses Incurred by the ECA Agent in connection with any refinancing of the Covered Loan or enforcement procedures.
- (b) If the ECA Agent requests the OeKB Guarantor’s consent or opinion to an amendment or a waiver requested by the Borrower under the Finance Documents, the ECA Agent shall have the right to charge the Borrower the reasonable out-of-pocket costs and expenses Incurred in evaluating and complying with such request.
- (c) The Borrower agrees and acknowledges that its payment obligations hereunder will in no way be relieved by the OeKB Guarantee or any payment to a Covered Lender thereunder. In the case of any payment to the Facility Agent, the ECA Agent or any Covered Lender pursuant to the OeKB Guarantee, the Borrower acknowledges that the OeKB Guarantor will, in addition to any other rights which it may have under the OeKB Guarantee or otherwise, have full rights of recourse against the Borrower pursuant to its right of subrogation as referred to in clause (d) below.
- (d) Upon payment by the OeKB Guarantor of amounts due and payable hereunder in accordance with the provisions of the OeKB Guarantee, the OeKB Guarantor shall (where applicable) have the right to be subrogated to the rights of the Facility Agent, the ECA Agent and any Covered Lender (as applicable) against the Borrower in accordance with the OeKB Guarantee.

9.3 Payments Made Under the OeKB Guarantee.

Each payment received by the ECA Agent from the OeKB Guarantor under the OeKB Guarantee for the account of any Covered Lender shall be paid by the ECA Agent to the Facility Agent, in immediately available funds, for distribution to each such Covered Lender.

9.4 Obligations under the OeKB Guarantee.

Notwithstanding anything to the contrary in the Finance Documents, nothing in the Finance Documents shall require the Facility Agent, ECA Agent or any Covered Lender to act (or refrain from acting) in a manner that is inconsistent with the terms of the OeKB Guarantee and, in particular:

- (a) the Facility Agent, ECA Agent and each Covered Lender may disclose to the OeKB Guarantor (and any internationally recognized insurer or reinsurer (including any insurance brokers or other service providers connected thereto; *provided* that such insurance broker or service provider is subject to confidentiality obligations or a nondisclosure agreement reasonably satisfactory to the Borrower)) that provides or proposes to provide insurance coverage to one or more of any Finance Party or the OeKB Guarantor in relation to any loss suffered under or pursuant to the Finance Documents (or the OeKB Guarantee, as applicable) any information related to the Borrower, the Project Upgrades and the Finance Documents as such party may consider appropriate or necessary including, without limitation, the occurrence of a Default or an Event of Default and the Facility Agent and the ECA Agent shall be authorized to take all such actions as it may deem necessary to ensure compliance with the terms of the OeKB Guarantee;
- (b) the ECA Agent shall be authorized to take all such actions as it may deem necessary to ensure compliance with the terms of the OeKB Guarantee;
- (c) the Borrower acknowledges and agrees that (i) each Covered Lender's rights to receive payment from the Borrower under this Agreement shall be covered pursuant to the OeKB Guarantee and (ii) the OeKB Guarantor may, at any time and in accordance with the OeKB Guarantee, instruct any one or more of the ECA Agent, the Facility Agent or the Covered Lenders to suspend or cease performing any or all of its obligations contained hereunder, and such of the ECA Agent, Facility Agent and Covered Lenders shall be required to comply with any such instruction; and
- (d) unless a contrary indication appears in the Project Equipment Supply Agreement, any instructions given to the Facility Agent by the ECA Agent shall override any conflicting instructions given by any other Finance Party and will be binding on all Finance Parties.

9.5 Other Agreements of the Covered Lenders.

- (a) The Facility Agent and each Covered Lender acknowledges that it has received a copy of the preliminary approval letter issued in connection with the OeKB Guarantee and the OeKB General Terms and Conditions and agrees to such terms and conditions. The Facility Agent and each Covered Lender authorizes the ECA Agent to receive the OeKB Guarantee on behalf of itself, the Facility Agent and each Covered Lender and to exercise any and all rights and perform any and all obligations arising under the OeKB Guarantee on behalf of itself, the Facility Agent and each Covered Lender. Upon receipt of the OeKB Guarantee by the ECA Agent, the ECA Agent shall promptly forward a copy thereof to the Facility Agent and each Covered Lender.
- (b) Each Covered Lender authorizes the ECA Agent to follow any instructions of the OeKB Guarantor in accordance with the terms and conditions of the OeKB Guarantee and acknowledges that any Covered Lender's failure to comply with such instructions or the terms and conditions of the OeKB Guarantee may result in lapse of coverage thereunder.
- (c) Each Covered Lender agrees that neither the ECA Agent nor any of its officers, directors, agents or employees shall be liable for any action taken or omitted by it or them under instructions from the OeKB Guarantor which it is or they are required to take under the OeKB Guarantee or in connection therewith.
- (d) Each Covered Lender agrees that any communication between any Covered Lender and the OeKB Guarantor in connection with the OeKB Guarantee or any Finance Document shall be conducted by and through the ECA Agent.
- (e) The ECA Agent shall inform the OeKB Guarantor of any increase or material change in any risk covered by the OeKB Guarantee to the extent it is required to do so under the terms of the OeKB Guarantee or for the purposes of ensuring the continuing validity of the OeKB Guarantee.
- (f) No Finance Party shall be liable in respect of any loss, damage or expense caused by its act (or omission) if it acts (or refrains from taking any action) in accordance with an instruction of the OeKB Guarantor. Any such decision or instructions from the OeKB Guarantor in the exercise or non-exercise of its rights shall be binding on the ECA Agent and the Covered Lenders. In the absence of instructions, the ECA Agent may act as it considers to be in the best interests of all the Covered Lenders and the OeKB Guarantor.
- (g) Without duplication to the provisions of Section 7.5 (*Indemnities*), the ECA Agent is subject to certain obligations under the OeKB Guarantee which ECA Agent would not be liable if it was not the ECA Agent. Accordingly, the Borrower agrees to indemnify and hold harmless the ECA Agent against any cost, loss or liability Incurred by it as ECA Agent under the OeKB Guarantee and for any cost, loss or liability for which the ECA Agent may be liable to the OeKB Guarantor in respect of the OeKB Guarantee.

Article 10 COVENANTS

Until the Commitments have expired or have been terminated in full and all Obligations have been indefeasibly paid or repaid in full, the Borrower covenants and agrees to each of the following:

Reporting Requirements; Notices.

(a) The Borrower shall furnish to the Facility Agent (for delivery to each Lender):

(i) **Quarterly Statements.** Within ninety (90) days after the end of each Fiscal Quarter of the Borrower (other than periods ending on the last day of the Fiscal Year of the Borrower):

(A) an unaudited consolidated balance sheet of the Borrower as of the close of such quarterly period;

(B) an unaudited consolidated income statement; and

(C)an unaudited consolidated cash flow statement

in each case, for such Fiscal Quarter, prepared in accordance with GAAP, containing any applicable notes and certified by independent public accountants of recognized international standing. Such Financial Statements shall be deemed furnished on the earlier of the date posted to the Borrower's website or the date publicly available on the U.S. Securities and Exchange Commission's website.

(ii)**Annual Consolidated Statements.** Within ninety (90) days after the end of each Fiscal Year of the Borrower:

(A)audited Financial Statements of the Borrower consisting of a consolidated balance sheet as of the end of such Fiscal Year,

(B)a consolidated income statement; and

(C)a consolidated cash flow statement,

(iii)in each case, for such Fiscal Year, prepared in accordance with GAAP, containing any applicable notes and certified by independent public accountants of recognized international standing. Such Financial Statements shall be (x) deemed furnished on the earlier of the date notified in writing to the Administrative Agent that they have been posted to the Borrower's website or that they have been made publicly available on the U.S. Securities and Exchange Commission's website and (y) if requested in writing by the ECA Agent, accompanied by the then most recent ratings report for the Borrower produced by any Ratings Agency.

(iv)**Annual Unconsolidated Statements.** Only if prepared, within ninety (90) days after the end of each Fiscal Year of the Borrower, any audited Financial Statements of the Borrower for such Fiscal Year, prepared in accordance with GAAP, containing any applicable notes and certified by independent public accountants of recognized international standing. Such Financial Statements shall be deemed furnished on the earlier of the date posted to the Borrower's website or the date publicly available on the U.S. Securities and Exchange Commission's website.

(v) **Material Adverse Environmental & Social Events.** The Borrower shall promptly notify and forward a brief summary report to the Facility Agent upon the occurrence of any severe incident outside of the ordinary course or severe accident on the Mon Valley Project site that relates to any of the following:

- (A) any accidents involving serious injuries or fatalities;
- (B) any fires or explosions;
- (C) any leaks of Hazardous Materials outside of the ordinary course and reasonably expected to require the Borrower to conduct soil or groundwater cleanup pursuant to Environmental Law;
- (D) any notices of violation issued or regulatory enforcement action taken by any Governmental Body against the Borrower pursuant to any Environmental Law which directly or indirectly lead to implementation delays in relation to the Project Upgrades; and
- (E) any strikes or neighborhood resident protests related to environmental or social matters.

Each such report shall include an outline of planned corrective actions for mitigating and resolving such accident or incident disclosed pursuant to clauses (A) through (E) listed above, as applicable, to the extent corrective actions are required in the Borrower's reasonable judgment or by Applicable Law.

(vi) **Construction Period Reporting.** Within ninety (90) days from the Closing Date until the end of each of its first two Fiscal Years following Final Acceptance, the Borrower shall deliver an annual report no later than ninety (90) days after the end of each Fiscal Year that shall provide a summary of the following:

- (A) The status of approvals (including new permits, permit extensions or renewals granted, outline for permits to be applied for) and status of compliance with regulatory requirements in relation to the Project Upgrades;
- (B) If applicable, description of any material non-compliance stipulated by any Governmental Body in relation to the Project Upgrades, and any planned mitigation measures (defining, among others, responsibilities, targets and timeframes for corrective actions); and
- (C) If applicable, status of outstanding corrective actions identified in the summary report required by the last sentence of Section 10.1(a)(v) (*Material Adverse Environmental & Social Events*).

(b) The Borrower will furnish written notice of each of the following events, occurrences, and conditions to the Facility Agent promptly, and in any event within seven Business Days after any officer of the Borrower has knowledge thereof:

- (i) the occurrence of any Default or Event of Default;
- (ii) the filing or commencement of any action, suit or proceeding, labor dispute or the assertion, notice or other communication in respect of any Environmental Claim relevant in any material respect to the development of the Project Upgrades or any threatened action, suit or proceeding, labor dispute or Environmental Claim, by or before any arbitrator or other Governmental Body against or affecting the Borrower that, if adversely determined, would reasonably be expected to result in a Material Adverse Effect;
- (iii) the occurrence of any other circumstances, act, or condition with respect to the adoption, material amendment, interpretation, or repeal of any Applicable Law or the Impairment of any Governmental Body or the Impairment or threatened Impairment of any Governmental Body or written notice of the failure of the Borrower to comply with the terms and conditions of any approval by a Governmental Body that results in or would reasonably be expected to result in a Material Adverse Effect;
- (iv) the occurrence of an ERISA Event, other than a prohibited transaction with respect to a Plan (within the meaning of Section 406 of ERISA or Section 4975 of the Code for which an exemption is not available) that would not reasonably be expected to result in a Material Adverse Effect;
- (v) the occurrence of any change in Applicable Law (or, to the knowledge of the Borrower, in the interpretation of any Applicable Law) by a Governmental Body that results in, or would reasonably be expected to result in any Transaction Document being terminated or becoming invalid, illegal or unenforceable;
- (vi) the occurrence of any event or development that results in, or would reasonably be expected to result in, a Material Adverse Effect;
- (vii) copies of any amendments of or waivers under the Project Equipment Supply Agreement; and
- (viii) following any request therefore, such information regarding the operations, business affairs and financial condition of the Borrower or compliance with the terms of the Finance Documents or the Project Equipment Supply Agreement, as the Facility Agent may reasonably request;

Each notice delivered under this Section 10.1 (*Reporting Requirements; Notices*) shall either (a) be accompanied by a statement of an Authorized Officer of the Borrower setting forth the details of the event or development requiring such notice and any action taken or proposed to be taken with respect thereto or (b) be deemed to have been delivered on the date on which the Borrower provides written notice to the Facility Agent that such information has been posted on the website address at <https://www.sec.gov/cgi-bin/browse-edgar?CIK=x&owner=exclude&action=getcompany&Find=Search>.

Continuation of Business and Maintenance of Existence.

The Borrower shall (a) continue to engage in business of the same general type as now conducted by it and those lines of business reasonably related or incidental thereto and (b) do or cause to be done all things necessary to preserve and keep in full force and effect its corporate existence in accordance with its organizational documents and the rights (charter and statutory) and corporate franchises of the Borrower; *provided, however*, that the Borrower shall not be required to preserve, with respect to itself, any right or franchise, if (i) the Board of Directors shall determine that the preservation thereof is no longer desirable in the conduct of the business of the Borrower and (ii) the loss thereof is not disadvantageous in any material respect to the shareholders of the Borrower.

Compliance Certificate; Notice of Default.

The Borrower shall deliver to the Facility Agent within one hundred twenty (120) days after the end of its Fiscal Year a Compliance Certificate certifying as to whether an Event of Default has occurred and, if such Authorized Officer knows of the occurrence of an Event of Default, specifying the details thereof and any action taken or proposed to be taken with respect thereto. The Compliance Certificate shall also notify the Facility Agent should the relevant Fiscal Year end on any date other than the current Fiscal Year end date.

10.4 Ranking. The Borrower shall ensure that the Loans will at all times be direct and unconditional general obligations of the Borrower, ranking in right of payment and otherwise at least *pari passu* with all other senior unsecured and unsubordinated Indebtedness of the Borrower, whether now existing or hereafter outstanding, except for Indebtedness of the Borrower having priority solely by operation of Applicable Law, such as Indebtedness relating to judicial expenses Incurred for the general benefit of creditors, Taxes payable to any Governmental Body, and wages, salaries and other social security benefits of the employees of the Borrower and its Subsidiaries.

10.5 Limitation on Liens.

Except for Permitted Liens:

- (a) The Borrower shall not Incur, and shall not permit any of its Subsidiaries to Incur, any Lien upon (i) any Principal Property of the Borrower or any Principal Property of a Subsidiary or (ii) any shares of stock or other Equity Interests or Indebtedness of any Subsidiary that owns a Principal Property (whether such Principal Property, shares of stock or other Equity Interests or Indebtedness is now existing or owned or hereafter created or acquired), in each case, unless prior to or at the same time, the Loans (together with, at the option of the Borrower, any other Indebtedness of the Borrower or any Subsidiary ranking *pari passu* in right of payment with the Loans) are equally and ratably secured with or, at the option of the Borrower, prior to such Indebtedness.
- (b) Any Lien created for the benefit of shareholders pursuant to the preceding clause (a) shall provide by its terms that such Lien shall be automatically and unconditionally released and discharged upon the release and discharge of such Lien.

Notwithstanding the restrictions set forth in clauses (a) and (b) above, the Borrower and its Subsidiaries shall be permitted to Incur Indebtedness secured by a Lien which would otherwise be subject to the restrictions in clauses (a) and (b) above without equally and ratably securing the Loans; *provided*, that, after giving effect to such Indebtedness, the aggregate amount of all Indebtedness secured by Liens (not including any Permitted Liens), together with all Attributable Debt outstanding pursuant to Section 10.6 (*Limitation on Sale and Leaseback Transactions*), does not exceed 17.5% of the Consolidated Net Tangible Assets of the Borrower calculated as of the date of the creation or Incurrence of the Lien. The Borrower and its Subsidiaries also may, without equally and ratably securing the Loans, create or Incur Liens that extend, renew, substitute or replace (including successive extensions, renewals, substitutions or replacements), in whole or in part, any Lien permitted pursuant to the preceding sentence.

10.6 Limitation on Sale and Leaseback Transactions.

- (a) The Borrower shall not directly or indirectly, and shall not permit any of its Subsidiaries that own a Principal Property directly or indirectly to, enter into any Sale-Leaseback for the sale and leasing back of any Principal Property, whether now owned or hereafter acquired, unless:
 - (i) such transaction was entered into prior to the Closing Date;
 - (ii) such transaction was for the sale and leasing back to the Borrower or one of its Subsidiaries of any property by the Borrower or one of its Subsidiaries;
 - (iii) such transaction involves a lease for not more than three years (or which may be terminated by the Borrower or its Subsidiaries within a period of not more than three years);
 - (iv) the Borrower would be entitled to Incur Indebtedness secured by a Lien with respect to such Sale-Leaseback without equally and ratably securing the Loans pursuant to the last paragraph of Section 10.5 (*Limitation on Liens*); or
 - (v) the Borrower applies an amount equal to the net proceeds from the sale of such property to the purchase of other property or assets used or useful in its business or to the retirement of long-term Indebtedness within 365 days before or after the effective date of any such Sale-Leaseback; *provided*, that, in lieu of applying such amount to the retirement of long-term Indebtedness, the Borrower may apply the proceeds to prepay the Loans pursuant to Section 4.4 (*Voluntary Prepayment*).
- (b) Notwithstanding the restrictions set forth in clause (a) above, the Borrower and its Subsidiaries may enter into any Sale-Leaseback which would otherwise be subject to the foregoing restrictions, if after giving effect thereto the aggregate amount of all Attributable Debt with respect to such transactions, together with all Indebtedness outstanding pursuant to the last paragraph of Section 10.5 (*Limitation on Liens*), does not exceed 17.5% of the Consolidated Net Tangible Assets of the Borrower calculated as of the closing date of the Sale-Leaseback.

10.7 Sanctions and Anti-Corruption Laws.

The Borrower shall not, directly or indirectly, use any part of the proceeds of the Loans, or lend, contribute or otherwise make available such proceeds to any other Person: (a) in violation of any applicable Anti-Corruption Law; (b) to fund, finance or facilitate any agreement, transaction, dealing or business with or for the benefit of a Sanctions Target (or involving any property thereof) or involving any Sanctioned Jurisdiction; or (c) in any other manner that would result in a violation of Sanctions by the Borrower or any Lender. In relation to each Restricted Finance Party, this Section 10.7 (*Sanctions and Anti-Corruption Laws*) shall only apply for the benefit of that Restricted Finance Party to the extent that the acceptance of the covenants in this Section 10.7 (*Sanctions and Anti-Corruption Laws*) would not conflict with, or result in any such Restricted Finance Party being in violation of, or subject to liability under, any EU Anti-Boycott Regulation.

In connection with any amendment, waiver, determination or direction relating to any part of this Section 10.7 (*Sanctions and Anti-Corruption Laws*) of which a Restricted Finance Party does not have the benefit, the Commitment of that Restricted Finance Party (if any) will be excluded for the purpose of determining whether the consent of the Majority Lenders has been obtained or whether the determination or direction by the Majority Lenders has been made.

10.8 Environmental Matters.

The Borrower shall promptly after obtaining knowledge thereof, notify the Facility Agent (for delivery to each Lender) of (a) any Environmental Claim that is instituted or threatened against the Borrower or its Subsidiaries and (b) any Environmental Matter, in each case, that would reasonably be expected to have a Material Adverse Effect. The Borrower shall, if remedial or corrective action is required pursuant to Environmental Law, prepare a corrective action plan or similar remedial plan to mitigate and remedy the facts giving rise to the applicable Environmental Claim or Environmental Matter and, if requested by any Lender and to the extent permitted by Applicable Law, deliver to the Facility Agent and the Lenders a copy of the final version of any such corrective action plan or similar remedial plan to the extent approved by the applicable Governmental Body.

10.9 Compliance with All Applicable Law and Material Contractual Obligations

The Borrower shall:

- (a) comply with all Environmental Laws and Equator Principles in all material respects;
- (b) obtain, maintain and comply in all material respects with all requisite Environmental Permits;
- (c) comply with all Applicable Law (other than Environmental Laws); and

- (d) comply with all Contractual Obligations;

in each case, with respect to subclauses (c) and (d) except where failure to do so does not or would not reasonably likely to have a Material Adverse Effect.

It is understood that "in all material respects" as used with respect to subclauses (a) and (b) means in all respects irrespective of the cost of any failure to comply, obtain or maintain.

10.10 Project Equipment Supply Agreement

The Borrower shall:

- (a) be in compliance in all material respects with the Project Equipment Supply Agreement;
- (b) not amend or waive any material provisions under the Project Equipment Supply Agreement which could reasonably be expected to be relevant for the interests of the Facility Agent, the ECA Agent and/or the OeKB Guarantor with respect to the deliveries and/or services under the Project Equipment Supply Agreement (including, without limitation, any amendment which changes or has the effect of changing the Export Contract Value, the Eligible Project Costs, the payment terms or the scope of work);
- (c) notify the ECA Agent of any other amendments to the Project Equipment Supply Agreement no later than seven (7) Business Days following the closing of such amendment;
- (d) submit to the ECA Agent all copies of amendments to the Project Equipment Supply Agreement no later than seven (7) Business Days following the closing of such amendment; and
- (e) inform the ECA Agent of any event under or with respect to the Project Equipment Supply Agreement enabling the Borrower and/or Primetals to cancel, suspend, rescind or terminate the Project Equipment Supply Agreement in whole or in part.

10.11 Know-Your-Customer

The Borrower will promptly on any Lender's written request supply to it any documentation or other evidence that is reasonably required by that Lender (whether for itself or on behalf of any Person to whom that Lender may, or may intend to, transfer any of its rights or Obligations under this Agreement) to enable such Lender:

- (a) to carry out and be satisfied it has complied with all necessary "know your customer" requirements that that Lender is obliged to carry out under all Applicable Law pursuant to the transactions contemplated in this Agreement; and
- (b) to comply with its obligations under all Applicable Law to prevent money laundering and corruption and to conduct ongoing monitoring of the business relationship with the Borrower.

10.12 Maintenance of Properties.

The Borrower will, and will cause each of its Subsidiaries to (a) maintain from time to time all property that is material to the conduct of its business at such time in good working order and condition (ordinary wear and tear excepted), and (b) maintain with financially sound and reputable insurance companies insurance on its property as are usually reasonably maintained by, and against at least such risks as are usually insured against in the same general area by, companies engaged in the same or a similar business would be (in any event including all risk property business interruption insurance, workers compensation and such other insurances that would be reasonable and prudent from time to time), in each case in such amounts and with only such deductibles as are commonly available in the market at such time; *provided* that the Borrower may, but shall not be obligated to, implement programs of self-insurance in the ordinary course of business and in accordance with industry standards for a company of similar size so long as reserves are maintained in accordance with GAAP for the liabilities associated therewith).

