

**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**vironmentally 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.

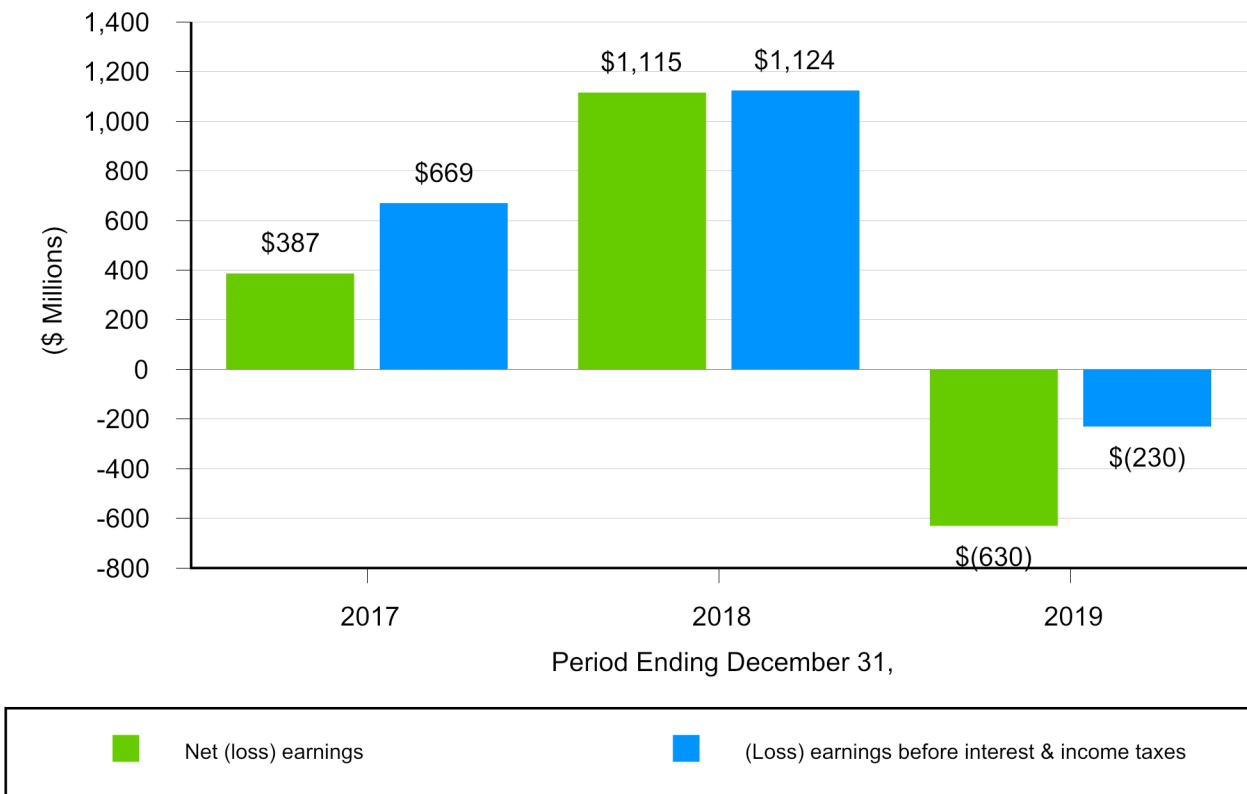
In 2019, we announced several transformation initiatives key to our strategy. On October 31, 2019, U. S. Steel acquired a 49.9% ownership interest in Big River Steel at a purchase price of approximately \$683 million in cash, with a call option to acquire the remaining 50.1% within the next four years. 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