10.13 Right of the Lenders to Inspect Property.

The Borrower shall, at its own cost, permit authorized representatives designated by the Facility Agent or the ECA Agent to visit and inspect its properties, including its books and records and the Project Upgrades, once per Fiscal Year, at reasonable times and with reasonable prior notice; *provided* that if (a) an Event of Default or severe accident or incident described in Section 10.1(a)(v) (*Material Adverse Environmental & Social Events*) has occurred and is continuing, or (b) requested by the OeKB Guarantor in writing, the Facility Agent, the ECA Agent, the OeKB Guarantor or any other designated authorized designee thereto, may conduct an inspection visit more than once per Fiscal Year at reasonable times and with reasonable prior notice. The OeKB Guarantor, the Facility Agent, the ECA Agent or any such designated authorized designee thereto, shall, in all cases, comply with the Borrower's rules regarding safety and security while visiting the Borrower's facilities.

10.14 Accuracy of Information.

The Borrower will ensure that no report, financial statement, certificate or other information furnished (other than projected financial information) by or on behalf of the Borrower to the Facility Agent or any Lender in connection with this Agreement, the Project Equipment Supply Agreement or any other Transaction Document or any amendment or other modification hereof or thereof (in each case as modified or supplemented by other information so furnished), taken as a whole, shall contain any material misstatement of fact or shall omit to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; *provided*, that with respect to projected financial information, the Borrower will ensure only that such information was prepared in good faith based upon assumptions believed to be reasonable at the time.

10.15 Obligations of the Borrower.

The Borrower shall perform its obligations under each Finance Document to which it is a party notwithstanding any failure by the Seller (as defined in the Project Equipment Supply Agreement) to fulfill its obligations under any commercial arrangement entered into with the Borrower or otherwise, and the Borrower shall not use any failure as an excuse, defense, set-off or counterclaim in respect of its obligations under any Finance Document.

10.16 Further Assurances.

Promptly upon request by the Facility Agent, or any Lender through the Facility Agent, the Borrower shall (a) correct any material defect or error that may be discovered in any Transaction Document or in the execution, acknowledgment, filing or recordation thereof and (b) do, execute, acknowledge, deliver, record, re-record, file, re-file, register and re-register any and all such further acts, deeds, certificates, assurances and other instruments as the Facility Agent, or any Lender through the Facility Agent, may reasonably require from time to time in order to carry out more effectively the purposes of the Transaction Documents.

10.17 Merger, Consolidation or Sale of Assets.

The Borrower shall not, in a single transaction or through a series of related transactions, consolidate or merge with or into any other Person, or, directly or indirectly, sell or convey

substantially all of its assets to another Person or group of affiliated Persons, except that the Borrower may consolidate or merge with, or sell or convey substantially all of its assets to another Person if:

- (a) the Borrower is the continuing Person or the successor Person (if other than the Borrower) is solvent, organized and existing under the laws of the United States of America, any State thereof or the District of Columbia and such Person expressly assumes all obligations of the Borrower under the Finance Documents, including payment of the principal and interest on the Loans, and the performance and observance of all of the obligations of this Agreement to be performed by the Borrower; and
- (b) immediately after giving effect to such transaction and the assumption of the obligations as set forth in clause (a) above, no Default or Event of Default shall have occurred and be continuing under this Agreement.

For purposes of this Section 10.17 (*Merger, Consolidation or Sale of Assets*) only, “substantially all of its assets” means, at any date, a portion of the non-current assets reflected in the Borrower’s consolidated balance sheet as of the end of the most recent quarterly period that represents at least 66% of the total reported value of such assets.

10.18 Amendments to Documents.

The Borrower will not amend, modify or waive any of its rights under its certificate of incorporation, bylaws or other organizational documents, in each case if the effect of such amendment, modification or waiver would be materially adverse to the Borrower’s ability to comply with its obligations under any Finance Document.

10.19 Financial Covenants in Other Agreements.

The Borrower shall not agree to any financial covenant in a debt instrument with any senior unsecured and unsubordinated creditor, where the aggregate principal amount of such senior unsecured and unsubordinated Indebtedness is greater than \$100,000,000.00, without also providing the same financial covenant *mutatis mutandis* for the benefit of Lenders under this Agreement.

Article 11 CONDITIONS PRECEDENT

Conditions Precedent to the Closing Date.

The closing date shall occur on the Business Day on which the following conditions shall be satisfied or waived by each Lender (the “**Closing Date**”), and the Facility Agent shall give notice of the satisfaction or waiver of the conditions set forth in this Section 11.1 (*Conditions Precedent to the Closing Date*) to the Lenders and the Borrower (and with respect to the delivery of such notice, the Facility Agent shall be entitled to assume that the conditions precedent in clause (h) (*Absence of Default*) and clause (i) (*No Material Adverse Effect*) have been fulfilled unless the Facility Agent has received actual notice to the contrary from the Borrower or a Lender):

- (a) **Execution of this Agreement and the Fee Letters.** This Agreement and the Fee Letters shall have been duly executed and delivered by the Borrower, the Facility Agent and each Lender identified on the signature pages hereof.
- (b) **Payment of Fees.**
 - (i) The fees payable on the Effective Date in accordance with the Fee Letters have been paid prior to or on the Effective Date;
 - (ii) The fees payable on the Closing Date in accordance with the Fee Letters have been paid prior to or on the Closing Date; and
 - (iii) All fees payable in accordance with the Finance Documents and the OeKB Guarantee, including the OeKB Guarantee Premium, and all out-of-pocket costs and expenses due at such time (including fees and disbursements of outside counsel to the Facility Agent) have been paid, or irrevocable instructions, satisfactory to the Lenders, shall be in place to pay such amounts and fees simultaneously with the requested Utilization.
- (c) **Financial Statements.** The Borrower shall have delivered to the Facility Agent copies of the audited Financial Statements of the Borrower for the Fiscal Year ended December 31, 2018 and unaudited financial statements of the Borrower for the nine (9)-month period ended September 30, 2019, together with a certificate from an Authorized Officer certifying that such Financial Statements fairly present, in all material respects, the financial condition and results of operations and cash flows of the Borrower, for the relevant Fiscal Year or semi-annual period, in all cases prepared in accordance with GAAP except to the extent set forth therein and subject, in the case of the Financial Statements for the nine (9)-month period ended September 30, 2019, to year-end audit adjustments and the absence of footnotes.
- (d) **Corporate Documents.** The Borrower shall have delivered to the Facility Agent an Officer’s Certificate, dated as of the Closing Date, certifying (i) that attached to such certificate is a true and complete copy of the charter and by-laws (or equivalent documents) of the Borrower as in effect on the date of such certificate; (ii) that attached to such certificate is a true and complete copy of all documents evidencing the corporate authority of the Borrower, including resolutions duly adopted by the Board of Directors or other authorized governing body of the Borrower for (x) the approval of the execution, delivery and performance of this Agreement, the Fee Letters and each other document to be delivered by

the Borrower from time to time in connection herewith or therewith and the transactions contemplated hereby and thereby and (y) authorizing a named person or persons to sign, execute and deliver each such document and any documents to be delivered by it pursuant thereto, and that such documents are true, complete and correct and in full force and effect (or, if applicable, certifying that such resolutions are not necessary for such Authorization under Applicable Law); and (iii) as to the incumbency and specimen signature of each Authorized Officer of the Borrower executing this Agreement and the Fee Letters on behalf of the Borrower.

- (e) **Borrower's Certificate.** The Borrower shall have delivered to the Facility Agent a certificate of an Authorized Officer of the Borrower, dated as of the Closing Date, certifying that each statement contained therein shall be true and correct as of the Closing Date and certifying that: (i) each of the representations and warranties of the Borrower contained in this Agreement is true and correct in all material respects on the Closing Date as if made on and as of such date (except to the extent such representations and warranties expressly relate to an earlier date, in which case they shall be true and correct in all material respects as of such earlier date); *provided*, that any representation and warranty that is qualified as to "materiality," "Material Adverse Effect" or similar language shall be true and correct (after giving effect to any qualifications therein) in all respects on such respective dates, (ii) no Event of Default has occurred and is continuing on such date or will result from the consummation of the transactions contemplated by this Agreement or the Fee Letters and (iii) since September 30, 2019, no event, condition, circumstance, action, suit or proceeding at law or in equity or by or before any Governmental Body or arbitral tribunal or other body affecting the Borrower has occurred that, individually or in the aggregate, has had or would reasonably be expected to have a Material Adverse Effect.
- (f) **Legal Opinion.** The Facility Agent and each Lender shall have received an opinion of Milbank LLP, New York counsel to the Borrower in form and substance reasonably satisfactory to the Facility Agent and each Lender.
- (g) **OeKB Guarantee.**
 - (i) (A) the OeKB Guarantee shall have been issued in favor of the ECA Agent and the Covered Lenders and shall be in full force and effect and (B) a true, complete and original copy of the OeKB Guarantee (including the OeKB General Terms and Conditions) shall have been received by the ECA Agent.
 - (ii) The Borrower shall have paid the OeKB Guarantee Premium or shall have given an irrevocable instruction for the payment of the OeKB Guarantee Premium out of the proceeds of the Premium Loans.
- (h) **Absence of Default.** No Default or Event of Default shall have occurred and be continuing.
- (i) **No Material Adverse Effect.** Since September 30, 2019, no event, condition or circumstance affecting the Borrower shall have occurred that, individually or in the aggregate, has had or would reasonably be expected to have a Material Adverse Effect.

- (j) **Know Your Customer Requirements.** (i) The Lenders and the Facility Agent shall have received, on or prior to the Closing Date, all documentation and other information reasonably requested by the Lenders at least three (3) Business Days prior to the Closing Date in order to allow such Lenders to comply with applicable “know your customer” rules and regulations and Anti-Money Laundering Laws and (ii) at least two (2) Business Days prior to the Closing Date, the Borrower shall have delivered a Beneficial Ownership Certification.
- (k) **Project Equipment Supply Agreement.** The Facility Agent shall have received duly executed copies of each document that comprises the Project Equipment Supply Agreement, including any amendment that impacts, among other things, (a) completion certificates or loan drawdown procedures, (b) assignment rights under the Project Equipment Supply Agreement and (c) the definition and mechanics related to “Deemed Acceptance Certificates” (as defined under the Project Equipment Supply Agreement).
- (l) **Exporter’s Undertaking.** The Facility Agent shall have received a duly executed copy of the Exporter’s Undertaking in form and substance reasonably acceptable to the Facility Agent.
- (m) **Exporter’s Declaration.** The Facility Agent shall have received a duly executed copy of the Exporter’s Declaration in form and substance reasonably acceptable to the Facility Agent.
- (n) **Construction Schedule.** The Facility Agent shall have received a construction schedule and timeline with respect to the Project Upgrades in form and substance reasonably acceptable to the Facility Agent.

For the avoidance of doubt, documents listed under the limbs (g)(i), (l), and (m) of this Section 11.1 shall not be disclosed to the Borrower.

Additional Conditions Precedent to Covered Loans.

The obligation of each Lender to make any Covered Loan hereunder (including its initial Covered Loan) shall become effective on the Business Day during the Covered Loan Commitment Period on which the following conditions shall be satisfied or waived by each Lender (each, a “**Covered Loan Additional Closing Date**”), and the Facility Agent shall give notice of the satisfaction or waiver of the conditions set forth in this Section 11.2 (*Additional Conditions Precedent to Covered Loans*) to the Lenders and the Borrower:

- (a) **Representations and No Default.** (i) Each of the representations and warranties of the Borrower contained in this Agreement is true and correct in all material respects on the Covered Loan Additional Closing Date as if made on and as of such date (except to the extent such representations and warranties expressly relate to an earlier date, in which case they shall be true and correct in all material respects as of such earlier date); *provided*, that any representation or warranty that is qualified as to “materiality,” “Material Adverse Effect” or similar language shall be true and correct (after giving effect to any qualifications therein) in all respects on such respective dates and (ii) no Default or Event of Default has occurred and is continuing on such date or will result from the consummation of such borrowing.
- (b) **Borrower’s Certificate.** The Borrower shall have delivered to the Facility Agent a certificate of an Authorized Officer of the Borrower, dated as of the Covered Loan Additional Closing Date, certifying that each statement contained in clause (a) above shall be true and correct as of the Covered Loan Additional Closing Date; *provided* that this paragraph 11.2(b) shall not apply in the case of a Covered Loan Utilization Request—Disbursement (*Schedule C-1, Part I*) is being delivered by the Exporter.
- (c) **Covered Loan Utilization Request.** The Borrower or the Exporter, as the case may be, shall have delivered to the Facility Agent a Covered Loan Utilization Request in accordance with Section 3.1 (*Delivery of a Utilization Request*).
- (d) **Down Payment.** Evidence satisfactory to the ECA Agent confirming that the Down Payment has been received by the Exporter or will be paid to the Exporter simultaneously with the first Utilization by disbursement of the Commercial Loan either directly to the Exporter or as reimbursement to the Borrower.
- (e) **OeKB Guarantee.**
 - (i) The OeKB Guarantee shall be in full force and effect;
 - (ii) the OeKB Guarantee shall provide cover in relation to the proposed Covered Loan and in respect of all Covered Loans outstanding as of the date of delivery of the Covered Loan Utilization Request; and
 - (iii) the Borrower shall have delivered such additional information, documentation or clarification that the ECA Agent advises (acting upon request of the OeKB Guarantor) is necessary to ensure that the requirements of, or conditions to, the OeKB Guarantee are satisfied; *provided*, that the ECA Agent uses its reasonable endeavors to request such additional information, documentation or clarification as far as reasonably possible in advance of the proposed date of disbursement of the Covered Loan.
- (f) **Evidence of Final Acceptance.** As to the final disbursement of the Covered Loan, the Facility Agent shall have received satisfactory evidence that the Final Acceptance has taken place.
- (g) **Exporter’s Certificate.** The Facility Agent shall have received a duly executed copy of the Exporter’s Certificate in form and substance reasonably acceptable to the Facility Agent.

Additional Conditions Precedent to Commercial Loans.

The obligation of each Lender to make any Commercial Loan hereunder (including its initial Commercial Loan) shall become effective on the Business Day during the Commercial Loan Commitment Period on which the following conditions shall be satisfied or waived by each Lender (each, a “**Commercial Loan Additional Closing Date**”), and the Facility Agent shall give notice of the satisfaction or waiver of the conditions set forth in this Section 11.3 (*Additional Conditions Precedent to Commercial Loans*) to the Lenders and the Borrower:

- (a) **Representations and No Default.** (i) Each of the representations and warranties of the Borrower contained in this Agreement is true and correct in all material respects on the Commercial Loan Additional Closing Date as if made on and as of such date (except to the extent such representations and

warranties expressly relate to an earlier date, in which case they shall be true and correct in all material respects as of such earlier date); *provided*, that any representation or warranty that is qualified as to “materiality,” “Material Adverse Effect” or similar language shall be true and correct (after giving effect to any qualifications therein) in all respects on such respective dates and (ii) no Default or Event of Default has occurred and is continuing on such date or will result from the consummation of such borrowing.

- (b) **Borrower’s Certificate.** The Borrower shall have delivered to the Facility Agent a certificate of an Authorized Officer of the Borrower, dated as of the Commercial Loan Additional Closing Date, certifying that each statement contained in clause (a) above shall be true and correct as of the Commercial Loan Additional Closing Date.
- (c) **Commercial Loan Utilization Request.** The Borrower shall have delivered to the Facility Agent a Commercial Loan Utilization Request in accordance with Section 3.1 (*Delivery of a Utilization Request*).

Article 12
EVENTS OF DEFAULT AND REMEDIES

Events of Default.

Until the Commitments have expired or have been terminated in full and all Obligations have been indefeasibly paid or repaid in full, the occurrence of any of the following events, following the lapse of the applicable cure period (if any) set forth below, or the issuance of written notice (if any) in respect thereof, shall constitute an “**Event of Default**”:

- (a) the Borrower fails to pay on or before the due date, any amount due to the Lenders (unless the failure to pay is caused by an administrative or technical error which is remedied within three (3) Business Days);
- (b) the Borrower shall default in the due performance or observance of any term, covenant, warranty, condition or provision of a Finance Document to which it is a party, not otherwise specified in this Section 12.1 (*Events of Default*) and, in the case of defaults other than under any of Section 2.3 (*Purpose and Use of Proceeds*), 10.1(a)(iv) (*Annual Unconsolidated Statements*), 10.1(b) (*Reporting Requirements; Notices*), 10.2 (*Continuation of Business and Maintenance of Existence*), 10.5 (*Limitation on Liens*), 10.6 (*Limitation on Sale and Leaseback Transactions*), Section 10.7 (*Sanctions and Anti-Corruption Laws*), 10.12 (*Maintenance of Properties*) or 10.17 (*Merger, Consolidation or Sale of Assets*), 10.18 (*Amendments to Documents*), and 10.19 (*Financial Covenants in Other Agreements*) such breach remains unremedied for a period of thirty (30) days or more after the earlier of (i) written notice from the Facility Agent to the Borrower and (ii) knowledge of such breach by an officer of the Borrower;
- (c) the entry by a court having jurisdiction in the premises of (i) an Order for relief in respect of the Borrower in an involuntary case or proceeding under any applicable U.S. federal or state bankruptcy, insolvency, reorganization or other similar law or (ii) an Order adjudging the Borrower a bankrupt or insolvent, or approving as properly filed a petition seeking reorganization, arrangement, adjustment or composition of or in respect of the Borrower under Applicable Law, or appointing a custodian, receiver, liquidator, assignee, trustee, sequestrator or other similar official of the Borrower or of any substantial part of its property, or ordering the winding up or liquidation of its affairs, and the continuance of any such Order for relief or any such other Order unstayed and in effect for a period of thirty (30) consecutive days;
- (d) the commencement by the Borrower of a voluntary case or proceeding under any applicable U.S. federal or state bankruptcy, insolvency, reorganization or other similar law or of any other case or proceeding to be adjudicated a bankrupt or insolvent, or the consent by it to the entry of an Order for relief in respect of the Borrower in an involuntary case or proceeding under any applicable U.S. federal or state bankruptcy, insolvency, reorganization or other similar law or to the commencement of any bankruptcy or insolvency case or proceeding against it, or the filing by it of a petition or answer or consent seeking reorganization or relief under Applicable Law, or the consent by it to the filing of such petition or to the

appointment of or taking possession by a custodian, receiver, liquidator, assignee, trustee, sequestrator or other similar official of the Borrower or of any substantial part of its property, or the making by it of an assignment for the benefit of creditors, its inability to pay its debts generally as they become due, the admission by it in writing thereof, or the taking of corporate action by the Borrower in furtherance of any such action;

- (e) one or more ERISA Events occurs which individually or in the aggregate has, or would reasonably be expected to have, a Material Adverse Effect;
- (f) the Borrower fails to comply with any material provision of the Project Equipment Supply Agreement and such breach remains unremedied beyond any applicable grace period in the Project Equipment Supply Agreement;
- (g) any representation or statement made or deemed to be made by the Borrower in any Finance Document or any other document delivered by or on behalf of the Borrower by an Authorized Officer of the Borrower under or in connection with any Transaction Document is or proves to have been incorrect or incomplete, to the extent not already qualified by materiality, in any material respect when made or deemed to be made (except to the extent such representation or warranty expressly relates to an earlier date, and in such case, shall be true and correct on and as of such earlier date) and in each case if the circumstances so misrepresented are susceptible to cure and not corrected within five (5) days after the earlier of (i) written notice from the Facility Agent to the Borrower and (ii) knowledge of such breach by an officer of the Borrower;
- (h)
 - (i) it becomes unlawful for the Borrower to perform in any material respect any of its Obligations under any Finance Document;
 - (ii) any obligation or obligations of the Borrower under any of the Finance Documents are not or cease to be legal, valid, binding or enforceable and the cessation individually or cumulatively materially and adversely affects the interests of the Lenders under the Finance Documents; or
 - (iii) any Finance Document ceases to be in full force and effect or is alleged by a party to it (other than a Finance Party) to be ineffective;
- (i) the Borrower suspends or ceases to carry on (or threatens to suspend or cease to carry on) all or a part of its business which has, or would reasonably be expected to have, a Material Adverse Effect; *provided* that temporary suspensions in connection with maintenance in the ordinary course of business shall not constitute an Event of Default under this clause (i);
- (j)
 - (i) the Borrower or any of its Subsidiaries shall fail to make any payment (whether of principal or interest or other amount and regardless of amount) in respect of any

Material Indebtedness, when and as the same shall become due and payable (whether by scheduled maturity, required prepayment, acceleration, demand or otherwise) and such failure shall continue unremedied for the applicable cure period, if any, provided in the document evidencing such Material Indebtedness, and the Borrower or its Subsidiary, as applicable, fails to demonstrate, to the satisfaction of the Lenders, that the default of such Material Indebtedness would not reasonably be expected to have a Material Adverse Effect;

- (ii) any event or condition occurs that results in any Material Indebtedness becoming due prior to its scheduled maturity pursuant to any document evidencing or relating to such Material Indebtedness (other than by a mandatory prepayment required due to asset sale, casualty or condemnation (other than a total loss) or debt or equity issuance), and the Borrower fails to demonstrate, to the satisfaction of the Lenders, that the acceleration of such Material Indebtedness would not reasonably be expected to have a Material Adverse Effect; and
- (k) one or more judgments for the payment of money in an aggregate amount exceeding \$100,000,000 shall be rendered against the Borrower or any of its Subsidiaries and shall remain undischarged for a period of thirty (30) consecutive days during which execution shall not be effectively stayed, or any action shall be legally taken by a judgment creditor to attach or levy upon any asset of the Borrower or its Subsidiary, as applicable, to enforce any such judgment.

Remedies upon Default.

- (a) Upon the occurrence of an Event of Default:
 - (i) under Section 12.1(c) or Section 12.1(d) (*Events of Default*) to the extent permitted by Applicable Law, the Obligations shall automatically and immediately become due and payable and the Facility Agent shall take the actions set forth in paragraph (b) below (other than paragraph (b)(i));
 - (ii) all outstanding Loans shall bear interest in accordance with Section 5.2 (*Default Interest*).
- (b) Upon the occurrence, and during the continuance, of any Event of Default, the Majority Lenders or the Facility Agent as instructed by the Majority Lenders may, by notice given to the Borrower, take any of the following actions:
 - (i) declare all Obligations to be immediately due and payable; and
 - (ii) to the extent permitted by Applicable Law:
 - (A) take such actions and commence such proceedings as may be permitted at law or in equity; and
 - (B) cancel any or all Unused Commitments,

and all of the foregoing without any additional notice, presentment, demand, protest, notice of protest, dishonor or any other action except as required by law. The rights and remedies of the Facility Agent and the Lenders hereunder are cumulative and are in addition to and not in substitution for any other rights or remedies provided by Applicable Law or by any of the other Finance Documents.

- (c) The Facility Agent will use commercially reasonable efforts to notify the Borrower and each Lender upon its satisfaction as to the cessation of an Event of Default without undue delay upon obtaining actual knowledge thereof, it being understood that no failure or delay on the part of the Facility Agent to provide any such notice will (i) give rise to any claim by the Borrower or any Lender against the Facility Agent or (ii) extend the period during which an Event of Default exists.

Article 13 CHANGES TO PARTIES

Assignment by Lenders.

- (a) This Agreement and the other Finance Documents shall inure to the benefit of and be binding upon the parties hereto and thereto, their respective successors and any permitted assignee of some or all of the parties' rights or obligations under this Agreement and the other Finance Documents as permitted under this Section 13.1 (*Assignment by Lenders*).
- (b) A Lender (the "**Existing Lender**") may assign or transfer all or any part of its rights in respect of the Obligations, this Agreement and the other Finance Documents to or in favor of any Lender, any Affiliate of any Lender or the OeKB Guarantor upon notice to the Facility Agent and the Borrower and have its corresponding obligations hereunder and thereunder assumed by such Person; *provided*, that:
 - (i) except with respect to an assignment or transfer to any Lender or Affiliate of any Lender, no Lender shall be permitted to make a partial assignment or transfer of Loans in a principal amount of less than \$5,000,000 and, if greater, in an amount which is an integral multiple of \$500,000;
 - (ii) the Facility Agent's and the Borrower's consent to assignment shall be required (which consent shall not be unreasonably withheld, delayed or conditioned) for any assignment to a Person other than any Lender, any Affiliate of any Lender or the OeKB Guarantor; unless an Event of Default has occurred and is continuing and in such case a Lender may make an assignment or transfer to any Person with the Facility Agent's consent and such transfer or assignment shall not require the consent of the Borrower and shall not be subject to any restriction (including those set forth in this Section 13.1 (*Assignment by Lenders*)); *provided*, that no Loans may be assigned to any Sanctions Target; this restriction shall not apply to any Restricted Finance Party if and to the extent it would result in any violation of, conflict with or liability under any EU Anti-Boycott Regulation;
 - (iii) no assignment or transfer may be made to the Borrower or any Affiliate thereof; and

- (iv) with respect to Covered Loans, the consent of the ECA Agent acting on behalf of the OeKB Guarantor shall be required.
- (c) If the Borrower has not given the Facility Agent notice of its objection to an assignment of a Loan within five (5) Business Days after receiving notice of such assignment, the Borrower shall be deemed to have consented to the assignment. Any assignment made hereunder shall become effective when the Facility Agent executes a duly completed and executed Transfer Certificate which is delivered by the Existing Lender and the Permitted Transferee. Any such assignee shall be treated as a party to this Agreement and the OeKB Guarantee for all purposes of this Agreement and the OeKB Guarantee and the other Finance Documents and shall be entitled to the full benefit hereof and thereof and shall be subject to the obligations of the Lenders to the same extent as if it were an initial party in respect of the rights assigned to it and obligations assumed by it and the Lender making such assignment shall be released and discharged accordingly.
- (d) If the consent of the Borrower is required for any assignment, the Facility Agent shall not be obligated to enter into a Transfer Certificate if the Borrower withholds its consent.
- (e) The Lenders may provide to any potential permitted assignee or transferee such information, including Confidential Information, concerning this Agreement, the other Finance Documents, the OeKB Guarantee and the financial position and the operations of the Borrower as, in the reasonable opinion of the Lenders, may be relevant or useful in connection with this Agreement, the other Finance Documents or any portion thereof proposed to be acquired by such assignee or transferee; *provided*, that each recipient of such information agrees not to disclose such information to any other Person except as permitted pursuant to Section 20.1(d) (*Confidential Information*).
- (f) The Facility Agent, acting solely for this purpose as an agent of the Borrower, shall maintain at one of its offices at KfW IPEX-Bank GmbH, Palmengartenstrasse 5-9, 60325 Frankfurt am Main, Germany a copy of each assignment delivered to it and a register for the recordation of the names and addresses of the Lenders, and the Commitments of, and principal amounts of (and stated interest on) the Loans owing to, each Lender pursuant to the terms hereof from time to time (the "**Register**"). The entries in the Register shall be conclusive absent manifest error, and the Borrower, the Facility Agent and the Lenders shall treat each Person whose name is recorded in the Register pursuant to the terms hereof as a Lender hereunder for all purposes of this Agreement. The Register shall be available for inspection by the Borrower and any Lender, at any reasonable time and from time to time upon reasonable prior notice.
- (g) Each new Lender, by executing the relevant Transfer Certificate, confirms that the Facility Agent, has authority to execute on its behalf any amendment or waiver that has been approved by or on behalf of the requisite Lenders in accordance with this Agreement before the date the transfer becomes effective.
- (h) Each new Lender shall pay to the Facility Agent a processing and recordation fee of \$5,000 upon execution and delivery of the relevant Transfer Certificate.

- (i) Any Lender may at any time, without the consent of, or notice to, the Borrower or the Facility Agent, sell participations to any Person (other than a natural Person, or a holding company, investment vehicle or trust for, or owned and operated for the primary benefit of, a natural Person, or the Borrower or any of the Borrower's Affiliates or Subsidiaries) (each, a "**Participant**") in all or a portion of such Lender's rights or obligations under this Agreement (including all or a portion of its Commitment or the Loans owing to it); *provided*, that (i) such Lender's obligations under this Agreement shall remain unchanged, (ii) such Lender shall remain solely responsible to the other parties hereto for the performance of such obligations, and (iii) the Borrower, the Facility Agent and Lenders shall continue to deal solely and directly with such Lender in connection with such Lender's rights and obligations under this Agreement.
- (j) Any agreement or instrument pursuant to which a Lender sells such a participation shall provide that such Lender shall retain the sole right to enforce this Agreement and to approve any amendment, modification or waiver of any provision of this Agreement; *provided*, that such agreement or instrument may provide that such Lender will not, without the consent of the Participant, agree to any amendment, modification or waiver of Section 22.4 (*Amendment and Waiver*) that affects such Participant and that requires the consent of each Lender. Each Lender that sells a participation shall, acting solely for this purpose as a non-fiduciary agent of the Borrower, maintain a register on which it enters the name and address of each Participant and the principal amounts of (and stated interest on) each Participant's interest in the Loans or other obligations under the Finance Documents (the "**Participant Register**"); *provided*, that no Lender shall have any obligation to disclose all or any portion of the Participant Register (including the identity of any Participant or any information relating to a Participant's interest in any commitments, loans, letters of credit or its other obligations under any Finance Document) to any Person except to the extent that such disclosure is necessary to establish that such commitment, loan, letter of credit or other obligation is in registered form under Section 5f.103-1(c) of the United States Treasury Regulations and Section 1.163-5(b) of the proposed United States Treasury Regulations. The entries in the Participant Register shall be conclusive absent manifest error, and such Lender shall treat each Person whose name is recorded in the Participant Register as the owner of such participation for all purposes of this Agreement notwithstanding any notice to the contrary. For the avoidance of doubt, the Facility Agent (in its capacity as Facility Agent) shall have no responsibility for maintaining a Participant Register.
- (k) Any Lender may at any time pledge or assign a security interest in all or any portion of its rights under this Agreement to secure obligations of such Lender, including any pledge or assignment to secure obligations to a Federal Reserve Bank or any other central bank; *provided*, that no such pledge or assignment shall release such Lender from any of its obligations hereunder or substitute any such pledgee or assignee for such Lender as a party hereto.
- (l) In connection with any assignment, participation or pledge made pursuant to this Section 13.1 (*Assignment by Lenders*), the Borrower agrees to enter into such documents as may reasonably be required by a Lender to evidence such assignment, participation or pledge.

Assignment by Borrower.

The Borrower shall not assign all or any part of its rights, benefits or Obligations under this Agreement or any of the other Finance Documents to which it is a party without the prior written consent of the Lenders.

Assignment to OeKB Guarantor.

In the event that the OeKB Guarantor makes a payment pursuant to the OeKB Guarantee to any Covered Lender or the ECA Agent for the account of any Covered Lender, the Borrower and the Covered Lenders shall recognize the OeKB Guarantor's full rights of subrogation against the Borrower to the Covered Lender to whom the claim payment was made, including to share *pro rata* with the other Covered Lenders in any payments received and distributed according to the terms of this Agreement (subject, however, to the express provisions of Sections 4.4 (*Voluntary Prepayment*) and 4.7 (*Application*)).

Article 14
ADMINISTRATIVE PARTIES

Appointment of the Facility Agent.

- (a) Each Finance Party (other than the Facility Agent) hereby irrevocably appoints and authorizes the Facility Agent to act on its behalf as its agent under and in connection with the Finance Documents. By its signature below, the Facility Agent (or any successor thereto pursuant to this Article 14 (*Administrative Parties*)) accepts such appointment.
- (b) Each Finance Party (other than the Facility Agent) irrevocably authorizes the Facility Agent in such capacity to:
 - (i) take such actions, perform the duties and to exercise the rights, powers, authorities and discretions that are specifically delegated to the Facility Agent under or in connection with the Finance Documents, together with any other incidental rights, powers, authorities and discretions as are reasonably incidental thereto; and
 - (ii) enter into and deliver each Finance Document expressed to be entered into by the Facility Agent.
- (c) Each of the Finance Parties (other than the Facility Agent) hereby exempts the Facility Agent from the restrictions pursuant to section 181 of the German Civil Code (Bürgerliches Gesetzbuch) and similar restrictions applicable to it pursuant to any other Applicable Law, in each case to the extent legally possible to such Finance Party. A Finance Party which cannot grant such exemption shall notify the Facility Agent accordingly.
- (d) The provisions of this Article 14 (*Administrative Parties*) are solely for the benefit of the Finance Parties and the Borrower shall not have rights as a third-party beneficiary of any such provision.

Instructions to the Facility Agent.

- (a) Unless a contrary indication appears in a Finance Document or the OeKB Guarantee, the Facility Agent is hereby authorized by the Finance Parties party hereto to execute, deliver and perform each of the Finance Documents to which the Facility Agent is or is intended to be a part.
- (b) The Facility Agent is not authorized to act on behalf of a Lender (without first obtaining such Lender's consent) in any legal or arbitration proceedings relating to any Finance Document or the OeKB Guarantee.
- (c) The Facility Agent may:
 - (i) assume, absent actual knowledge or written notice to the contrary, that (A) any representation made by any Person in connection with any Finance Document is true, (B) no Default or Event of Default exists, (C) no Person is in breach of or in default under its obligations under any Finance Document and (D) any right, power, authority or discretion vested herein upon the other Agent has not been exercised;
 - (ii) assume, absent actual knowledge or written notice to the contrary, that any notice or certificate given by any Person has been validly given by a Person authorized to do so and act upon such notice or certificate unless the same is revoked or superseded by a further such notice or certificate;
 - (iii) assume, absent written notice to the contrary, that the address, facsimile, email and telephone numbers for the giving of any written notice to any Person hereunder is that identified in Section 21.1 (*Notices*) until it has received from such Person a written notice designating some other office of a Person to replace any such address or facsimile or email or telephone number and act upon any such notice until the same is superseded by a further such written notice; and
 - (iv) employ, the out-of-pocket costs and expenses of which shall be for the account of the Borrower, attorneys, consultants, accountants or other experts whose advice or services the Facility Agent may reasonably determine is necessary (*provided*, that, in connection with an exercise of remedies following the occurrence of an Event of Default, the Facility Agent shall be permitted to employ any such Person at the reasonable expense of the Borrower as it determines to be necessary in its sole discretion), may pay reasonable and documented fees and expenses for the advice or service of any such Person and may rely upon any advice so obtained; *provided*, that the Facility Agent shall be under no obligation to act upon such advice if it does not deem such action to be appropriate.

Duties of the Facility Agent.

- (a) The Facility Agent's duties under the Finance Documents are solely mechanical and administrative in nature.
- (b) The Facility Agent shall forward promptly to a Finance Party the original or a copy of any document which it receives under this Agreement and the other Finance Documents,

including non-administrative notices, certificates, reports, opinions and agreements, which are delivered to the Facility Agent for such Finance Party by any other Finance Party and shall provide a copy of all notices delivered to it or by it under each Finance Document to which it is a party to the Facility Agent.

- (c) The Facility Agent shall perform its duties in accordance with the Finance Documents and any instructions given to it by the Majority Lenders, which instructions shall be binding on all Finance Parties party hereto.
- (d) The Facility Agent shall have no responsibility for the accuracy or completeness of any information supplied by any Person in connection with the Project Upgrades or for the legality, validity, effectiveness, adequacy or enforceability of any Finance Document or any other document referred to herein or provided for herein or therein or for any recitals, statements, representations or warranties made by the Borrower or any other Person contained in this Agreement or any other Finance Document or in any certificate or other document referred to or provided for in or received by the Facility Agent, hereunder or thereunder. The Facility Agent shall not be liable as a result of any failure by the Borrower or its Affiliates or any Person party hereto or to any other Finance Document to perform their respective obligations hereunder or under any other Finance Document or any document referred to or provided for herein or therein or as a result of taking or omitting to take any action hereunder or in relation to any Finance Document, except to the extent of the Facility Agent's gross negligence, fraud or willful misconduct.
- (e) The Facility Agent is not obligated to monitor or enquire whether a Default or Event of Default has occurred. The Facility Agent shall not be deemed to have knowledge of or notice of the occurrence of a Default or Event of Default unless the Facility Agent has actual knowledge of such Default or Event of Default or has received a notice from a Finance Party, referring to this Agreement, describing such Default or Event of Default and stating that such notice is a "Notice of Default." If the Facility Agent has received notice from a Person describing a Default or Event of Default or receives such a "Notice of Default," the Facility Agent shall give prompt notice thereof to the other Agent and each Lender. The Facility Agent shall take such action with respect to such Default or Event of Default as is provided in Article 12 (*Events of Default and Remedies*); *provided*, that, unless and until the Facility Agent shall have received such directions, it may (but shall not be obligated to) take such action or refrain from taking such action, with respect to such Default or Event of Default as it shall deem advisable and in the best interest of the Finance Parties.
- (f) The Facility Agent shall not:
 - (i) be bound to inquire as to (A) whether or not any representation made by any other Person in connection with any Finance Document is true, (B) the occurrence or otherwise of any Default or Event of Default, (C) the performance by any other Person of its obligations under any of the Finance Documents or (D) any breach or default by any other Person of its obligations under any of the Finance Documents;

- (ii) be bound to account to any Person for any sum or the profit element of any sum received by it for its own account except as provided in this Agreement; or
 - (iii) be bound to disclose to any Person any information relating to the Project Upgrades or to any Person if such disclosure would or might in its opinion, constitute a breach of any Applicable Law or otherwise be actionable at the suit of any Person.
- (g) The Facility Agent shall have only those duties, obligations and responsibilities expressly specified in the Finance Documents to which it is expressed to be a party (and no others shall be implied).
- (h) It is understood and agreed by each Finance Party hereto (for itself and any Person claiming through it) that, except as expressly set forth herein, it has itself been and will continue to be, solely responsible for making its own independent appraisal of and investigations into, the financial condition, creditworthiness, condition, affairs, status and nature of each Person and, accordingly, each such Finance Party hereto warrants to the Facility Agent that it has not relied on and will not hereafter rely on the Facility Agent:
- (i) in making its decision to enter into this Agreement, any other Finance Document, the OeKB Guarantee or any amendment, waiver or other modification hereto or thereto;
 - (ii) to check or inquire on its behalf into the adequacy, accuracy or completeness or any information provided by any Person in connection with any of the Finance Documents or the transactions therein contemplated (whether or not such information has been or is hereafter circulated to such Person by the Facility Agent); or
 - (iii) to assess or keep under review on its behalf the financial condition, creditworthiness, condition, affairs, status or nature of any Person.

Role of the Mandated Lead Arranger.

Except as specifically provided in the Finance Documents, the Mandated Lead Arranger has no obligations of any kind to any other Finance Party under or in connection with any Finance Document or the OeKB Guarantee.

No Fiduciary Duties.

- (a) Except as specifically provided in a Finance Document:
- (i) nothing in the Finance Documents makes an Administrative Party a trustee or fiduciary of any other person; and
 - (ii) no Administrative Party shall be bound to account to any Lender for any sum or the profit element of any sum received by it for its own account.

- (b) Each Lender (x) represents and warrants, as of the date of becoming a Lender party hereto, to, and (y) covenants, from the date of becoming a Lender party hereto to the date of ceasing to be a Lender party hereto, for the benefit of, the Agents, the Mandated Lead Arranger and its respective Affiliates, and not, for the avoidance of doubt, to or for the benefit of the Borrower, that at least one of the following is and will be true:
- (i) such Lender is not using “plan assets” (within the meaning of 29 CFR § 2510.3-101, as modified by Section 3(42) of ERISA) of one or more Benefit Plans in connection with the transactions contemplated by this Agreement and the Finance Documents;
 - (ii) the transaction exemption set forth in one or more PTEs, such as PTE 84-14 (a class exemption for certain transactions determined by independent qualified professional asset managers), PTE 95-60 (a class exemption for certain transactions involving insurance company general accounts), PTE 90-1 (a class exemption for certain transactions involving insurance company pooled separate accounts), PTE 91-38 (a class exemption for certain transactions involving bank collective investment funds) or PTE 96-23 (a class exemption for certain transactions determined by in-house asset managers), is applicable with respect to such Lender’s entrance into, participation in, administration of and performance of the transactions contemplated by this Agreement and the Transaction Documents,
 - (iii) (A) such Lender is an investment fund managed by a “Qualified Professional Asset Manager” (within the meaning of Part VI of PTE 84-14), (B) such Qualified Professional Asset Manager made the investment decision on behalf of such Lender to enter into, participate in, administer and perform the transactions contemplated by this Agreement and the Transaction Documents, (C) the entrance into, participation in, administration of and performance of the transactions contemplated by this Agreement and the Transaction Documents satisfies the requirements of subsections (b) through (g) of Part I of PTE 84-14 and (D) to the best knowledge of such Lender, the requirements of subsection (a) of Part I of PTE 84-14 are satisfied with respect to such Lender’s entrance into, participation in, administration of and performance of the transactions contemplated by this Agreement and the Transaction Documents; or
 - (iv) such other representation, warranty and covenant as may be agreed in writing between each Arranger, the Agent and such Lender.

In addition, unless subclause (i) of this clause (b) is true with respect to a Lender or such Lender has not provided another representation, warranty and covenant as provided in sub-clause (iv) of this clause (b), such Lender further (x) represents and warrants, as of the date of becoming a Lender party hereto, to, and (y) covenants, from the date of becoming a Lender party hereto to the date of ceasing to be a Lender party hereto, for the benefit of, the Agents, the Mandated Lead Arranger and their respective Affiliates, and not, for the avoidance of doubt, to or for the benefit of the Borrower, that none of the Agents, the Mandated Lead Arranger or any of their respective Affiliates is a fiduciary with respect to the assets of such Lender (including in connection with the reservation or exercise of any rights by the Administrative Party under this Agreement or any documents related hereto).

Business with the Borrower.

- (a) Each Administrative Party may accept deposits from, lend money to and generally engage in any kind of banking or other business with the Borrower.
- (b) If it is also a Lender, each Administrative Party has the same rights and powers under the Finance Documents and, with respect to the Covered Lenders, the OeKB Guarantee, as applicable, as any other Lender and may exercise those rights and powers as though it were not an Administrative Party.
- (c) Each Administrative Party may carry on any business with the Borrower or its related entities (including acting as an agent or a trustee in connection with any other financing).

Responsibility for Documentation.

No Administrative Party is responsible or liable for:

- (a) the adequacy, accuracy or completeness of any statement or information (whether oral or written) made, given or supplied by any person in or in connection with any Finance Document or the OeKB Guarantee, as applicable;
- (b) the legality, validity, effectiveness, adequacy, completeness or enforceability of any Finance Document, the OeKB Guarantee, as applicable, or any other agreement, arrangement or document entered into, made or executed in anticipation of or in connection with any Finance Document, the OeKB Guarantee, as applicable; or
- (c) any determination as to whether any information provided or to be provided to any Finance Party is non-public information the use of which may be regulated or prohibited by Applicable Law or regulation relating to insider dealing or otherwise.

Exclusion of Liability.

- (a) Without limiting paragraph (a)(ii) below (and without prejudice to any other provision of any Finance Document excluding or limiting the liability of any Administrative Party), no Administrative Party nor any of its respective officers, directors, employees or agents shall be liable to any Person for:
 - (i) any damage, costs or losses to any person, any diminution in value, or any liability whatsoever arising as a result of taking or not taking any action under or in connection with any Finance Document, the OeKB Guarantee, as applicable, unless directly caused by its gross negligence, willful misconduct or fraud, as determined by a court of competent jurisdiction;
 - (ii) exercising, or not exercising, any right, power, authority or discretion given to it by, or in connection with, any Finance Document, the OeKB Guarantee, as applicable, or the arrangement or document entered into, made or executed in anticipation of,

under or in connection with, any Finance Document, the OeKB Guarantee, as applicable; or

- (iii) without prejudice to the generality of paragraphs (a)(i) and (a)(ii) above, any damages, costs or losses to any person, any diminution in value or any liability whatsoever arising as a result of:
 - (A) any act, event or circumstance not reasonably within its control; or
 - (B) the general risks of investment in, or the holding of assets in, any jurisdiction,

including (in each case and without limitation) such damages, costs, losses, diminution in value or liability arising as a result of: nationalization, expropriation or other governmental actions; any regulation, currency restriction, devaluation or fluctuation; market conditions affecting the execution or settlement of transactions or the value of assets; breakdown, failure or malfunction of any third-party transport, telecommunications, computer services or systems; natural disasters or acts of God; war, terrorism, insurrection or revolution; or strikes or industrial action.

- (b) Neither the Administrative Party nor any of its officers, directors, employees or agents shall be liable to any Person for any action taken or omitted under this Agreement, under the other Finance Documents or the OeKB Guarantee, as applicable, or in connection therewith, except to the extent caused by the gross negligence, fraud or willful misconduct of such Administrative Party, as determined by a court of competent jurisdiction. The Finance Parties party hereto each (for itself any Person claiming through it) hereby release, waive, discharge and exculpate such Administrative Party for any action taken or omitted under this Agreement, under the other Finance Documents or the OeKB Guarantee, as applicable, or in connection therewith, except to the extent caused by the gross negligence, fraud or willful misconduct of such Administrative Party as determined by a court of competent jurisdiction. Each Administrative Party will not be liable for any delay (or any related consequences) in crediting an account with an amount required under any Finance Document or the OeKB Guarantee, as applicable, to be paid by such Administrative Party if the Administrative Party has taken all necessary steps as soon as reasonably practicable to comply with the regulations or operating procedures of any recognized clearing or settlement system used by the Administrative Party for that purpose.
- (c) No Finance Party (other than the relevant Administrative Party (as applicable)) may take any proceedings against any officer, employee or agent of an Administrative Party in respect of any claim it might have against such Administrative Party or in respect of any act or omission of any kind by such officer, employee or agent in relation to any Finance Document, the OeKB Guarantee, as applicable, except in respect of proceedings for fraud. Any officer, employee or agent of an Administrative Party may enforce and enjoy the benefit of this Section 14.8 (*Exclusion of Liability*).
- (d) Nothing in this Agreement shall obligate any Administrative Party to carry out:
 - (i) any “know your customer” or other checks in relation to any person; or

(ii) any check on the extent to which any transaction contemplated by this Agreement might be unlawful for any Lender,

on behalf of any Lender and each Lender confirms to each Administrative Party that it is solely responsible for any such checks it is required to carry out and that it may not rely on any statement in relation to such checks made by any other Administrative Party.

- (e) Without prejudice to any provision of any Finance Document or the OeKB Guarantee, as applicable, excluding or limiting an Administrative Party's liability, any liability of an Administrative Party arising under or in connection with any Finance Document, the OeKB Guarantee, as applicable, shall be limited to the amount of actual loss which has been finally judicially determined to have been suffered (as determined by reference to the date of default of such Administrative Party or, if later, the date on which the loss arises as a result of such default) but without reference to any special conditions or circumstances known to such Administrative Party at any time which increase the amount of such loss. In no event shall any Administrative Party be liable for any loss of profits, goodwill, reputation, business opportunity or anticipated saving, or for special, punitive, indirect or consequential damages, whether or not foreseeable, whether or not such Administrative Party has been advised of the possibility of such loss or damages and regardless of whether the claim for loss or damage is made in negligence, breach of contract, duty or otherwise.

Lender's Indemnity.

- (a) Without limiting the liability of the Borrower under the Finance Documents, each Commercial Lender shall indemnify (in proportion to such Commercial Lender's share of total outstanding Commercial Loans or, if no Commercial Loans are then outstanding, its share of the Total Commercial Loan Commitment), the Facility Agent, within three (3) Business Days of demand against any cost, loss or liability Incurred by the Facility Agent, except to the extent that the cost, loss or liability is caused by the Facility Agent's gross negligence, willful misconduct or fraud in acting as such Agent under the Finance Documents (unless the Facility Agent has been reimbursed by the Borrower pursuant to a Finance Document).
- (b) Without limiting the liability of the Borrower under the Finance Document or under the OeKB Guarantee, as applicable, each Covered Lender shall indemnify (in proportion to such Covered Lender's share of total outstanding Covered Loans or, if no Covered Loans are then outstanding, its share of the Total Covered Loan Commitment), each Agent, within three (3) Business Days of demand against any cost, loss or liability Incurred by such Agent, except to the extent that the cost, loss or liability is caused by such Agent's gross negligence, willful misconduct or fraud in acting as such Agent under the Finance Documents or the OeKB Guarantee, as applicable (unless the applicable Agent has been reimbursed by the Borrower pursuant to a Finance Document or the OeKB Guarantee, as applicable).
- (c) The Borrower shall immediately on demand reimburse any Lender for any payment such Lender makes to an Agent under this Section 14.9 (*Lender's Indemnity*).

Resignation and Replacement of the Facility Agent.

- (a) The Facility Agent may resign and appoint one of its Affiliates as successor Facility Agent by giving written notice to the Lenders and the Borrower.
- (b) Alternatively, the Facility Agent may resign by giving thirty (30) days' written notice to the Lenders and the Borrower, in which case the Majority Lenders (with the consent of the Borrower so long as no Event of Default has occurred and is continuing) may appoint a successor Facility Agent.
- (c) The Majority Lenders may remove the Facility Agent from its appointment hereunder with or without cause by giving prior written notice to that effect to the Facility Agent and the Borrower.
- (d) If the Majority Lenders have not appointed a successor Facility Agent in accordance with paragraph (b) above within twenty (20) days after notice of resignation or removal was given, the retiring Facility Agent (with the consent of the Borrower so long as no Event of Default has occurred and is continuing) may appoint a successor Facility Agent.
- (e) The retiring Facility Agent shall, at its own cost:
 - (i) make available to the successor Facility Agent those documents and records and provide such assistance as the successor Facility Agent may reasonably request for the purposes of performing its functions as the Facility Agent under the Finance Documents and the OeKB Guarantee, as applicable; and
 - (ii) enter into and deliver to the successor Facility Agent those documents and effect any registrations as may be reasonably required for the transfer or assignment of all of its rights and benefits under the Finance Documents to the successor Facility Agent.
- (f) The resignation of the Facility Agent and the appointment of any successor Facility Agent shall both become effective only when the successor Facility Agent notifies all the Finance Parties that it accepts its appointment.
- (g) On giving the notification, the successor Facility Agent shall succeed to the position of the Facility Agent and the term "Facility Agent" shall mean the successor Facility Agent.
- (h) Upon its resignation becoming effective, the retiring Facility Agent shall be discharged from any further obligation in respect of the Finance Documents and the OeKB Guarantee, as applicable (other than its obligations under paragraph (e) above and other than any accrued liabilities) but shall remain entitled to the benefit of this Section 14.10 (*Resignation and Replacement of the Facility Agent*). The provisions of this Agreement shall inure to the retiring Facility Agent's benefit as to any actions taken or omitted to be taken by it under this Agreement and the other Finance Documents and the OeKB Guarantee, as applicable, while it was Facility Agent. Any successor and each of the other Finance Parties shall have

the same rights and obligations amongst themselves as they would have had if such successor had been an initial Finance Party.

- (i) After consultation with the Borrower, the Majority Lenders may, by notice to the Facility Agent, require it to resign under paragraph (c) above. In this event, the Facility Agent shall resign in accordance with paragraph (b) above.

Facility Agent and ECA Agent Relationship with the Covered Lenders.

- (a) Each of the Facility Agent and ECA Agent may treat the person shown in its records as Covered Lender at the opening of business (in the place of the Facility Agent's or ECA Agent's principal office, as applicable, as notified to the Finance Parties from time to time) as each Covered Lender acting through its lending office:

- (i) entitled to or liable for any payment due under any Finance Document or OeKB Guarantee on such day; and
- (ii) entitled to receive and act upon any notice, request, document or communication or make any decision or determination under any Finance Document or OeKB Guarantee made or delivered on such day,

unless it has received not less than five (5) Business Days' prior notice from such Covered Lender to the contrary in accordance with the terms of this Agreement.

- (b) The Facility Agent may at any time and shall, if requested to do so by the Majority Lenders, convene a meeting of the Lenders.
- (c) Any Lender may by notice to the Facility Agent appoint a person to receive on its behalf all notices, communications, information and documents to be made or dispatched to such Lender under the Finance Documents or the OeKB Guarantee, as applicable.

- (i) Any such notice:
 - (A) shall contain the address, fax number and (where communication by electronic mail or other electronic means is permitted under a Finance Document or the OeKB Guarantee, as applicable) electronic mail address and any other information required to enable the sending and receipt of information by that means (and, in each case, the department or officer, if any, for whose attention communication is to be made); and
 - (B) shall be treated as a notification of a substitute address, fax number, electronic mail address, department and officer by such Lender for the purposes of the Finance Documents or the OeKB Guarantee, as applicable.
- (ii) The Facility Agent is entitled to treat such person as the person entitled to receive all such notices, communications, information and documents as though that person were such Lender.

- (d) The Facility Agent shall keep a record of all Finance Parties and supply any other Finance Party with a copy of the record on request. The record shall include each Lender's contact details for the purposes of the Finance Documents and the OeKB Guarantee, as applicable, and its lending office.

14.12 Appointment of the ECA Agent.

- (a) Each of the Covered Lenders irrevocably appoints the ECA Agent to act as its agent under and in connection with the OeKB Guarantee. By its signature below, the ECA Agent (or any successor thereto pursuant to this Article 14 (*Administrative Parties*)) accepts such appointment.
- (b) Each of the Covered Lenders irrevocably authorizes the ECA Agent to:
- (i) perform the duties, obligations and responsibilities and to exercise the rights, powers, authorities and discretions specifically given to the ECA Agent under or in connection with the OeKB Guarantee together with any other incidental rights, powers, authorities and discretions; and
 - (ii) enter into and deliver on its behalf the OeKB Guarantee and agrees severally to be bound by the terms and conditions of the OeKB Guarantee as if it had executed and delivered the OeKB Guarantee for and in its own name.
- (c) Any bank or financial institution serving as ECA Agent hereunder shall have the same rights and powers in its capacity as a Covered Lender as any other Covered Lender and may exercise the same as though it were not the ECA Agent, and such bank and its Affiliates may accept deposits from, lend money to and generally engage in any kind of business with the Borrower or Affiliate thereof as if it were not the ECA Agent hereunder.
- (d) Each Covered Lender expressly confirms that it releases the Facility Agent and the ECA Agent from the restrictions pursuant to section 181 of the German Civil Code (*Bürgerliches Gesetzbuch*) and similar restrictions applicable to it pursuant to any other Applicable Law as provided for in paragraph (c) of Section 14.1 (*Appointment of the Facility Agent*) and this Section 14.12 (*Appointment of the ECA Agent*).

14.13 Representations and Agreement.

Each Covered Lender represents and warrants to the ECA Agent that: (a) it has reviewed the OeKB Guarantee and is aware of the provisions thereof and (b) no information provided by such Covered Lender in writing to the OeKB Guarantor prior to the date hereof was incomplete, untrue or incorrect in any respect except to the extent that such Covered Lender, in the exercise of reasonable care and due diligence prior to the giving of the information, could not have discovered the error or omission. Each Covered Lender represents and warrants that it has not taken (or failed to take), and agrees that it shall not take (or fail to take), any action that would result in the ECA Agent being in breach of any of its obligations as "Guarantee Holder" under the OeKB Guarantee, or result in the Guarantor being in breach of its obligations under the OeKB Guarantee, or which would otherwise prejudice the Guarantor's ability to make a claim on behalf of the Covered Lenders under the OeKB Guarantee.

14.14 Communications.

The ECA Agent agrees to furnish promptly to the Facility Agent (for delivery to each Covered Lender) a copy of each written communication received by it from, or sent by it to, the OeKB Guarantor, the Borrower, the Facility Agent and any amendment or waiver of any of the provisions of the OeKB Guarantee, this Agreement or any other Finance Document or the transactions contemplated hereby or thereby, or from any Covered Lender pursuant to or in relation to this Agreement or any other Finance Document. The ECA Agent agrees not to take any action under the OeKB Guarantee without the consent of the Facility Agent (acting upon the instructions of the Majority Lenders). The ECA Agent agrees to furnish promptly to the Facility Agent a request for any information it reasonably requires for the purposes of fulfilling its duties under the OeKB Guarantee. Furthermore, at any time in which the OeKB Guarantor's consent is required under the terms of the OeKB Guarantee for any consent, waiver, approval, direction, amendment, supplement or other modification or any other action to be taken by the Covered Lenders with respect to this Agreement or any other Finance Document, the ECA Agent agrees to promptly inform the Facility Agent of such consent requirement.

14.15 Limitation on Right to Make Claims.

Each Covered Lender acknowledges and agrees that it shall have no entitlement to make any claim or to take any action whatsoever under or in connection with the OeKB Guarantee except through the ECA Agent (acting upon the instructions of the Facility Agent) and that all of the rights of the Covered Lenders under the OeKB Guarantee shall only be exercised by the ECA Agent (acting upon the instructions of the Facility Agent in accordance with the terms of this Agreement and the Finance Documents).

14.16 Resignation of the ECA Agent.

- (a) The ECA Agent may resign and appoint one of its Affiliates as successor by giving notice to the Covered Lenders and the Borrower.
- (b) Alternatively, the ECA Agent may resign by giving thirty (30) days' notice to the Covered Lenders and the Borrower, in which case the Covered Lenders, acting unanimously (after consultation with the Borrower) may appoint a successor ECA Agent.
- (c) If the Covered Lenders, acting unanimously, have not appointed a successor ECA Agent in accordance with paragraph (b) above within twenty (20) days after notice of resignation was given, the retiring ECA Agent (with the consult of the Borrower so long as no Default or Event of Default has occurred or is continuing) may appoint a successor ECA Agent.
- (d) The retiring ECA Agent shall, at its own cost:
 - (i) make available to the successor ECA Agent such documents and records and provide such assistance as the successor ECA Agent may reasonably request for the purposes of performing its functions as ECA Agent under the Finance Documents; and
 - (ii) enter into and deliver to the successor ECA Agent those documents and effect any registrations as may be reasonably required for the transfer or assignment of all of its rights and benefits under the Finance Documents to the successor ECA Agent.
- (e) The ECA Agent's resignation notice shall only take effect upon the appointment of a successor.
- (f) Upon the appointment of a successor, the retiring ECA Agent shall be discharged from any further obligation in respect of the Finance Documents (other than its obligations under paragraph (d) above) but shall remain entitled to the benefit of Section 14.9(b) (*Lender's Indemnity*) and this Article 14 (*Administrative Parties*) (and any agency fees for the account of the retiring ECA Agent shall cease to accrue from (and shall be payable on) that date). Any successor and each of the other Administrative Parties shall have the same rights and obligations amongst themselves as they would have had if such successor had been an original party.
- (g) Pursuant to the terms of the OeKB Guarantee, the parties hereto acknowledge that any successor ECA Agent shall be required to act as "Guarantee Holder" under the OeKB Guarantee. The "Guarantee Holder" under the OeKB Guarantee shall not transfer the OeKB Guarantee or any rights thereunder to any successor ECA Agent or any other third party without the express written consent of the OeKB Guarantor.

14.17 Replacement of the ECA Agent.

- (a) With the consent of the Borrower (so long as no Default or Event of Default has occurred or is continuing), the Covered Lenders, acting unanimously, may, by giving thirty (30) days' notice to the ECA Agent (or, at any time the ECA Agent is an Impaired Agent, by giving any shorter notice determined by the Covered Lenders, acting unanimously) replace the ECA Agent by appointing a successor ECA Agent, which shall be acceptable to the OeKB Guarantor.
- (b) The retiring ECA Agent shall (at its own cost if it is an Impaired Agent and otherwise at the expense of the Covered Lenders) make available to the successor ECA Agent such documents and records and provide such assistance as the successor ECA Agent may reasonably request for the purposes of performing its functions as ECA Agent under the Finance Documents.
- (c) The appointment of the successor ECA Agent shall take effect on the date specified in the notice from the Covered Lenders, acting unanimously, to the retiring ECA Agent. As from this date, the retiring ECA Agent shall be discharged from any further obligation in respect of the Finance Documents (other than its obligations under paragraph (b) above) but shall remain entitled to the benefit of Section 14.9(b) (*Lender's Indemnity*) and this Article 14 (*Administrative Parties*) (and any agency fees for the account of the retiring ECA Agent shall cease to accrue from (and shall be payable on) that date).
- (d) Any successor ECA Agent and each of the other parties shall have the same rights and obligations amongst themselves as they would have had if such successor had been an original party.

14.18 No Liability.

Neither the ECA Agent nor any of its officers, directors, employees or agents shall be liable to any Person for any action taken or omitted under this Agreement, the OeKB Guarantee or under the other Finance Documents or in connection therewith (including any action or omission that, in its opinion, results in or is reasonably likely to result in a breach of any term of the OeKB Guarantee), except to the extent caused by the gross negligence, fraud or willful misconduct of the ECA Agent, as determined by a court of competent jurisdiction. The Covered Lenders hereto each (for itself and any Person claiming through it) hereby releases, waives, discharges and exculpates the ECA Agent and the Facility Agent for any action taken or omitted under this Agreement, the OeKB Guarantee or under the other Finance Documents or in connection therewith, except to the extent caused by gross negligence, fraud or willful misconduct of the ECA Agent as determined by a court of competent jurisdiction. The ECA Agent will not be liable for any delay (or any related consequences) in crediting an account with an amount required under the OeKB Guarantee or any other Finance Document to be paid by the ECA Agent if the ECA Agent has taken all necessary steps as soon as reasonably practicable to comply with the regulations or operating procedures of any recognized clearing or settlement system used by the ECA Agent for that purpose.

Agent's Confidentiality.

- (a) In acting as an agent for the Finance Parties, each Administrative Party shall be regarded as acting through its agency division which shall be treated as a separate entity from any other of its divisions and departments.
- (b) If information is received by another division or department of any Administrative Party, it may be treated as confidential to such division or department and such Administrative Party shall not be deemed to have notice of it.

14.20 Consent of the OeKB Guarantor.

- (a) At any time in which the OeKB Guarantor's consent is required under the terms of the OeKB Guarantee, for any consent, waiver, approval, direction, amendment, supplement or other modification or any other action to be taken by the Covered Lenders with respect to this Agreement or any other Finance Document, the Facility Agent shall not take such action until the ECA Agent, has notified the Facility Agent that such consent has been obtained.

The Facility Agent shall notify the Covered Lenders that such consent has been obtained or denied, as the case may be.

- (b) Notwithstanding the foregoing or anything else to the contrary in this Agreement or the Finance Documents, the parties hereto acknowledge and agree that, pursuant to the terms of the OeKB Guarantee, the OeKB Guarantor shall have sole consent and approval rights over any waivers, amendments, supplements or modifications of or under this Agreement and shall, in its sole discretion, direct the voting of the Covered Lenders through the ECA Agent.

Credit Appraisal by the Covered Lenders.

Without affecting the responsibility of the Borrower for information supplied by it or on its behalf in connection with any Finance Document or the OeKB Guarantee, as applicable, each Covered Lender confirms to the Administrative Parties that it has been, and shall continue to be, solely responsible for making its own independent appraisal and investigation of all risks arising under or in connection with any Finance Document and the OeKB Guarantee, including but not limited to:

- (a) the financial condition, creditworthiness, status and nature of the Borrower;
- (b) the legality, validity, effectiveness, adequacy or enforceability of any Finance Document, the OeKB Guarantee and any other agreement, arrangement or document entered into, made or executed in anticipation of, under or in connection with any Finance Document;
- (c) whether such Covered Lender has recourse, and the nature and extent of such recourse, against any Finance Party or any of its respective assets under or in connection with any Finance Document, the OeKB Guarantee, the transactions contemplated by the Finance Documents, the OeKB Guarantee, or any other agreement, arrangement or document entered into made or executed in anticipation of, under or in connection with any Finance Document, the OeKB Guarantee, as applicable; and
- (d) the adequacy, accuracy and completeness of any reports and any other information provided by any Administrative Party, by any Finance Party or by any other person under or in connection with any Finance Document, the OeKB Guarantee, the transactions contemplated by the Finance Documents and OeKB Guarantee, or any other agreement, arrangement or document entered into, made or executed in anticipation of, under or in connection with any Finance Document and the OeKB Guarantee.

Deduction from Amounts Payable by Administrative Parties.

If any Finance Party owes an amount to any Administrative Party under the Finance Documents or the OeKB Guarantee, as applicable, such Administrative Party may, after giving notice to such Finance Party, deduct an amount not exceeding such amount from any payment to such Finance Party which such Administrative Party would otherwise be obligated to make under the Finance Documents or the OeKB Guarantee, as applicable, and apply the amount deducted in or towards satisfaction of the amount owed. For the purposes of the Finance Document or the OeKB Guarantee, as applicable, such Finance Party shall be regarded as having received the amount so deducted.

Notice Period.

Where a Finance Document or the OeKB Guarantee, as applicable, specifies a minimum period of notice to be given to any Administrative Party, such Administrative Party may, at its discretion, accept a shorter notice period.

Payments.

- (a) While no Event of Default is continuing, the Borrower shall make all payments in accordance with Article 16 (*Payment Mechanics*).
- (b) Following an Event of Default that is continuing, provided the Facility Agent has declared all Obligations immediately due and payable, all payments shall be made to the Facility Agent for distribution to the Lenders in accordance with this Agreement, such that the benefit of all such payments shall be shared by the Lenders ratably in accordance with the Applicable Percentage of the Covered Loans or Commercial Loans, as the case may be, owing to them; *provided*, that the provisions of this Section 14.24 (*Payments*) shall not be construed to apply to:
- (i) any payment made in respect of an obligation that is secured by a Permitted Lien or that is otherwise entitled to priority over the Borrower's obligations under or in connection with the Finance Documents or the OeKB Guarantee, as applicable; or
- (ii) any payment to which such Lender is entitled in its capacity as a party to any Finance Document or the OeKB Guarantee, as applicable.

14.25 Agents as Lender.

With respect to its Commitment and the Loans made by it, any Person serving as an Agent hereunder shall have the same rights and powers under the Finance Documents as any other Lender and may exercise the same as though it were not such Agent. The term "Lender" or "Finance Party", when used with respect to each Agent, shall unless otherwise expressly indicated, include such Agent in its individual capacity. Each Agent and its Affiliates may accept deposits from, lend money to, act as trustee under, act as financial advisor or in any other advisory capacity for and generally engage in any kind of business with, any Person as if such Agent were not the applicable Agent hereunder, without any duty to account therefor to the Lenders or Finance Parties.

Article 15 CONDUCT OF BUSINESS BY THE FINANCE PARTIES

15.1 Conduct of Business by the Finance Parties.

No provision of any Finance Document or the OeKB Guarantee, as applicable, will:

- (a) interfere with the right of any Finance Party to arrange its affairs (Tax or otherwise) in whatever manner it deems appropriate;
- (b) obligate any Finance Party to investigate or claim any credit, relief, remission or repayment available to it or the extent, order and manner of any claim; or
- (c) obligate any Finance Party to disclose any information relating to its affairs (Tax or otherwise) or any computations in respect of Tax.

Article 16
PAYMENT MECHANICS

Payments to the Agents.

- (a) On each date on which the Borrower or a Lender is required to make a payment under a Finance Document (including as relates to any payments to be made in respect of the OeKB Guarantee), the Borrower or such Lender shall make the same available to the Facility Agent or (in the case of any disbursement or payment expressed to be made or payable under the terms of any Finance Document) to the relevant Agent, for value on the due date at the time and in U.S. Dollars.
- (b) Payment shall be made to such account as the Facility Agent specifies.

Distributions by the Agents.

Each payment received by an Agent under the Finance Documents or the OeKB Guarantee, as applicable, for another Finance Party shall, subject to Section 16.3 (*Distributions to the Borrower*) and Section 16.4 (*Clawback*), be made available by that Agent as soon as practicable after receipt to the Finance Party entitled to receive payment in accordance with the Finance Documents or the OeKB Guarantee, and:

- (a) in the case of payment for the Borrower, to the account identified in writing by the Borrower to an Agent;
- (b) in the case of payment for a Lender, for the account of its lending office; and
- (c) in the case of payment for any other Finance Party (other than the Borrower or a Lender), to such account with a bank in New York City as that Finance Party may notify to the Facility Agent by not less than five (5) Business Days' prior notice.

Distributions to the Borrower.

Each Agent may (with the consent of the Borrower or in accordance with Article 17 (*Set-Off*)) apply any amount received by it for the Borrower in or towards payment (as soon as practicable after receipt) of any amount due from the Borrower under the Finance Documents. For this purpose, the relevant Agent may apply the received sum in or towards the purchase of any amount of any currency to be paid.

Clawback.

- (a) Where a sum is to be paid to an Agent under the Finance Documents or the OeKB Guarantee, as applicable, for another Finance Party, such Agent is not obligated to pay that sum to that other Finance Party (or to enter into or perform any related exchange contract) until it has been able to establish to its satisfaction such it has actually received that sum.
- (b) If an Agent pays an amount to another Finance Party and it proves to be the case that such Agent has not actually received such amount, then the Finance Party to whom such amount (or the proceeds of any related exchange contract) was paid by such Agent shall on demand refund such amount to such Agent.

No Set-Off by the Borrower.

All payments to be made by the Borrower under the Finance Documents will be calculated and be made without (and free and clear of any deduction for) set-off or counterclaim, it being understood that deduction for withholding Taxes is addressed by Article 6 (*Taxes*).

Business Days.

- (a) Any payment which is due to be made on a day that is not a Business Day will be made on the next Business Day in the same calendar month (if there is one) or the preceding Business Day (if there is not). If the Final Maturity Date is not a Business Day, any payment due on the Final Maturity Date shall be made on the next Business Day in the same calendar month (if there is one) or the preceding Business Day (if there is not).
- (b) During any extension of the due date for payment of any principal or Unpaid Sum approved by the Finance Parties under a Finance Document and the OeKB Guarantee, interest is payable on the principal or Unpaid Sum at the rate payable on the original due date.

Currency of Account.

- (a) Subject to paragraphs (b) below, U.S. Dollars is the currency of account and payment for any sum due from the Borrower under any Finance Document and the OeKB Guarantee.
- (b) Each payment in respect of costs, expenses or Taxes shall be made in the currency in which the costs, expenses or Taxes are Incurred.

Change of Currency.

- (a) Unless otherwise prohibited by law, if more than one currency or currency unit are at the same time recognized by the central bank of any country as the lawful currency of that country, then:
 - (i) any reference in the Finance Documents to, and any Obligations arising under the Finance Documents in, the currency of that country will be translated into, or paid in, the currency or currency unit of that country designated by the Facility Agent (after consultation with the Borrower); and
 - (ii) any translation from one currency or currency unit to another will be at the official rate of exchange recognized by the central bank for the conversion of that currency or currency unit into the other, rounded up or down by the Facility Agent (acting reasonably).
- (b) If a change in any currency of a country occurs (including where there is more than one currency or currency unit recognized at the same time as the lawful currency of a country), the Finance Documents will, to the extent the Facility Agent (acting reasonably and after consultation with the Borrower)

specifies to be necessary, be amended to comply with any generally accepted conventions and market practice in the relevant interbank market and otherwise reflect the change in currency.

Article 17
SET-OFF

A Finance Party may set off any matured obligation due from the Borrower under the Finance Documents and the OeKB Guarantee (to the extent beneficially owned by that Finance Party) against any matured obligation owed by that Finance Party to the Borrower, regardless of the place of payment, booking branch or currency of either obligation. If the obligations are in different currencies, the Finance Party may convert either obligation at a market rate of exchange in its usual course of business for the purpose of the set-off.

Article 18
BAIL-IN PROVISIONS

Notwithstanding anything to the contrary in any Finance Document, the OeKB Guarantee, or in any other agreement, arrangement or understanding among any such Finance Parties, each Finance Party hereto acknowledges and accepts that any liability of any Finance Party to any other Finance Party under or in connection with the Finance Documents, to the extent such liability is unsecured, may be subject to Bail-In Action by the relevant Resolution Authority and acknowledges and accepts to be bound by the effect of:

- (a) the application of any Bail-In Action to any such liabilities arising hereunder which may be payable to it by any Finance Party hereto; and
- (b) the effects of any Bail-In Action on any such liability, including, if applicable:
 - (i) a reduction, in full or in part, or cancellation in the principal amount, or outstanding amount due (including any accrued but unpaid interest) in respect of any such liability; and
 - (ii) a conversion of all, or a portion of, any such liability into shares or other instruments of ownership that may be issued to, or conferred on, it; and

- (c) the variation of any term of any Finance Document or the OeKB Guarantee to the extent necessary to give effect to any Bail-In Action in relation to any such liability.

Article 19
CALCULATIONS AND CERTIFICATES

Day Count Conventions.

Except as otherwise expressly provided in a Finance Document or in the OeKB Guarantee, any interest, commission or fee accruing under a Finance Document or under the OeKB Guarantee will accrue from day to day and is calculated on the basis of the actual number of days elapsed and a year of three hundred sixty (360) days or, in any case where the practice in the relevant interbank market differs, in accordance with that market practice.

Financial Calculations.

All financial calculations to be made under, or for the purposes of, this Agreement, the OeKB Guarantee and any other Finance Document shall be made in accordance with GAAP and, except as otherwise required to conform to any provision of this Agreement, shall be calculated from the then-most-recently issued quarterly Financial Statements which the Borrower is obligated to furnish to the Finance Parties under Section 10.1(a)(i) (*Quarterly Statements*).

Article 20
CONFIDENTIAL INFORMATION

20.1 Confidential Information.

The Borrower and the Finance Parties each agree that it shall maintain as confidential and, without the prior written consent of the relevant party(ies), shall not disclose the terms of this Agreement (including any interest rate or margin on any Loans, the amount of any Commitments and the amount of any fees related to the transactions contemplated by the Agreement and the other Finance Documents) and any non-public information concerning the other party or its business and operations (the "**Confidential Information**"); *provided*, that a party and the OeKB Guarantor may disclose such information:

- (a) where such information becomes publicly available or widely known by the public other than by a breach of this Agreement, or is known by the receiving party prior to the entry of this Agreement or obtained independently of this Agreement, and the disclosure of such information would not breach any other confidentiality obligations;
- (b) if required by Applicable Law or requested by any Governmental Body having jurisdiction over such party (after providing written notice to the Borrower and, to the extent practicable, giving the Borrower an opportunity to lawfully object to such disclosure);
- (c) to its Affiliates and those of its and its Affiliates' directors, officers, employees, accountants, attorneys, agents, advisors, insurers, insurance brokers and representatives who need to have knowledge of such information in connection with this Agreement and the transactions contemplated herein;

- (d) to any Person to whom such party, in good faith, anticipates assigning an interest in this Agreement as contemplated by Section 13.1 (*Assignment by Lenders*) and such Person's Affiliates and the representatives, consultants and advisors of such Person or its Affiliates who have a legitimate need to know such information in connection with an assignment;
- (e) to the OeKB Guarantor such Confidential Information as that Finance Party reasonably considers appropriate. The Borrower acknowledges that the OeKB Guarantor may disclose information as required by the rules, regulations or recommendations of the OECD, including, but not limited to, publishing the executive summary on the OeKB Guarantor's website), the European Union and the information the OeKB Guarantor reasonably considers appropriate in order to arrange and manage any reinsurance or other security arrangements to cover its risk exposure;
- (f) to the Exporter; and
- (g) in connection with the exercise of any duties or remedies hereunder or any suit, action or proceeding relating to this Agreement or the OeKB Guarantee (or in satisfaction of the insureds' obligations thereunder).

In the case of disclosure pursuant to paragraph (c), (d), (e) or (f) above, the disclosing party shall be responsible to ensure that the recipient of such Confidential Information does not disclose such information to the same extent as if it were bound by the same non-disclosure obligations of the disclosing party under this Agreement, and shall be liable to the disclosing party for any improper use or disclosure of such information by such recipient.

Entire Agreement Regarding Confidentiality.

- (a) This Article 20 (*Confidential Information*) constitutes the entire agreement between the Finance Parties in relation to the obligations of the Finance Parties under the Finance Documents and the OeKB Guarantee regarding Confidential Information and supersedes any previous agreement, whether express or implied, regarding Confidential Information.
- (b) No Finance Party will be liable for any loss, cost, liability or other claim in connection with the Confidential Information beyond reasonably foreseeable losses and will not be liable for lost profits or consequential or punitive damages.

Inside Information.

Each of the Finance Parties acknowledges that some or all of the Confidential Information is or may be price-sensitive information and that the use of such information may be regulated or prohibited by applicable legislation including securities law relating to insider dealing and market abuse and each of the Finance Parties undertakes not to use any Confidential Information for any unlawful purpose.

Continuing Obligations.

The obligations in this Section 20.4 (*Continuing Obligations*) are continuing and, in particular, will survive and remain binding on each Finance Party for a period of twelve (12) months from the earlier of:

- (a) the date on which all amounts payable by the Borrower under or in connection with the Finance Documents and the OeKB Guarantee (pursuant to the terms of the Finance Documents) have been paid in full and all Commitments have been cancelled or otherwise cease to be available; and
- (b) the date on which such Finance Party otherwise ceases to be a Finance Party.

Article 21 NOTICES

Notices.

Any notice or other communication required or permitted to be given hereunder shall be in writing and shall be given by facsimile or other means of electronic communication or by hand-delivery as hereinafter provided. Any such notice, if sent by facsimile or other means of electronic communication, shall be deemed to have been received on the day of sending, or if delivered by hand shall be deemed to have been received at the time it is delivered to the applicable address noted below. Notices of change of address shall also be governed by this Article 21 (*Notices*). Notices and other communications shall be addressed as follows:

- (a) if to the Borrower:

600 Grant Street, 61st Floor
Pittsburgh, Pennsylvania 15219
Attention: Treasurer & Chief Risk Officer
Facsimile No: (412) 433-1167

Copy to:

600 Grant Street, Room 1874
Pittsburgh, Pennsylvania 15219
Attention: Manager – Corporate Finance
Facsimile No: (412) 433-2222
Corporate_Finance@uss.com

or at such other address, facsimile number or email address as a party hereto from time to time directs in writing to the other parties hereto.

- (b) if to the Facility Agent:

KfW IPEX-Bank GmbH
Palmengartenstrasse 5-9
60325 Frankfurt am Main
Germany
Attention: Peter Sebastian Schröder
Contract Management – Metals & Mining (X1a3)
Email: peter_sebastian.schroeder@kfw.de
Telephone number: +49 69 7431 8858

or at such other address, facsimile number or email address as a party hereto from time to time directs in writing to the other parties hereto.

- (c) if to the ECA Agent:

KfW IPEX-Bank GmbH
Palmengartenstrasse 5-9
60325 Frankfurt am Main
Germany
Attention: Peter Sebastian Schröder
Contract Management – Metals & Mining (X1a3)
Email: peter_sebastian.schroeder@kfw.de
Telephone number: +49 69 7431 8858

- (d) if to the Lenders, at the addresses noted on Schedule A (*Commitments*); and

- (e) in accordance with Section 22.5 (*English Language*), any notices and communications given in respect of this Agreement shall be given in the English language, or if given in any other language, that notice or communication shall be accompanied by an English translation of it (if requested by the OeKB Guarantor or the ECA Agent), which shall be certified as being a true and correct translation of the notice or communication.

Notification of Address and Fax Number.

Promptly upon receipt of notification of an address or fax number or change of address or fax number pursuant to this Article 21 (*Notices*) or changing its own address or fax number, the Facility Agent shall notify the other Finance Parties.

Electronic Communication.

- (a) Any communication to be made between any of the Finance Parties under or in connection with the Finance Documents and the OeKB Guarantee, may be made by electronic mail or other electronic means (including, without limitation, by way of posting to a secure website) if the relevant Finance Parties:
- (i) agree that, unless and until notified to the contrary, this is to be an accepted form of communication;
 - (ii) notify each other in writing of their electronic mail address and any other information required to enable the sending and receipt of information by that means; and
 - (iii) notify each other of any change to their electronic mail address or any other such information supplied by them by not less than five (5) Business Days' notice.
- (b) Any such electronic communication as specified in paragraph (a) above made between any two Finance Parties will be effective only when actually received (or made available) in readable form.
- (c) Any electronic communication which would otherwise become effective on a nonworking day or after business hours in the place of receipt will be deemed only to become effective on the next working day in that place.

- (d) Any reference in a Finance Document to a communication being sent or received will be construed to include that communication being made available in accordance with this Section 21.3 (*Electronic Communication*).

Article 22 GENERAL

Partial Invalidity.

If, at any time, any provision of a Finance Document is or becomes illegal, invalid or unenforceable in any respect under any law of any jurisdiction, that will not affect or impair:

- (a) the legality, validity or enforceability in that jurisdiction of any other provision of the Finance Documents or the OeKB Guarantee; or
- (b) the legality, validity or enforceability in other jurisdictions of that or any other provision of the Finance Documents or the OeKB Guarantee.

Reliance and Non-Merger.

All covenants, agreements, representations and warranties of the Borrower made herein or in any other Finance Document or in any certificate or other document signed by any of its directors or officers and delivered by or on behalf of the Borrower pursuant hereto or thereto are material, shall be deemed to have been relied upon by the Facility Agent and each Lender notwithstanding any investigation heretofore or hereafter made by the Facility Agent, the Lenders or Lenders' counsel or any employee or other representative of any of them and shall survive the execution and delivery of this Agreement and the other Finance Documents until all Obligations owed to the Facility Agent or the Lenders under this Agreement and the other Finance Documents shall have been satisfied and performed in full and the Lenders shall have no further obligation to make the Loans hereunder.

Remedies and Waivers.

- (a) No investigation by or on behalf of any Finance Party, into the affairs of the Borrower will prejudice any rights or remedies held by or on behalf of a Finance Party under the Finance Documents or the OeKB Guarantee.
- (b) No failure to exercise, nor any delay in exercising, on the part of or on behalf of any Finance Party, any right or remedy under a Finance Document or the OeKB Guarantee will operate as a waiver of any such right or remedy or constitute an election to affirm any Finance Document or the OeKB Guarantee. No election to affirm any Finance Document on the part of or on behalf of any Finance Party will be effective unless it is in writing. No single or partial exercise of any right or remedy will prevent any further or other exercise or the exercise of any other right or remedy. The rights and remedies provided in each Finance Document or the OeKB Guarantee are cumulative and not exclusive of any rights or remedies provided by law and may be waived only in writing and specifically.

Amendment and Waiver.

- (a) Except as otherwise expressly provided in this Agreement and subject to paragraph (c) and paragraph (d) below, any term of the Finance Documents may be amended, modified, waived or supplemented only with the consent of the Majority Lenders or the Borrower, and, to the extent it is a party, the Facility Agent (acting on behalf of the Majority Lenders), and any such amendment, waiver, modification or supplement shall be binding on all parties.
- (b) (i) Any waiver or modification of any provision of this Agreement that has the effect (either immediately or at some later time) of enabling the Borrower to satisfy a condition precedent to the making of a Loan of any Class shall not be effective against the Lenders of such Class for purposes of the Commitments of such Class unless the Majority Lenders of such Class shall have concurred with such waiver or modification and (ii) no waiver or modification of any provision of this Agreement or any other Finance Document that would reasonably be expected to adversely affect the Lenders of any Class in a manner that does not affect all Classes equally shall be effective against the Lenders of such Class unless the Majority Lenders of such Class shall have concurred with such waiver or modification.
- (c) Except as otherwise expressly provided in the relevant agreement or document, no waiver, consent, annulment, modification or supplement of any term or condition of any Finance Document may be given or granted by the Borrower or the Lenders.
- (d) Notwithstanding paragraph (a) above, an amendment, modification, supplement or waiver that relates to the rights, duties, protections or obligations of the Agents or the Mandated Lead Arranger (each in their capacity as such) may not be effected without the consent of the Agents or the Mandated Lead Arranger (as the case may be).
- (e) Notwithstanding paragraph (a) above, each Lender shall be required to consent in writing to any amendment, modification, supplement or waiver of:
 - (i) the definition of “Majority Lenders” or any other provision in the Finance Documents or the OeKB Guarantee specifying the number or percentage of Lenders required to waive, amend or modify any rights thereunder or make any determination or grant thereunder;
 - (ii) Section 11.1 (*Conditions Precedent to the Closing Date*), Section 11.2 (*Additional Conditions Precedent to Covered Loans*) and Section 11.3 (*Additional Conditions Precedent to Commercial Loans*);
 - (iii) a reduction in the Applicable Margin, or a reduction in the amount of any payment of principal, interest, fees or other amounts payable to a Lender under the Finance Documents;
 - (iv) an increase in, or an extension of, a Commitment or the Total Commitments;
 - (v) a change to the order of application of any reduction in the Commitments or any prepayment of Loans from the application thereof set forth in the applicable provisions of Section 4.2 (*Mandatory Prepayment*), Section 4.3 (*Voluntary Cancellation*), and Section 4.4 (*Voluntary Prepayment*);

- (vi) a term or provision of a Finance Document that expressly requires the consent, approval or instructions of each Lender;
 - (vii) the right of a Lender to assign or transfer its rights or obligations under the Finance Documents in accordance with Section 13.1 (*Assignment by Lenders*);
 - (A) this Section 22.4 (*Amendment and Waiver*);
 - (B) Section 22.8 (*Remedies Cumulative*); or
 - (viii) change any provision in the Finance Documents relating to the *pro rata* nature of the Utilizations or any amount payable thereunder.
- (f) To the extent required by the OeKB General Terms and Conditions, the Lenders may need to receive prior written consent of the OeKB Guarantor prior to providing their consent in connection with an amendment or waiver that relates to:
- (i) an extension of the date of payment of any amount to a Lender under the Finance Documents;
 - (ii) an increase in, or an extension of, a Commitment or the Total Commitments; or
 - (iii) any other amount or provision that requires the consent of the OeKB Guarantor in accordance with the OeKB General Terms and Conditions.

English Language.

- (a) Except for the OeKB Guarantee and certain communications with the OeKB Guarantor, which shall be in German, any communication made under or in connection with any Finance Document or the OeKB Guarantee shall be in English.
- (b) All other documents provided under or in connection with any Finance Document shall be:
 - (i) in English; or
 - (ii) if not in English, accompanied by an English translation and, in this case, the English translation will prevail unless the document is a constitutional, statutory or other official document.

Further Assurances.

Whether before or after the happening of an Event of Default, the Borrower shall at its own expense do, make, execute or deliver, or cause to be done, made, executed or delivered, all such further acts, things, agreements, documents and instruments in connection with this Agreement, the other Finance Documents or the OeKB Guarantee as the Facility Agent may reasonably request from time to time for the purpose of giving effect to the terms of this Agreement, the other Finance Documents or the OeKB Guarantee, all promptly upon the request of the Facility Agent.

Judgment Currency.

If for the purpose of obtaining or enforcing judgment in any court it is necessary to convert a sum due hereunder or under any other Finance Document in U.S. Dollars into another currency (the "**Judgment Currency**"), the rate of exchange which shall be applied shall be that at which in accordance with normal banking procedures a Finance Party, as applicable, could purchase such U.S. Dollars in the United States of America with the Judgment Currency on the Business Day next preceding the day on which such judgment is rendered. The obligation of the Borrower in respect of any such sum due from it to such Finance Party hereunder or under any other Finance Document (an "**Entitled Person**") shall, notwithstanding the rate of exchange actually applied in rendering such judgment, be discharged only to the extent that on the Business Day following the receipt by such Entitled Person of any sum adjudged to be due hereunder or under any other Finance Document in the Judgment Currency, such Entitled Person may in accordance with normal banking procedures purchase and transfer U.S. Dollars to the United States of America with the amount of the Judgment Currency so adjudged to be due; and the Borrower hereby, as a separate obligation and notwithstanding any such judgment, agrees to indemnify such Entitled Person on demand, in U.S. Dollars, for the amount (if any) by which the sum originally due to such Entitled Person in U.S. Dollars hereunder or under any other Finance Document exceeds the amount of the U.S. Dollars so purchased and transferred.

Remedies Cumulative.

Subject to Applicable Law, no failure or delay on the part of any Finance Party in exercising any right, power or privilege hereunder or under any other Finance Document or the OeKB Guarantee and no course of dealing between the Borrower or any its Affiliates, on the one hand and any Finance Party, on the other hand, shall impair any such right, power or privilege or operate as a waiver thereof; nor shall any single or partial exercise of any right, power or privilege hereunder or under any other Finance Document or the OeKB Guarantee preclude any other or further exercise thereof or the exercise of any other right, power or privilege hereunder or thereunder. The rights, powers and remedies herein or in any other Finance Document or the OeKB Guarantee expressly provided are cumulative and not exclusive of any rights, powers or remedies which any party thereto would otherwise have. No notice to or demand on the Borrower in any case shall entitle the Borrower to any other or further notice or demand in similar or other circumstances or constitute a waiver of the rights of any Finance Party to any other or further action in any circumstances without notice or demand.

Entire Agreement.

This Agreement, the other Finance Documents and the OeKB Guarantee constitute the entire agreement between the parties pertaining to the subject matter described herein and therein. There are no warranties, conditions or representations (including any that may be implied by statute) and there are no agreements in connection with such subject matter except as specifically set forth or referred to in this Agreement, the other Finance Documents and the OeKB Guarantee. No reliance is placed on any warranty, representation, opinion, advice or assertion of fact made either prior to, contemporaneously with, or after the entering into of this Agreement, the other Finance Documents or the OeKB Guarantee, or any amendment or supplement thereto, by any party to this Agreement or any of the other Finance Documents or its directors, officers, partners, employees or agents, where applicable, to any other party to this Agreement or any of the other Finance Documents or its directors, officers, partners, employees or agents, where applicable, except to the extent that the same has been reduced to writing and included as a term of this Agreement or any of the other Finance Documents or the OeKB Guarantee.

Governing Law; Jurisdiction.

- (a) THIS AGREEMENT AND EACH OF THE OTHER FINANCE DOCUMENTS (UNLESS SUCH DOCUMENT EXPRESSLY STATES OTHERWISE THEREIN), THE RELATIONSHIP BETWEEN THE FINANCE PARTIES HERETO AND ANY CLAIM OR DISPUTE (WHETHER SOUNDING IN CONTRACT, TORT OR OTHERWISE)

RELATING TO THIS AGREEMENT OR SUCH OTHER FINANCE DOCUMENT OR SUCH RELATIONSHIP SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK.

- (b) Except as provided in clause (d) below, each party hereto hereby irrevocably and unconditionally agrees that it will not commence any action, litigation or proceeding of any kind or description, whether in law or equity, whether in contract, or in tort or otherwise, against any other party hereto in any way relating to this Agreement or the other Finance Documents governed by New York law or the transactions relating hereto or thereto, in any forum other than the Supreme Court of the State of New York sitting in New York County or the United States District Court of the Southern District of New York and, by execution and delivery of this Agreement, each party hereto hereby irrevocably accepts for itself and in respect of its property, generally and unconditionally, the jurisdiction of the aforesaid courts. Each party hereto agrees that a judgment, after exhaustion of all available appeals, in any such action or proceeding shall be conclusive and binding upon it, and may be enforced in any other jurisdiction, including by a suit upon such judgment, a certified copy of which shall be conclusive evidence of the judgment.
- (c) Each party hereto hereby irrevocably waives any objection that it may now have or hereafter have to the laying of the venue of any suit, action or proceeding arising out of or relating to this Agreement or any other Finance Document brought in the Supreme Court of the State of New York, County of New York or in the United States District Court for the Southern District of New York, and hereby further irrevocably waives any claim that any such suit, action or proceeding brought in any such court has been brought in an inconvenient forum.
- (d) Nothing in this Section 22.10 (*Governing Law; Jurisdiction*) shall limit the right of the Finance Parties to refer any claim against the Borrower to any court of competent jurisdiction outside of the State of New York, nor shall the taking of proceedings by any Finance Parties before the courts in one or more jurisdictions preclude the taking of proceedings in any other jurisdiction whether concurrently or not.

22.11 Service of Process.

- (a) The Borrower irrevocably acknowledges and agree that service of process in any such action or proceeding may be effected by mailing a copy thereof by first class mail, postage prepaid, together with two copies of a statement of service by mail and acknowledgment of receipt, with a postage-prepaid return envelope addressed to the sender, to the Borrower at their address set forth in Article 21 (*Notices*) or at such other address of which the Facility Agent shall have been notified pursuant to Article 21 (*Notices*).
- (b) This Section 22.11 (*Service of Process*) does not affect any other method of service allowed by Applicable Law.
- (c) To the extent that the Borrower may, in any action or proceeding arising out of or relating to any of the Finance Documents, be entitled under any Applicable Law to require or claim

that any Finance Party post security for costs or take similar action, the Borrower hereby irrevocably waives and agrees not to claim the benefit of such entitlement.

Waiver of Jury Trial. EACH OF THE PARTIES HERETO HEREBY EXPRESSLY, KNOWINGLY, VOLUNTARILY AND INTENTIONALLY WAIVES THE RIGHT ANY OF THEM MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LITIGATION BASED ON, OR ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT OR ANY OTHER FINANCE DOCUMENT, OR ANY COURSE OF CONDUCT, COURSE OF DEALING, STATEMENTS (WHETHER VERBAL OR WRITTEN) OR ACTIONS OF ANY PARTY RELATING HERETO OR THERETO. THIS PROVISION IS A MATERIAL INDUCEMENT FOR THE PARTIES TO ENTER INTO THIS AGREEMENT.

22.13 USA PATRIOT Act.

To the extent that it is subject to the requirements of the USA PATRIOT Act or any other Anti-Money Laundering Laws, each Finance Party hereby notifies the Borrower that, pursuant to the requirements of the USA PATRIOT Act or any other Anti-Money Laundering Laws applicable to such Finance Party and the customer due diligence requirements for financial institutions of the Financial Crimes Enforcement Network (as published at 81 FR 29397, 31 CFR 1010, 1020, 1023, 1024, and 1026), it is required to obtain, verify and record information that identifies the Borrower and its direct and indirect beneficial owners, which information includes the name and address of such Persons and other information that will allow such Finance Party, as the case may be, to identify the Borrower and its direct and indirect beneficial owners in accordance with the USA PATRIOT Act or any other Anti-Money Laundering Laws applicable to such Finance Party and the customer due diligence requirements for financial institutions of the Financial Crimes Enforcement Network. The Borrower agrees that it will promptly provide each Finance Party with such information as it may request in order for such Finance Party, respectively, to satisfy the requirements of the USA PATRIOT Act or any other Anti-Money Laundering Laws applicable to such Finance Party.

Counterparts.

This Agreement and all documents contemplated by or delivered under or in connection with this Agreement may be executed and delivered in any number of counterparts (including email or facsimile), with the same effect as if all parties had signed and delivered the same document, and all counterparts shall be construed together to be an original and will constitute one and the same agreement.

No Third-Party Beneficiaries.

The agreement of the Lenders to make the Loans to the Borrower, on the terms and conditions set forth in this Agreement, is solely for the benefit of the Borrower and the Finance Parties, and no other Person (including any contractor, subcontractor, supplier, workman, carrier, warehouseman or materialman furnishing labor, supplies, goods or services to or for the benefit of the Project Upgrades) shall have any rights under this Agreement or under any other Finance Document or with respect to any extension of credit contemplated by this Agreement.

Severability.

Any provision of this Agreement held to be invalid, illegal or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such invalidity, illegality or unenforceability without affecting the validity, legality and enforceability of the remaining provisions hereof; and the invalidity of a particular provision in a particular jurisdiction shall not invalidate such provision in any other jurisdiction. Upon such determination that any term or other provision is invalid, illegal or unenforceable, the parties shall negotiate in good faith to modify this Agreement so as to effect the original intent of the parties as closely as possible in an acceptable manner to the end that the transactions contemplated in this Agreement are fulfilled to the extent possible.

Survival.

All covenants, agreements, representations and warranties made by the Borrower herein and in the certificates or other instruments delivered in connection with or pursuant to this Agreement shall be considered to have been relied upon by the other parties hereto and shall survive the execution and delivery of this Agreement and the making of any Loans. The provisions of Sections 7.3 (*Change in Circumstances*), 7.4 (*Payment of Out-of-Pocket Costs and Expenses*) and 7.5 (*Indemnities*) and Article 14 (*Administrative Parties*) and Article 20 (*Confidential Information*) shall survive and remain in full force and effect regardless of the consummation of the transactions contemplated hereby, the repayment of the Loans, the expiration or termination of the Commitments or the termination of this Agreement or any provision hereof.

Reinstatement.

The Obligations of the Borrower under this Agreement shall be automatically reinstated if and to the extent that for any reason any payment by or on behalf of the Borrower in respect of the Obligations is rescinded or shall be otherwise restored by any holder of any of the Obligations, whether as a result of any proceedings in bankruptcy or reorganization or otherwise, and the Borrower agrees that it will indemnify each Finance Party on demand for all reasonable and documented out-of-pocket costs and expenses (including fees of counsel) incurred by such Finance Party in connection with such rescission or restoration, including any such reasonable and documented out-of-pocket costs and expenses incurred in defending against any claim alleging that such payment constituted a preference, fraudulent transfer or similar payment under any bankruptcy, insolvency or similar law.

[Signature pages follow]

IN WITNESS WHEREOF, this Agreement has been executed by the parties as of the date first written above.

UNITED STATES STEEL CORPORATION,
as Borrower

By: /s/ Arne Jahn
Name: Arne Jahn
Title: Treasurer & Chief Risk Officer

KFW IPEX-BANK GMBH,
as Facility Agent and ECA Agent

By: /s/ Stefan Eitel
Name: Stefan Eitel
Title: Director

By: /s/ Cihan Yilmaz

Name: Cihan Yilmaz

Title: Assistant Vice President

KfW IPEX-BANK GMBH,

as Mandated Lead Arranger and ECA Structuring Bank

By: /s/ Stefan Eitel

Name: Stefan Eitel

Title: Director

By: /s/ Cihan Yilmaz

Name: Cihan Yilmaz

Title: Assistant Vice President

SCHEDULE 8.1(n)

ENVIRONMENTAL MATTERS

- *Penn Environment, Clean Air Council, ACHD v. United States Steel Corporation* – Clean Air Act Citizens Suit filed in the Western District of Pennsylvania, Federal Court, in April 2019 against the Edgar Thomson Plant, the Irvin Plant and the Clairton Plant for alleged air permit violations at each of the three plants.

**SCHEDULE A
COMMITMENTS**

Covered Loan Lender Commitment

Initial Lender	Commitment (\$)	Address for Notices
KfW IPEX-BANK GMBH	Up to \$250,000,000 for the purpose of financing (a) 85% of the Eligible Project Costs, and (b) 100% of the OeKB Guarantee Premium	KfW IPEX-BANK GMBH Palmengartenstrasse 5-9 60325 Frankfurt am Main Germany Attention: Peter Sebastian Schröder Contract Management – Metals & Mining (X1a3) Email: Email: peter_sebastian.schroeder@kfw.de Telephone number: +49 69 7431 8858

Commercial Loan Lender Commitment

Initial Lender	Commitment (\$)	Address for Notices
KfW IPEX-BANK GMBH	Up to the Down Payment	KfW IPEX-BANK GMBH Palmengartenstrasse 5-9 60325 Frankfurt am Main Germany Attention: Peter Sebastian Schröder Contract Management – Metals & Mining (X1a3) Email: Email: peter_sebastian.schroeder@kfw.de Telephone number: +49 69 7431 8858

**SCHEDULE B
FORM OF TRANSFER CERTIFICATE**

(Delivered pursuant to Section 13.1(c) (*Assignment by Lenders*) of the Credit Agreement)

Date of this Transfer Certificate: _____

For

Transfer Date: _____

KfW IPEX-Bank GmbH
Palmengartenstrasse 5-9
60325 Frankfurt am Main
Germany
Attention: Peter Sebastian Schröder
Contract Management – Metals & Mining (X1a3)
Email: peter_sebastian.schroeder@kfw.de
Telephone number: +49 69 7431 8858

United States Steel Corporation, as Borrower
600 Grant Street, 61st Floor
Pittsburgh, Pennsylvania 15219
Attention: Treasurer & Chief Risk Officer
Facsimile No: (412) 433-1167

Copy to:

600 Grant Street, Room 1874
Pittsburgh, Pennsylvania 15219
Attention: Manager – Corporate Finance
Facsimile No: (412) 433-2222

Ladies and Gentlemen:

United States Steel Corporation – Credit Agreement

1. [Permitted Transferee] (the “**Transferee**”) delivers this Transfer Certificate to you pursuant to that certain Credit Agreement, dated as of December 10, 2019 (as amended, amended and restated, supplemented or otherwise modified from time to time, the “**Credit Agreement**”), by and among United States Steel Corporation as Borrower (the “**Borrower**”), KfW IPEX-Bank GmbH (“**KfW IPEX-Bank**”) as Mandated Lead Arranger and ECA Structuring Bank, KfW IPEX-Bank as Facility Agent and ECA Agent, and the Lenders party thereto from time to time. Capitalized terms used but not defined herein shall have the respective meanings ascribed thereto in, or incorporated by reference in, the Credit Agreement.

2. The Lender confirms that the Lender’s participation set forth on Schedule I (“**Schedule**”) hereto is an accurate summary of its participation in the Commitments and requests the Transferee to accept and procure the transfer to the Transferee of the Percentage Transferred (set forth in Schedule I) of the Lender’s participation specified in the Schedule hereto by counter-signing and delivering this Transfer Certificate to the Facility Agent, ECA Agent and the Borrower at their respective addresses for the service of notices specified in the Credit Agreement or as otherwise notified by them pursuant to the terms thereof.

3. The Transferee hereby requests, subject to Section 13.1 of the Credit Agreement (*Assignment by Lenders*), the Facility Agent, ECA Agent and the Borrower to accept this Transfer Certificate as being delivered to the Facility Agent, ECA Agent and the Borrower pursuant to and for the purposes of Section 13.1 of the Credit Agreement (*Assignment by Lenders*) so as to take effect in accordance with the terms thereof on the Transfer Date stated above or on such later date as may be determined in accordance with the terms thereof.

4. The Transferee confirms that it has received a copy of each of the Finance Documents together with such other information as it has required in connection with this transaction and that it has not relied and will not hereafter rely on the Lender to check or inquire on its behalf into the legality, validity, effectiveness, adequacy, accuracy or completeness of any such information and further agrees that it has not relied and will not rely on the Lender to assess or keep under review on its behalf the financial condition, creditworthiness, condition, affairs, status or nature of the Borrower or any other party to any of the Transaction Documents.

5. The Lender makes no representation or warranty and assumes no responsibility with respect to the legality, validity, effectiveness, adequacy, accuracy or enforceability of any of the Transaction Documents or any document relating thereto and assumes no responsibility for the financial condition of any party thereto or for the performance and observance by such party of any of its obligations under any of the Transaction Documents or any document relating thereto and any and all such conditions and warranties, whether express or implied by law or otherwise, are hereby excluded.

6. The Lender hereby gives notice that nothing herein or in the Finance Documents (or any document relating thereto) shall oblige it to (i) accept a re-transfer from the Transferee of the whole or any part of its rights, benefits and/or obligations under the Credit Agreement transferred pursuant hereto or (ii) support any losses directly or indirectly sustained or incurred by the Transferee for any reason whatsoever including, without limitation, the non-performance by the Borrower or any other party to any of the Transaction Documents (or any document relating thereto) of its obligations under any such document. The Transferee hereby acknowledges the absence of any such obligation as is referred to in clause (i) or (ii) above.

7. This Transfer Certificate shall be governed by the law of the State of New York of the United States of America and shall for all purposes be governed by and construed in accordance with the law of such state; *provided, however*, that to the extent any terms of this Transfer Certificate are incorporated in and made part of any other Finance Documents, any such term so incorporated shall for all purposes of such Finance Documents be governed by and construed in accordance with the law governing the Finance Documents into which such term is so incorporated.

[8. This Transfer Certificate becomes effective upon acceptance by the Borrower.]

IN WITNESS WHEREOF, the undersigned have executed this Transfer Certificate as of the respective dates set forth below.

KfW IPEX-Bank GmbH,
as Facility Agent and ECA Agent

By__
Name:
Title:
Date:

[Existing Lender]

By__
Name:
Title:
Date:

[Accepted and Agreed:

United States Steel Corporation,
as the Borrower

By__
Name:
Title:
Date:]

**SCHEDULE C-1
COVERED LOAN UTILIZATION REQUESTS**

**PART I
FORM OF COVERED LOAN UTILIZATION REQUEST
– DISBURSEMENT NO. [•] –**

From: [Primetals], as Exporter
To: KfW IPEX-Bank GmbH, as Facility Agent and ECA Agent
Cc: United States Steel Corporation, as Borrower
Dated:
Ladies and Gentlemen:

1. We refer to the Credit Agreement dated as of December 10, 2019 (as amended, supplemented or otherwise modified from time to time, the “Credit Agreement”) by and among United States Steel Corporation as Borrower (the “Borrower”), KfW IPEX-Bank GmbH (“KfW IPEX-Bank”) as Mandated Lead Arranger and ECA Structuring Bank, KfW IPEX-Bank as Facility Agent and ECA Agent, and the Lenders party thereto from time to time. This is a Covered Loan Utilization Request for a disbursement to the Exporter under the terms to the Credit Agreement and relates to “payment step” no [•] as described under Schedule G (“*Payment Steps*”) of the Credit Agreement. All capitalized terms used, but not otherwise defined, herein have the meanings ascribed to such terms in the Credit Agreement.
2. In connection with the Project Equipment Supply Agreement, an Eligible Project Cost Loan shall be borrowed on the following terms:

Proposed Utilization Date: [•] which is a Business Day within the Covered Loan Commitment Period

Amount: \$[_____]

We confirm that the Amount is due and payable, [and latest due date is as per attached Exporter’s Certificate(s) – Disbursement].

3. We refer to the attached Exporter’s Certificate and Supporting Documentation and certify that the information specified therein is true and accurate and has not been amended or superseded as of the date of this Covered Loan Utilization Request.

4. This Eligible Project Cost Loan is to be made in respect of amounts due and payable under the Project Equipment Supply Agreement for [Eligible Goods and Services]/[Eligible Local Costs] in connection with invoice no [•] which is attached as part of the Supporting Documentation hereto.
5. The proceeds of this Eligible Project Cost Loan should be credited to the Exporter's account with the following details:
 Account Number:
 Account Holder:
 Bank name:
 ABA:
 Reference:
6. We confirm that all documents supplied by us with respect to this Covered Loan Utilization Request are true copies and you may rely on the accuracy and completeness of all information and documents provided regarding this Covered Loan Utilization Request.
7. This Covered Loan Utilization Request is irrevocable.
8. THIS COVERED LOAN UTILIZATION REQUEST, THE RELATIONSHIP BETWEEN THE FINANCE PARTIES HERETO AND ANY CLAIM OR DISPUTE (WHETHER SOUNDING IN CONTRACT, TORT OR OTHERWISE) RELATING TO THIS COVERED LOAN UTILIZATION REQUEST OR SUCH OTHER FINANCE DOCUMENT OR SUCH RELATIONSHIP SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK.

Yours faithfully

.....
 (Primetals Technologies Austria GmbH)

.....
 (Primetals Technologies USA LLC)

In each case an Authorized Signatory for and on behalf of the Exporter

[Primetals]

PART II

FORM OF COVERED LOAN UTILIZATION REQUEST

– REIMBURSEMENT NO. [•] –

From: United States Steel Corporation, as Borrower

To: KfW IPEX-Bank, as Facility Agent and ECA Agent

Dated:

Ladies and Gentlemen:

1. We refer to the Credit Agreement dated as of December 10, 2019 (as amended, supplemented or otherwise modified from time to time, the "Credit Agreement") by and among United States Steel Corporation as Borrower (the "Borrower"), KfW IPEX-Bank GmbH ("KfW IPEX-Bank") as Mandated Lead Arranger and ECA Structuring Bank, KfW IPEX-Bank as Facility Agent and ECA Agent, and the Lenders party thereto from time to time. This is a Covered Loan Utilization Request for a reimbursement to the Borrower under the terms to the Credit Agreement. All capitalized terms used, but not otherwise defined herein, have the meanings ascribed to such terms in the Credit Agreement.
2. We wish to borrow an Eligible Project Cost Loan on the following terms:

Proposed Utilization Date: _____ [•] which is a Business Day within the Covered
 Loan Commitment Period

Amount: \$[_____]

3. We refer to the attached Exporter's Certificate and Supporting Documentation and certify that, to our knowledge, the information specified therein is true and accurate and has not been amended or superseded at the date of this Covered Loan Utilization Request.
4. This Covered Loan Utilization Request is to be made for the purposes of reimbursing amounts paid under the Project Equipment Supply Agreement in relation to [Eligible Goods and Services]/[Eligible Local Costs] by the Borrower.
5. The proceeds of this Eligible Project Cost Loan should be credited to the Borrower account detailed under Section 16.2(a) (*Distributions by the Agents*) of the Credit Agreement.
6. We confirm each of the following:
 - (a) the proceeds of the proposed Utilization will be used only for the purpose set forth in Section 2.3(a) (*Purpose and Use of Proceeds*) of the Credit Agreement;

- (b) the currency and amount of the proposed Utilization comply with Section 3.3 (*Currency and Amount*) of the Credit Agreement;
 - (c) the Interest Period of the proposed Utilization complies with Article 5 (*Interest, Interest Period, and Fees*) of the Credit Agreement;
 - (d) each of the conditions specified in Section 3.1 (*Delivery of a Utilization Request*), Section 3.2 (*Completion of a Utilization Request*) and Section 11.2 (*Additional Conditions Precedent to Covered Loans*) of the Credit Agreement are satisfied on the date of this Covered Loan Utilization Request and shall be satisfied immediately after the Covered Loan is made on the Utilization Date or, if not so satisfied on either date, has in each case been waived by the Facility Agent in accordance with the Credit Agreement;
 - (e) the representations and warranties of the Borrower set forth in Article 8 (*Representations and Warranties*) of the Credit Agreement are true and correct in all material respects (or, if qualified by “materiality,” “Material Adverse Effect” or similar language, in all respects after giving effect to such qualification) as of such date (after giving effect to the Utilization requested hereunder); provided, that, to the extent that such representations or warranties specifically refer to an earlier date, they shall be true and correct in all material respects (or, if qualified by “materiality,” “Material Adverse Effect” or similar language, in all respects after giving effect to such qualification) as of such earlier date;
 - (f) no Default or Event of Default has occurred and is continuing or would result after giving effect to the Utilization requested hereunder;
 - (g) since September 30, 2019, no event, circumstance or condition has occurred and is continuing that has had or would reasonably be expected to have a Material Adverse Effect; and
 - (h) we have no actual knowledge that any ECA Mandatory Prepayment Event has occurred and is continuing.
7. This Covered Loan Utilization Request is irrevocable.
8. THIS COVERED LOAN UTILIZATION REQUEST, THE RELATIONSHIP BETWEEN THE FINANCE PARTIES HERETO AND ANY CLAIM OR DISPUTE (WHETHER SOUNDING IN CONTRACT, TORT OR OTHERWISE) RELATING TO THIS COVERED LOAN UTILIZATION REQUEST OR SUCH OTHER FINANCE DOCUMENT OR SUCH RELATIONSHIP SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK.
9. The undersigned is an Authorized Officer of the Borrower.
10. The above certifications are effective as of the date of this Covered Loan Utilization Request and shall continue to be effective as of the date of the Utilization being requested. If any of these certifications is no longer valid as of or prior to the date of the requested Utilization, we undertake to immediately notify the Facility Agent.

Yours faithfully

.....
 Borrower Authorized Signatory for and on behalf of the Borrower
United States Steel Corporation

PART III
FORM OF COVERED LOAN UTILIZATION REQUEST
– PREMIUM LOAN –

From: United States Steel Corporation, as Borrower
 To: KfW IPEX-Bank, as Facility Agent and ECA Agent
 Dated:

Ladies and Gentlemen:

1. We refer to the Credit Agreement dated as of December 10, 2019 (as amended, supplemented or otherwise modified from time to time, the “Credit Agreement”) by and among United States Steel Corporation as Borrower (the “Borrower”), KfW IPEX-Bank GmbH (“KfW IPEX-Bank”) as Mandated Lead Arranger and ECA Structuring Bank, KfW IPEX-Bank as Facility Agent and ECA Agent, and the Lenders party thereto from time to time. This is a Covered Loan Utilization Request for a Premium Loan under the terms to the Credit Agreement. All capitalized terms used, but not otherwise defined herein, have the meanings ascribed to such terms in the Credit Agreement.
2. We wish to borrow a Premium Loan on the following terms:

Proposed Utilization Date: _____ [•] which is a Business Day within the Covered
 Loan Commitment Period

Amount: \$[_____]

3. The proceeds of this Premium Loan should be disbursed directly to the OeKB Guarantor.
4. We confirm each of the following:
 - (a) the proceeds of the proposed Utilization are required for the purpose set out in Section 2.3(a) (*Purpose and Use of Proceeds*) of the Credit

Agreement;

- (b) the currency and amount of the proposed Utilization comply with Section 3.3 (*Currency and Amount*) of the Credit Agreement;
- (c) the Interest Period of the proposed Utilization complies with Article 5 (*Interest, Interest Period, and Fees*) of the Credit Agreement;
- (d) each of the conditions specified in Section 3.1 (*Delivery of a Utilization Request*), Section 3.2 (*Completion of a Utilization Request*) and Section 11.2 (*Additional Conditions Precedent to Covered Loans*) of the Credit Agreement are satisfied on the date of this Covered Loan Utilization Request and shall be satisfied immediately after the Covered Loan is made on the Utilization Date or, if not so satisfied on either date, has in each case been waived by the Facility Agent in accordance with the Credit Agreement;
- (e) the representations and warranties of the Borrower set forth in Article 8 (Representations and Warranties) of the Credit Agreement are true and correct in all material respects (or, if qualified by “materiality,” “Material Adverse Effect” or similar language, in all respects after giving effect to such qualification) as of such date (after giving effect to the Utilization requested hereunder); provided, that, to the extent that such representations or warranties specifically refer to an earlier date, they shall be true and correct in all material respects (or, if qualified by “materiality,” “Material Adverse Effect” or similar language, in all respects after giving effect to such qualification) as of such earlier date;
- (f) no Default or Event of Default has occurred and is continuing or would result after giving effect to the Utilization requested hereunder;
- (g) since September 30, 2019, no event, circumstance or condition has occurred and is continuing that has had or would reasonably be expected to have a Material Adverse Effect; and
- (h) we have no actual knowledge that any ECA Mandatory Prepayment Event has occurred and is continuing.

5. This Covered Loan Utilization Request is irrevocable.

6. THIS COVERED LOAN UTILIZATION REQUEST, THE RELATIONSHIP BETWEEN THE FINANCE PARTIES HERETO AND ANY CLAIM OR DISPUTE (WHETHER SOUNDING IN CONTRACT, TORT OR OTHERWISE) RELATING TO THIS COVERED LOAN UTILIZATION REQUEST OR SUCH OTHER FINANCE DOCUMENT OR SUCH RELATIONSHIP SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK.

7. The undersigned is an Authorized Officer of the Borrower.

8. The above certifications are effective as of the date of this Covered Loan Utilization Request and shall continue to be effective as of the date of the Utilization being requested. If any of these certifications is no longer valid as of or prior to the date of the requested Utilization, we undertake to immediately notify the Facility Agent.

Yours faithfully

.....

Authorized Signatory for and on behalf of the Borrower
United States Steel Corporation

**SCHEDULE C-2
FORM OF COMMERCIAL LOAN UTILIZATION REQUEST**

From: United States Steel Corporation, as Borrower

To: KfW IPEX-Bank, as Facility Agent and ECA Agent

Dated: []

Ladies and Gentlemen:

1. We refer to the Credit Agreement dated as of December 10, 2019 (as amended, supplemented or otherwise modified from time to time, the “Credit Agreement”) by and among United States Steel Corporation as Borrower (the “Borrower”), KfW IPEX-Bank GmbH (“KfW IPEX-Bank”) as Mandated Lead Arranger and ECA Structuring Bank, KfW IPEX-Bank as Facility Agent and ECA Agent, and the Lenders party thereto from time to time. This is a Commercial Loan Utilization Request for a Commercial Loan under the terms to the Agreement. Terms defined in the Agreement have the same meaning in this Commercial Loan Utilization Request unless given a different meaning in this Commercial Loan Utilization Request.

2. We wish to borrow a Commercial Loan on the following terms:

Proposed Utilization Date: [•] which is a Business Day within the Commercial Loan Commitment Period

Amount: \$[] or, if less, the available Commercial Loan Commitment

3. The proceeds of this Commercial Loan should be disbursed directly to the Borrower.
4. We confirm each of the following:
 - (a) the proceeds of the proposed Utilization are required for the purpose set out in Section 2.3(b) of the Credit Agreement (*Purpose and Use of Proceeds*);
 - (b) the currency and amount of the proposed Utilization comply with Section 3.3 of the Credit Agreement (*Currency and Amount*); and
 - (c) the Interest Period of the proposed Utilization complies with Article 5 (*Interest, Interest Period, and Fees*) of the Credit Agreement.
 - (d) each of the conditions specified in Section 3.1 of the Credit Agreement (*Delivery of a Utilization Request*), Section 3.2 of the Credit Agreement (*Completion of a Utilization Request*) and Section 11.3 of the Credit Agreement (*Additional Conditions Precedent to Commercial Loans*) are satisfied on the date of this Commercial Loan Utilization Request and shall be satisfied immediately after the Commercial Loan is made on the Utilization Date or, if not so satisfied on either date, has in each case been waived by the Facility Agent in accordance with the Credit Agreement;
 - (e) the representations and warranties of the Borrower set forth in Article 8 of the Credit Agreement (*Representations and Warranties*) are true and correct in all material respects (or, if qualified by “materiality,” “Material Adverse Effect” or similar language, in all respects after giving effect to such qualification) as of such date (after giving effect to the Utilization requested hereunder); *provided*, that, to the extent that such representations or warranties specifically refer to an earlier date, they shall be true and correct in all material respects (or, if qualified by “materiality,” “Material Adverse Effect” or similar language, in all respects after giving effect to such qualification) as of such earlier date;
 - (f) no Default or Event of Default has occurred and is continuing or would result after giving effect to the Utilization requested hereunder; and
 - (g) since September 30, 2019, no event, circumstance or condition has occurred and is continuing that has had or would reasonably be expected to have a Material Adverse Effect.
5. This Commercial Loan Utilization Request is irrevocable.
6. THIS COMMERCIAL LOAN UTILIZATION REQUEST, THE RELATIONSHIP BETWEEN THE FINANCE PARTIES HERETO AND ANY CLAIM OR DISPUTE (WHETHER SOUNDING IN CONTRACT, TORT OR OTHERWISE) RELATING TO THIS COMMERCIAL LOAN UTILIZATION REQUEST OR SUCH OTHER FINANCE DOCUMENT OR SUCH RELATIONSHIP SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK.
7. The undersigned is a Person duly authorized to execute this Utilization Request on behalf of the Borrower as evidenced by the Officer’s Certificate attached hereto.
8. The proceeds of this Commercial Loan should be disbursed to the following account.
 - Beneficiary Name:
 - Beneficiary Address:
 - Bank Name:
 - Bank Address:
 - Account Number:
 - Swift Code:
9. The above certifications are effective as of the date of this Commercial Loan Utilization Request and shall continue to be effective as of the date of the Utilization being requested. If any of these certifications is no longer valid as of or prior to the date of the requested Utilization, we undertake to immediately notify the Facility Agent.

Yours faithfully

.....
 Authorized Signatory for and on behalf of the Borrower
**UNITED STATES STEEL CORPORATION SCHEDULE D
 FORMS OF EXPORTER’S CERTIFICATE**

Part I: Form of Exporter’s Certificate - Disbursement

From: [Primetals], as Exporter
 To: KfW IPEX-Bank GmbH, as Facility Agent and ECA Agent
 Copy to: United States Steel Corporation, as Borrower
 Dated:
 Dear Sirs

1. We refer to the Credit Agreement dated as of December 10, 2019 (the “Credit Agreement”) by and among United States Steel Corporation as Borrower

(the “Borrower”), KfW IPEX-Bank GmbH (“KfW IPEX-Bank”) as Mandated Lead Arranger and ECA Structuring Bank, KfW IPEX-Bank as Facility Agent and ECA Agent, and the Lenders party thereto from time to time. All capitalized terms used, but not otherwise defined herein, have the meanings ascribed to such terms in the Credit Agreement. This is the Exporter’s Certificate issued in respect of Covered Loan Utilization Request – Disbursement No. [•].

2. We confirm that:

(a) the copy/ies of the commercial invoice(s) attached to the Request [was/were] issued by us in respect of the following goods and services:

Item	Description	Amount	Signature	Date of Certificate	[Latest Due Date]
------	-------------	--------	-----------	---------------------	-------------------

The total amount due equals to USD [•] (the “Utilization Amount”).

(b) The Utilization Amount remains due and payable but unpaid to us. The Utilization Amount should be paid to the Exporter’s account as described under the Covered Loan Utilization Request – Disbursement No. [•].

(c) We attach the following Supporting Documentation: [].

3. We confirm that:

(a) the Utilization Amount does not include any sums which have been the subject of any other Exporter’s Certificate;

(b) the Project Equipment Supply Agreement is in full force and effect;

(c) all relevant authorizations necessary for the export and import of the goods and services described above have been obtained and are in full force and effect;

(d) we have received the Down Payment from the Borrower which amount to in aggregate at least USD [•];

(e) the Eligible Goods and Services have been supplied in accordance with the Project Equipment Supply Agreement and are consistent with the description given by us in our application to the OeKB Guarantor in relation to the Project Equipment Supply Agreement and the OeKB Guarantee; and

(f) we are not aware of any notification of the OeKB Guarantor requesting that further advances/deliveries/services be suspended or terminated under the Credit Agreement and/or the Project Equipment Supply Agreement (unless such notice has been withdrawn by the OeKB Guarantor).

4. THIS CERTIFICATE, AND ANY NON-CONTRACTUAL OBLIGATIONS ARISING OUT OF OR IN CONNECTION WITH IT, SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK.

Yours faithfully

.....
(Primetals Technologies Austria GmbH)

.....
(Primetals Technologies USA LLC)

In each case an Authorized Signatory for and on behalf of the Exporter
[Primetals]

Part II: Form of Exporter’s Certificate - Reimbursement

From: [Primetals], as Exporter

To: KfW IPEX-Bank GmbH, as Facility Agent and ECA Agent

Copy to: United States Steel Corporation, as Borrower

Dated:

Dear Sirs

1. We refer to the Credit Agreement dated as of December 10, 2019 (the “Credit Agreement”) by and among United States Steel Corporation as Borrower (the “Borrower”), KfW IPEX-Bank GmbH (“KfW IPEX-Bank”) as Mandated Lead Arranger and ECA Structuring Bank, KfW IPEX-Bank as Facility Agent and ECA Agent, and the Lenders party thereto from time to time. All capitalized terms used, but not otherwise defined herein, have the meanings ascribed to such terms in the Credit Agreement. This is the Exporter’s Certificate issued in respect of Covered Loan Utilization Request – Reimbursement No. [•].

2. We represent and warrant that:

- (a) we have received payments in an aggregate amount of USD [•] paid between [date] and [date] from the Borrower in accordance with the Project Equipment Supply Agreement and which relate to “payment step” no [•] as described under Schedule G (“*Payment Steps*”) of the Credit Agreement (the “*Relevant Payment(s)*”) in relation to Eligible Project Costs under the Project Equipment Supply Agreement as evidenced by the attached true copy of an account statement of the Exporter;
 - (b) we have received the Down Payment from the Borrower for Eligible Project Costs under the Project Equipment Supply Agreement which amount to in aggregate at least USD [•] as evidenced by the attached true copy/ies of [an] account statement(s) of the Exporter;
 - (c) the Relevant Payment(s) do not include any payment in respect of which we have already provided an Exporter’s Certificate or in respect of which we have provided a Covered Loan Utilization Request;
 - (d) the Eligible Project Costs have been supplied in accordance with the Project Equipment Supply Agreement and are consistent with the description given by us in our application to the OeKB Guarantor in relation to the Project Equipment Supply Agreement and the OeKB Guarantee;
 - (e) the Project Equipment Supply Agreement is in full force and effect;
 - (f) all authorizations (including any consents, licences, export licences, permits, clearances any other relevant authorizations) required in respect of the Eligible Project Costs to be supplied and/or rendered in accordance with the Project Equipment Supply Agreement have been obtained and remain in full force and effect; and
 - (g) we are not aware of any notification of the OeKB Guarantor requesting that further advances/deliveries/services be suspended or terminated under the Credit Agreement and/or the Project Equipment Supply Agreement (unless such notice has been withdrawn by the OeKB Guarantor).
3. We confirm that all documents supplied by us with respect to the relevant Covered Loan Utilization Request are true copies and you may rely on the accuracy and completeness of all information and documents provided regarding this Covered Loan Utilization Request.
 4. THIS CERTIFICATE, AND ANY NON-CONTRACTUAL OBLIGATIONS ARISING OUT OF OR IN CONNECTION WITH IT, SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK.

Yours faithfully

.....
(Primetals Technologies USA LLC)

.....
(Primetals Technologies Austria GmbH)

In each case an Authorized Signatory for and on behalf of the Exporter
[Primetals]

Part III: Form of Completion Certificate concerning the Project Equipment Supply Agreement (this “Completion Certificate”)

From: United States Steel Corporation, as Borrower

Primetals, as Exporter

To: KfW IPEX-Bank, as Facility Agent and ECA Agent

Dated:

Dear Sirs

We refer to the:

1. Credit Agreement dated as of December 10, 2019 (the “*Credit Agreement*”) by and among United States Steel Corporation as Borrower (the “Borrower”), KfW IPEX-Bank GmbH (“KfW IPEX-Bank”) as Mandated Lead Arranger and ECA Structuring Bank, KfW IPEX-Bank as Facility Agent and ECA Agent, and the Lenders party thereto from time to time
2. Project Equipment Supply Agreement (as defined in the Credit Agreement)
3. Commercial Invoice No. [•] dated [•] and issued by [Primetals Technologies Austria GmbH][Primetals Technologies USA LLC] in relation to the Covered Loan Utilization Request with disbursement no. [•] (hereafter “*Exporter’s Invoice*”)
4. Supporting Documentation

We certify that, subject to all terms, rights, conditions and obligations of the Parties under the Project Equipment Supply Agreement, all work related to the Project

Equipment Supply Agreement as described under the corresponding Exporter's Invoice has been [completed]/[delivered] by the Exporter and approved by the Borrower under and pursuant to the Project Equipment Supply Agreement.

- 5. The undersigned is an Authorized Officer of the Borrower.
 - 6. The Borrower hereby also confirms that on the date of this Completion Certificate, Section 11.2(a) of the Agreement remains correct in all respects.
- Terms defined in the Agreement shall have the same meaning in this Completion Certificate unless given a different meaning in this Completion Certificate.

Yours faithfully

For United States Steel Corporation

For Primetals Technologies USA LLC

.....

.....

Authorized Signatory

Authorized Signatory

Schedule 1

**SCHEDULE E
APPLICABLE MARGIN**

Covered Loan: 0.95% *per annum*

Commercial Loan: 3.80% *per annum*

**SCHEDULE F
COMPLIANCE CERTIFICATE**

To: KfW IPEX-Bank GmbH
Palmengartenstrasse 5-9
60325 Frankfurt am Main
Germany
Attention: Peter Sebastian Schröder
Contract Management – Metals & Mining (X1a3)
Email: peter_sebastian.schroeder@kfw.de
Telephone number: +49 69 7431 8858

From: United States Steel Corporation
600 Grant Street, 61st Floor
Pittsburgh, Pennsylvania 15219
Attention: Treasurer & Chief Risk Officer

Copy to:

600 Grant Street, Room 1874
Pittsburgh, Pennsylvania 15219
Attention: Manager – Corporate Finance

Date: []

Re: Credit Agreement, dated as of December 10, 2019, by and among United States Steel Corporation (the “**Borrower**”), KfW IPEX-Bank GmbH (“**KfW IPEX-Bank**”) as Mandated Lead Arranger and ECA Structuring Bank, KfW IPEX-Bank as Facility Agent and ECA Agent, and the Lenders party thereto from time to time (as amended, amended and restated, supplemented or otherwise modified from time to time, the “**Credit Agreement**”).

The undersigned hereby certifies as of the date hereof that [he/she] is an Authorized Officer of the Borrower as evidenced by an up-to-date Officer’s Certificate, and that, as such, [he/she] is authorized by to execute and deliver this Compliance Certificate to the Facility Agent on the behalf of the Borrower, and hereby further certifies without personal liability on behalf of the Borrower, as follows:

- 1. This Compliance Certificate is furnished pursuant to Section 10.3 of the Credit Agreement (*Compliance Certificate; Notice of Default*). Unless otherwise defined in this Compliance Certificate, terms defined in the Credit Agreement are used in this Compliance Certificate with the same meanings given to them in the Credit Agreement, and the rules of construction of the Credit Agreement apply to this Compliance Certificate.
- 2. The undersigned has read and is familiar with the Credit Agreement including, in particular, the definitions of the various financial terms used in the Credit Agreement, the covenants and Events of Default contained in the Credit Agreement.
- 3. The undersigned has made, or has caused to be made under his/her supervision, such examinations or investigations as are, in the undersigned’s

opinion, necessary to furnish this Compliance Certificate, and the undersigned has furnished this Compliance Certificate with the intent that it may be relied upon by the Lenders as a basis for determining compliance by the Borrower with the covenants and obligations under the Credit Agreement as of the date of this Compliance Certificate.

4. This Compliance Certificate is delivered for the Fiscal Year ended [] and attached hereto as Schedule I are the Borrower's audited annual consolidated financial statements for such Fiscal Year.
5. No Default or Event of Default has occurred and is continuing on the date of this Compliance Certificate.

[Signature page follows]

IN WITNESS WHEREOF, the undersigned has executed this Certificate as of, _____ .

UNITED STATES STEEL CORPORATION as Borrower

By: _____
 Name:
 Title:

SCHEDULE G PAYMENT STEPS

Mon Valley Works Project – Payment Steps

Total Mon Valley Works Project Order Volume as per PESA	\$250,300,953.02
Eligible Project Cost Loan related to Mon Valley Project (85%)	\$212,755,810.07
Down Payment (15%)	\$ 37,545,142.95

#	Description	Payment as per Project Equipment Supply Agreement		Eligible Project Cost Loan (85%)		Supporting Documentation (copies)
		In %	In USD	In % ***	In USD	

1	Already invoiced and partly paid PO#20820016**	100%*	\$12,725,215.92	0%	\$0	100% Invoiced and paid
2	Already invoiced and paid PO#20914233**	10%	\$23,757,573.71	0%	\$0	100% Invoiced and paid
3	Already invoiced PO#20914233** for Order Placement of Material for Fabrication	4%	\$9,923,630.00	4%	\$8,861,276.68	100% Invoiced and paid Partial reimbursement (for the amount exceeding 15% Down payment)
4	Already invoiced PO#20914233** for Order Placement of Material for Fabrication	4%	\$9,441,244.00	4%	\$9,441,244.00	100% Invoiced and due by January 3, 2020 Upon receipt by Exporter, reimbursement in full value
5	Already invoiced PO#20914233** for Order Placement of Material for Fabrication	3%	\$7,114,330.00	3%	\$7,114,330.00	100% Invoiced and due by January 31, 2020 Upon receipt by Exporter, reimbursement in full value
6	(Remaining) Order Placement of Material for Fabrication	9%	\$21,035,943.42	10%	\$21,035,943.42	• Exporter's commercial invoice(s) • Orders placed with sub-suppliers (redacted for commercially sensitive information) • Completion Certificate signed by Borrower and Exporter
7	Delivery of Goods	45%	\$106,909,081.70	50%	\$106,909,081.70	• Exporter's commercial invoice(s) • Transport document (e.g. Bill of Lading, Airway Bill, etc.) • Completion Certificate signed by Borrower and Exporter
8	Completion of Cold Commissioning (First Coil)	10%	\$23,757,573.71	11%	\$23,757,573.71	• Exporter's commercial invoice(s) • Provisional Acceptance Certificate signed by Borrower and Exporter or Deemed Provisional Acceptance Certificate issued by Exporter
9	Receipt of Maintenance Manuals and as-built Drawings	5%	\$11,878,786.66	6%	\$11,878,786.66	• Exporter's commercial invoice(s) • Primetals Secure File Exchange – Download Notification or if no download within 30 days Primetals File Exchange – Initial Report showing issue date
10	For Final Acceptance	10%	\$23,757,573.71	11%	\$23,757,573.71	• Exporter's commercial invoice(s) • Acceptance Certificate signed by Borrower and Exporter or Deemed Acceptance Certificate issued by Exporter
	Total	100%	\$250,300,953.02	100%	\$212,755,810.07	

* Of PO#20820016

** (partly) relating to Down Payment (15%)

*** of Eligible Project Cost Loan for the Mon Valley Works Project (85%)

SCHEDULE 2

EXHIBIT A-1

**FORM OF
U.S. TAX COMPLIANCE CERTIFICATE
(For Foreign Lender Parties That Are Not Partnerships For U.S. Federal Income Tax Purposes)**

U.S. TAX COMPLIANCE CERTIFICATE DATE: 20_

Reference is hereby made to the Credit Agreement dated as of December 10, 2019 (as amended, supplemented or otherwise modified from time to time, the "Credit Agreement") by and among United States Steel Corporation as Borrower (the "Borrower"), KfW IPEX-Bank GmbH ("KfW IPEX-Bank") as Mandated Lead Arranger and ECA Structuring Bank, KfW IPEX-Bank as Facility Agent and ECA Agent, and the Lenders party thereto from time to time.

Pursuant to the provisions of Article 6 of the Credit Agreement, the undersigned hereby certifies that (a) it is the sole record and beneficial owner of the Loan(s) (as well as any Note(s) evidencing such Loan(s)) in respect of which it is providing this certificate, (b) it is not a bank within the meaning of Section 881(c)(3)(A) of the Code, (c) it is not a ten-percent shareholder of the Borrower within the meaning of Section 871(h)(3)(B) of the Code and (d) it is not a controlled foreign corporation related to the Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished the Facility Agent and the Borrower with a certificate of its non-U.S. Person status on IRS Form W-8BEN or IRS Form W-8BEN-E. By executing this certificate, the undersigned agrees that (i) if the information provided on this certificate changes, the undersigned shall promptly so inform the Borrower and the Facility Agent, and (ii) the undersigned shall have at all times furnished the Borrower and the Facility Agent with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments. For the avoidance of doubt, any reference herein to any IRS Form shall be deemed to include any applicable successor form.

In witness whereof, the undersigned has duly executed and delivered this U.S. Tax Compliance Certificate as of the date first above written.

[NAME OF LENDER]

By: _____

Name:

Title:

EXHIBIT A-2

**FORM OF
U.S. TAX COMPLIANCE CERTIFICATE
(For Foreign Participants That Are Not Partnerships
For U.S. Federal Income Tax Purposes)**

U.S. TAX COMPLIANCE CERTIFICATE DATE:, 20_

Reference is hereby made to the Credit Agreement dated as of December 10, 2019 (as amended, supplemented or otherwise modified from time to time, the "Credit Agreement") by and among United States Steel Corporation as Borrower (the "Borrower"), KfW IPEX-Bank GmbH ("KfW IPEX-Bank") as Mandated Lead Arranger and ECA Structuring Bank, KfW IPEX-Bank as Facility Agent and ECA Agent, and the Lenders party thereto from time to time.

Pursuant to the provisions of Article 6 of the Credit Agreement, the undersigned hereby certifies that (a) it is the sole record and beneficial owner of the participation in respect of which it is providing this certificate, (b) it is not a bank within the meaning of Section 881(c)(3)(A) of the Code, (c) it is not a ten-percent shareholder of the Borrower within the meaning of Section 871(h)(3)(B) of the Code, and (d) it is not a controlled foreign corporation related to the Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished its participating Lender with a certificate of its non-U.S. Person status on IRS Form W-8BEN or IRS Form W-8BEN-E. By executing this certificate, the undersigned agrees that (i) if the information provided on this certificate changes, the undersigned shall promptly so inform such Lender in writing, and (ii) the undersigned shall have at all times furnished such Lender with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments. For the avoidance of doubt, any reference herein to any IRS Form shall be deemed to include any applicable successor form.

In witness whereof, the undersigned has duly executed and delivered this U.S. Tax Compliance Certificate as of the date first above written.

[NAME OF PARTICIPANT]

By: _____

Name:

Title:

EXHIBIT A-3

**FORM OF
U.S. TAX COMPLIANCE CERTIFICATE (For Foreign Participants That Are Partnerships
For U.S. Federal Income Tax Purposes)**

U.S. TAX COMPLIANCE CERTIFICATE DATE:, 20_

Reference is hereby made to the Credit Agreement dated as of December 10, 2019 (as amended, supplemented or otherwise modified from time to time, the "Credit Agreement") by and among United States Steel Corporation as Borrower (the "Borrower"), KfW IPEX-Bank GmbH ("KfW IPEX-Bank") as Mandated Lead Arranger and ECA Structuring Bank, KfW IPEX-Bank as Facility Agent and ECA Agent, and the Lenders party thereto from time to time.

Pursuant to the provisions of Article 6 of the Credit Agreement, the undersigned hereby certifies that (a) it is the sole record owner of the participation in respect of which it is providing this certificate, (b) its direct or indirect partners/members are the sole beneficial owners of such participation, (c) with respect to such participation, neither the undersigned nor any of its direct or indirect partners/members is a bank extending credit pursuant to a loan agreement entered into in the ordinary course of its trade or business within the meaning of Section 881(c)(3)(A) of the Code,

(d) none of its direct or indirect partners or members is a ten- percent shareholder of the Borrower within the meaning of Section 871(h)(3)(B) of the Code and (e) none of its direct or indirect partners or members is a controlled foreign corporation related to the Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished its participating Lender with IRS Form W-8IMY accompanied by one of the following forms from each of its partners or members that is claiming the portfolio interest exemption: (i) an IRS Form W-8BEN or IRS Form W-8BEN-E or (ii) an IRS Form W-8IMY accompanied by an IRS Form W-8BEN or IRS Form W-8BEN-E from each of such partner's or member's beneficial owners that is claiming the portfolio interest exemption. By executing this certificate, the undersigned agrees that (A) if the information provided on this certificate changes, the undersigned shall promptly so inform such Lender and (B) the undersigned shall have at all times furnished

such Lender with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments. For the avoidance of doubt, any reference herein to any IRS Form shall be deemed to include any applicable successor form.

In witness whereof, the undersigned has duly executed and delivered this U.S. Tax Compliance Certificate as of the date first above written.

[NAME OF PARTICIPANT]

By: _____

Name:

Title:

EXHIBIT A-4

**FORM OF
U.S. TAX COMPLIANCE CERTIFICATE (For Foreign Lender Parties That Are Partnerships
For U.S. Federal Income Tax Purposes)**

U.S. TAX COMPLIANCE CERTIFICATE DATE: 20__

Reference is hereby made to the Credit Agreement dated as of December 10, 2019 (as amended, supplemented or otherwise modified from time to time, the "Credit Agreement") by and among United States Steel Corporation as Borrower (the "Borrower"), KfW IPEX-Bank GmbH ("KfW IPEX-Bank") as Mandated Lead Arranger and ECA Structuring Bank, KfW IPEX-Bank as Facility Agent and ECA Agent, and the Lenders party thereto from time to time.

Pursuant to the provisions of Article 6 of the Credit Agreement, the undersigned hereby certifies that (a) it is the sole record owner of the Loan(s) (as well as any Note(s) evidencing such Loan (s)) in respect of which it is providing this certificate, (b) its direct or indirect partners or members are the sole beneficial owners of such Loan(s) (as well as any Note(s) evidencing such Loan(s)), (c) with respect to the extension of credit pursuant to this Credit Agreement or any other Loan Document, neither the undersigned nor any of its direct or indirect partners or members is a bank extending credit pursuant to a loan agreement entered into in the ordinary course of its trade or business within the meaning of Section 881(c)(3)(A) of the Code, (d) none of its direct or indirect partners or members is a ten-percent shareholder of the Borrower within the meaning of Section 871(h)(3)(B) of the Code and (e) none of its direct or indirect partners or members is a controlled foreign corporation related to the Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished the Facility Agent and the Borrower with IRS Form W-8IMY accompanied by one of the following forms from each of its partners or members that is claiming the portfolio interest exemption: (i) an IRS Form W-8BEN or IRS Form W- 8BEN-E or

(ii) an IRS Form W-8IMY accompanied by an IRS Form W-8BEN or IRS Form W- 8BEN-E from each of such partner's or member's beneficial owners that is claiming the portfolio interest exemption. By executing this certificate, the undersigned agrees that (A) if the information provided on this certificate changes, the undersigned shall promptly so inform the Borrower and the Facility Agent, and (B) the undersigned shall have at all times furnished the Borrower and the Facility Agent with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments. For the avoidance of doubt, any reference herein to any IRS Form shall be deemed to include any applicable successor form.

In witness whereof, the undersigned has duly executed and delivered this U.S. Tax Compliance Certificate as of the date first above written.

[NAME OF LENDER]

By: _____

Name:

Title:

UNITED STATES STEEL CORPORATION
SUBSIDIARIES AND JOINT VENTURES AS OF DECEMBER 31, 2019**Company Name**

Chisholm Coal LLC
Chrome Deposit Corporation
Compagnie de Gestion de Mifergui- Nimba, LTEE
Cygnus Mines Limited
Double G Coatings, Inc.
Double G Coatings Company, L.P.
Essex Minerals Company
Fairfield Primary Operations, LLC
Feralloy Processing Company
GCW/USS Energy, LLC
Grant Assurance Corporation
Kanawha Coal LLC
Oilfield Technologies, Inc.
Orinoco Mining Company
Perdido Land Development Co., Inc.
PITCAL, Inc.
 USS-POSCO Industries
Pitcal Pipe, LLC
Preserve Village Developers, LLC
Stelco Holding Company
 Ontario Coal Company
 Ontario Eveleth Company
 Ontario Hibbing Company
 Hibbing Development Company
 Hibbing Taconite Company
 Stelco Coal Company
 Stelco Erie Corporation
 Ontario Tilden Company
Swan Point Yacht & Country Club, Inc.
Timber Wolf Land, LLC
Transtar, LLC
 Delray Connecting Railroad Company
 Gary Railway Company
 Tracks Traffic and Management Services, Inc.
 Texas & Northern Railway Company
 The Lake Terminal Railroad Company
 Lorain Northern Company
 Union Railroad Company, LLC
 Birmingham Southern Railroad Company
 Fairfield Southern Company, Inc.
 Warrior & Gulf Navigation LLC
U. S. Steel China, LLC
U. S. Steel Holdco LLC
 Big River Steel Holdings LLC
 Big River Steel Metallics Funding LLC
 BRS Intermediate Holdings LLC
 Big River Steel LLC
 BRS Finance Corp

UNITED STATES STEEL CORPORATION
SUBSIDIARIES AND JOINT VENTURES AS OF DECEMBER 31, 2019

BRS Stock Holdco LLC
 Big River Steel Corp
U. S. Steel Blocker LLC
U. S. Steel Holdings, Inc.
 U. S. Steel Global Holdings I B.V.
 U. S. Steel Global Holdings VI B.V.
 U. S. Steel Košice, s.r.o. (USSK)
 OBAL-SERVIS, a.s. Košice
 Ferroenergy s.r.o.
 U. S. Steel Košice – Labortest, s.r.o.
 U. S. Steel Services s.r.o.
 U. S. Steel Europe - Bohemia a.s.
 U. S. Steel Europe - France S.A.
 U.S. Steel Košice - SBS, s.r.o.
 U. S. Steel Europe - Germany GmbH
 RMS, Košice s.r.o.
 U. S. Steel Global Holdings II, B.V.
 U. S. Steel Canada Limited Partnership
 U. S. Steel Holdings IV, Inc.
U. S. Steel International of Canada, LTD.
U. S. Steel LRD Canada North Inc.
U. S. Steel Mining Company, LLC
U. S. Steel Timber Company, LLC
U. S. Steel Tubular Products Holdings, LLC
 U. S. Steel Seamless Tubular Operations, LLC
 U. S. Steel Tubular Products, Inc.
 U. S. Steel Tubular Products Middle East DMCC
 U.S. Steel Oilwell Services, LLC
 Patriot Premium Threading Services, LLC
 USS Construction Products, LLC
 U. S. Steel Tubular Products Canada Inc.
 U.S. Steel Produtos Tubulares do Brasil Ltda.
 Zinklahoma, Inc.
 Star Brazil US, LLC 2
 Star Brazil US, LLC 1
 Lone Star Brazil Holdings 1 Ltda.
 Lone Star Steel Holdings, Inc.
 Lone Star Steel Holdings II, Inc.
 Fintube (Thailand) Limited
UEC Technologies, LLC
 189548 Canada Inc.
 USX Engineers and Consultants
 UEC Sail Information Technology, LTD.
United States Steel International, Inc.
 United States Steel Export Company de Mexico, S.R.L. de C.V.
 United States Steel International de Mexico, S.R.L. de C. V.
USS Galvanizing, Inc.
 PRO-TEC Coating Company, LLC
 PRO-TEC Coating Company, Inc.

UNITED STATES STEEL CORPORATION
SUBSIDIARIES AND JOINT VENTURES AS OF DECEMBER 31, 2019

USS International Services, LLC
USS Lakeside, LLC
 Chicago Lakeside Development, LLC
USS Oilwell Supply Co., LTD.
USS Oilwell Tubular, Inc.
USS Portfolio Delaware, Inc.
USS WSP, LLC
 Worthington Specialty Processing
 ProCoil Company, LLC
 Worthington Taylor, LLC
USX International Sales Company, Inc.



CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-3 (No. 333-229714 and 333-229713) and Form S-8 (No. 333-231216, 333-231215, 333-217464, 333-210953, and 333-151438) of United States Steel Corporation of our report dated February 14, 2020 relating to the financial statements, financial statement schedule and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP
Pittsburgh, Pennsylvania
February 14, 2020

POWER OF ATTORNEY

The undersigned does hereby make, constitute and appoint Christine S. Breves and Kimberly D. Fast or any one of them, my true and lawful attorneys-in-fact to sign and execute for me and on my behalf United States Steel Corporation's Annual Report on Form 10-K for the year ended December 31, 2019 to be filed with the Securities and Exchange Commission, and any and all amendments to such report to be filed with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934, as amended, in such form as they or any one or more of them may approve, and to do any and all other acts which said attorneys-in-fact may deem necessary or desirable to enable United States Steel Corporation to comply with said Act and the rules and regulations thereunder.

IN WITNESS WHEREOF, I have hereunto set my hand this 14th day of February, 2020.

/s/ David B. Burritt
David B. Burritt

POWER OF ATTORNEY

The undersigned does hereby make, constitute and appoint David B. Burritt, Christine S. Breves and Kimberly D. Fast or any one of them, my true and lawful attorneys-in-fact to sign and execute for me and on my behalf United States Steel Corporation's Annual Report on Form 10-K for the year ended December 31, 2019 to be filed with the Securities and Exchange Commission, and any and all amendments to such report to be filed with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934, as amended, in such form as they or any one or more of them may approve, and to do any and all other acts which said attorneys-in-fact may deem necessary or desirable to enable United States Steel Corporation to comply with said Act and the rules and regulations thereunder.

IN WITNESS WHEREOF, I have hereunto set my hand this 14th day of February, 2020.

/s/ Patricia Diaz Dennis
Patricia Diaz Dennis

POWER OF ATTORNEY

The undersigned does hereby make, constitute and appoint David B. Burritt, Christine S. Breves and Kimberly D. Fast or any one of them, my true and lawful attorneys-in-fact to sign and execute for me and on my behalf United States Steel Corporation's Annual Report on Form 10-K for the year ended December 31, 2019 to be filed with the Securities and Exchange Commission, and any and all amendments to such report to be filed with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934, as amended, in such form as they or any one or more of them may approve, and to do any and all other acts which said attorneys-in-fact may deem necessary or desirable to enable United States Steel Corporation to comply with said Act and the rules and regulations thereunder.

IN WITNESS WHEREOF, I have hereunto set my hand this 14th day of February, 2020.

/s/ Dan O. Dinges

Dan O. Dinges

POWER OF ATTORNEY

The undersigned does hereby make, constitute and appoint David B. Burritt, Christine S. Breves and Kimberly D. Fast or any one of them, my true and lawful attorneys-in-fact to sign and execute for me and on my behalf United States Steel Corporation's Annual Report on Form 10-K for the year ended December 31, 2019 to be filed with the Securities and Exchange Commission, and any and all amendments to such report to be filed with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934, as amended, in such form as they or any one or more of them may approve, and to do any and all other acts which said attorneys-in-fact may deem necessary or desirable to enable United States Steel Corporation to comply with said Act and the rules and regulations thereunder.

IN WITNESS WHEREOF, I have hereunto set my hand this 14th day of February, 2020.

/s/ John J. Engel

John J. Engel

POWER OF ATTORNEY

The undersigned does hereby make, constitute and appoint David B. Burrirt, Christine S. Breves and Kimberly D. Fast or any one of them, my true and lawful attorneys-in-fact to sign and execute for me and on my behalf United States Steel Corporation's Annual Report on Form 10-K for the year ended December 31, 2019 to be filed with the Securities and Exchange Commission, and any and all amendments to such report to be filed with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934, as amended, in such form as they or any one or more of them may approve, and to do any and all other acts which said attorneys-in-fact may deem necessary or desirable to enable United States Steel Corporation to comply with said Act and the rules and regulations thereunder.

IN WITNESS WHEREOF, I have hereunto set my hand this 14th day of February, 2020.

/s/ John V. Faraci

John V. Faraci

POWER OF ATTORNEY

The undersigned does hereby make, constitute and appoint David B. Burritt, Christine S. Breves and Kimberly D. Fast or either one of them, my true and lawful attorneys-in-fact to sign and execute for me and on my behalf United States Steel Corporation's Annual Report on Form 10-K for the year ended December 31, 2019 to be filed with the Securities and Exchange Commission, and any and all amendments to such report to be filed with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934, as amended, in such form as they or any one or more of them may approve, and to do any and all other acts which said attorneys-in-fact may deem necessary or desirable to enable United States Steel Corporation to comply with said Act and the rules and regulations thereunder.

IN WITNESS WHEREOF, I have hereunto set my hand this 14th day of February, 2020.

/s/ Murry S. Gerber
Murry S. Gerber

POWER OF ATTORNEY

The undersigned does hereby make, constitute and appoint David B. Burrirt, Christine S. Breves and Kimberly D. Fast or any one of them, my true and lawful attorneys-in-fact to sign and execute for me and on my behalf United States Steel Corporation's Annual Report on Form 10-K for the year ended December 31, 2019 to be filed with the Securities and Exchange Commission, and any and all amendments to such report to be filed with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934, as amended, in such form as they or any one or more of them may approve, and to do any and all other acts which said attorneys-in-fact may deem necessary or desirable to enable United States Steel Corporation to comply with said Act and the rules and regulations thereunder.

IN WITNESS WHEREOF, I have hereunto set my hand this 14th day of February, 2019.

/s/ Stephen J. Girsky
Stephen J. Girsky

POWER OF ATTORNEY

The undersigned does hereby make, constitute and appoint David B. Burrirt, Christine S. Breves and Kimberly D. Fast or any one of them, my true and lawful attorneys-in-fact to sign and execute for me and on my behalf United States Steel Corporation's Annual Report on Form 10-K for the year ended December 31, 2019 to be filed with the Securities and Exchange Commission, and any and all amendments to such report to be filed with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934, as amended, in such form as they or any one or more of them may approve, and to do any and all other acts which said attorneys-in-fact may deem necessary or desirable to enable United States Steel Corporation to comply with said Act and the rules and regulations thereunder.

IN WITNESS WHEREOF, I have hereunto set my hand this 14th day of February, 2020.

/s/ Paul A. Mascarenas
Paul A. Mascarenas

POWER OF ATTORNEY

The undersigned does hereby make, constitute and appoint David B. Burrirt, Christine S. Breves and Kimberly D. Fast or any one of them, my true and lawful attorneys-in-fact to sign and execute for me and on my behalf United States Steel Corporation's Annual Report on Form 10-K for the year ended December 31, 2019 to be filed with the Securities and Exchange Commission, and any and all amendments to such report to be filed with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934, as amended, in such form as they or any one or more of them may approve, and to do any and all other acts which said attorneys-in-fact may deem necessary or desirable to enable United States Steel Corporation to comply with said Act and the rules and regulations thereunder.

IN WITNESS WHEREOF, I have hereunto set my hand this 14th day of February, 2020.

/s/ Michael H. McGarry
Michael H. McGarry

POWER OF ATTORNEY

The undersigned does hereby make, constitute and appoint David B. Burrirt, Christine S. Breves and Kimberly D. Fast or any one of them, my true and lawful attorneys-in-fact to sign and execute for me and on my behalf United States Steel Corporation's Annual Report on Form 10-K for the year ended December 31, 2019 to be filed with the Securities and Exchange Commission, and any and all amendments to such report to be filed with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934, as amended, in such form as they or any one or more of them may approve, and to do any and all other acts which said attorneys-in-fact may deem necessary or desirable to enable United States Steel Corporation to comply with said Act and the rules and regulations thereunder.

IN WITNESS WHEREOF, I have hereunto set my hand this 14th day of February, 2020.

/s/ Eugene B. Sperling
Eugene B. Sperling

POWER OF ATTORNEY

The undersigned does hereby make, constitute and appoint David B. Burrirt, Christine S. Breves and Kimberly D. Fast or any one of them, my true and lawful attorneys-in-fact to sign and execute for me and on my behalf United States Steel Corporation's Annual Report on Form 10-K for the year ended December 31, 2019 to be filed with the Securities and Exchange Commission, and any and all amendments to such report to be filed with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934, as amended, in such form as they or any one or more of them may approve, and to do any and all other acts which said attorneys-in-fact may deem necessary or desirable to enable United States Steel Corporation to comply with said Act and the rules and regulations thereunder.

IN WITNESS WHEREOF, I have hereunto set my hand this 14th day of February, 2020.

/s/ David S. Sutherland
David S. Sutherland

POWER OF ATTORNEY

The undersigned does hereby make, constitute and appoint David B. Burrirt, Christine S. Breves and Kimberly D. Fast or any one of them, my true and lawful attorneys-in-fact to sign and execute for me and on my behalf United States Steel Corporation's Annual Report on Form 10-K for the year ended December 31, 2019 to be filed with the Securities and Exchange Commission, and any and all amendments to such report to be filed with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934, as amended, in such form as they or any one or more of them may approve, and to do any and all other acts which said attorneys-in-fact may deem necessary or desirable to enable United States Steel Corporation to comply with said Act and the rules and regulations thereunder.

IN WITNESS WHEREOF, I have hereunto set my hand this 14th day of February, 2020.

/s/ Patricia A. Tracey
Patricia A. Tracey

CHIEF EXECUTIVE OFFICER CERTIFICATION

I, David B. Burritt, certify that:

1. I have reviewed this annual report on Form 10-K of United States Steel Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

February 14, 2020

/s/ David B. Burritt

David B. Burritt

President and Chief Executive Officer

CHIEF FINANCIAL OFFICER CERTIFICATION

I, Christine S. Breves, certify that:

1. I have reviewed this annual report on Form 10-K of United States Steel Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

February 14, 2020

/s/ Christine S. Breves

Christine S. Breves

Senior Vice President and Chief Financial Officer

CHIEF EXECUTIVE OFFICER
CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350

I, David B. Burritt, President and Chief Executive Officer of United States Steel Corporation, certify that:

- (1) The Annual Report on Form 10-K of United States Steel Corporation for the period ending December 31, 2019, fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the foregoing report fairly presents, in all material respects, the financial condition and results of operations of United States Steel Corporation.

/s/ David B. Burritt

David B. Burritt

President and Chief Executive Officer

February 14, 2020

A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 has been provided to United States Steel Corporation and will be retained by United States Steel Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

CHIEF FINANCIAL OFFICER
CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350

I, Christine S. Breves, Senior Vice President and Chief Financial Officer of United States Steel Corporation, certify that:

- (1) The Annual Report on Form 10-K of United States Steel Corporation for the period ending December 31, 2019, fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the foregoing report fairly presents, in all material respects, the financial condition and results of operations of United States Steel Corporation.

/s/ Christine S. Breves

Christine S. Breves

Senior Vice President and Chief Financial Officer

February 14, 2020

A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 has been provided to United States Steel Corporation and will be retained by United States Steel Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

United States Steel Corporation
Mine Safety Disclosure
(Unaudited)

Information for the twelve months ended December 31, 2019 follows:

Mine (Federal Mine Safety and Health Administration (MSHA) ID)	Total # of Significant & Substantial violations under §104(a) ^(a)	Total # of orders under §104(b) ^(a)	Total # of unwarrantable failure citations and orders under §104(d) ^(a)	Total # of violations under §110(b)(2) ^(a)	Total # of orders under §107(a) ^(a)	Total dollar value of proposed assessments from MSHA	Total # of mining related fatalities	Received Notice of Pattern of Violations under §104(e) ^(a) (yes/no)?	Received Notice of Potential to have Pattern under §104(e) ^(a) (yes/no)?	Total # of Legal Actions Pending with the Mine Safety and Health Review Commission as of Last Day of Period ^(b)	Legal Actions Initiated During Period	Legal Actions Resolved During Period
Mt. Iron (2100820, 2100282)	71	—	—	—	—	\$555,650	—	no	no	34	159	134
Keewatin (2103352)	36	—	—	—	—	\$332,548	—	no	no	—	87	87

^(a) References to Section numbers are to sections of the Federal Mine Safety and Health Act of 1977.

^(b) Includes all legal actions pending before the Federal Mine Safety and Health Review Commission, together with the Administrative Law Judges thereof, for each of our iron ore operations. These actions may have been initiated in prior quarters. All of the legal actions were initiated by us to contest citations, orders or proposed assessments issued by the Federal Mine Safety and Health administration, and if we are successful, may result in the reduction or dismissal of those citations, orders or assessments. As of the last day of the period, all 34 legal actions were to contest citations and proposed assessments.