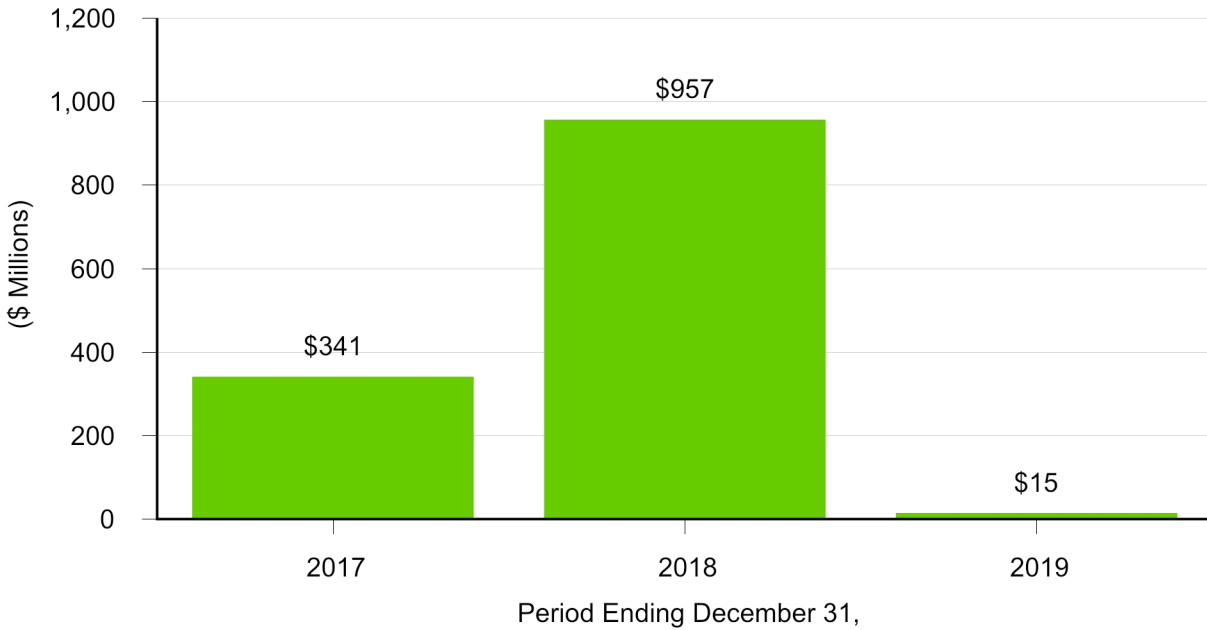
This section provides an overview of select key performance indicators for U. S. Steel which management and investors use to assess the Company's financial performance. It does not contain all of the information you should consider. Fluctuations for year to year changes are explained in Item 7. "Management's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

Statement of Operations Data



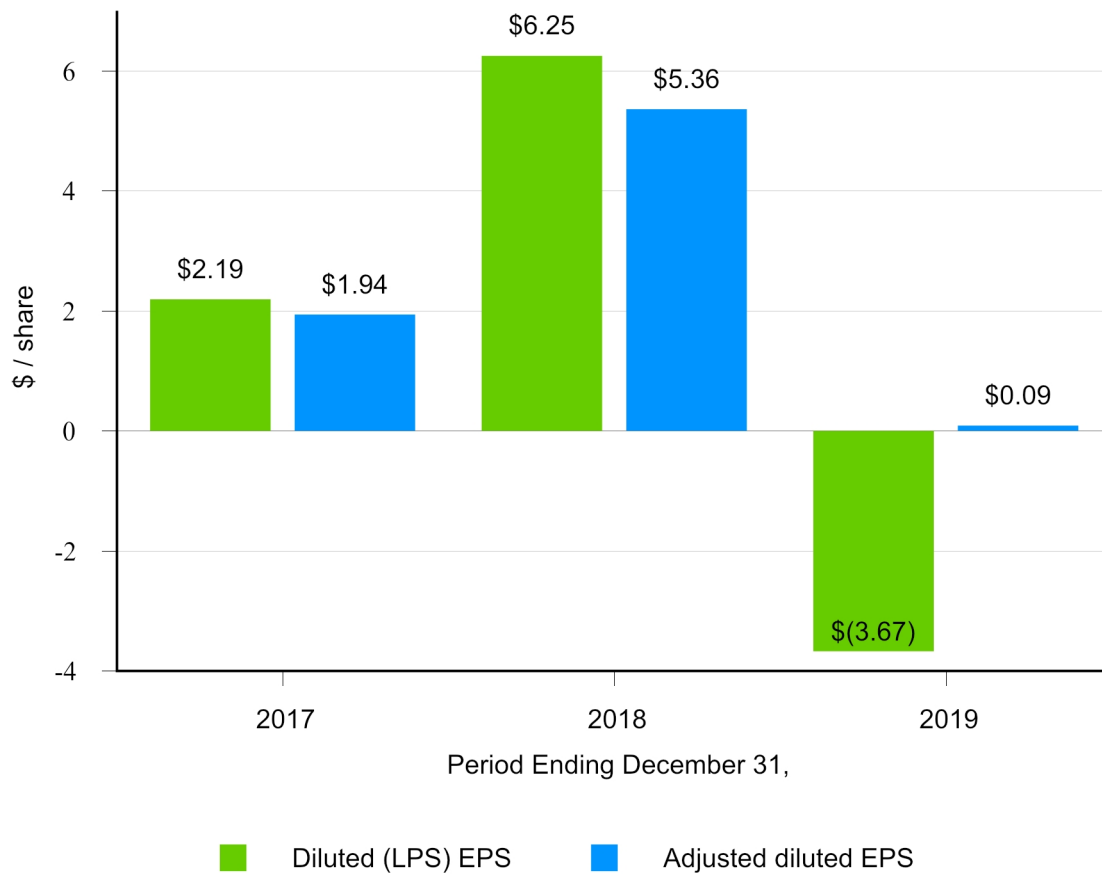
- Our 2019 net loss includes unfavorable restructuring impacts of \$275 million for the indefinite idling of certain of our Flat-Rolled facilities, plant exit costs at USSE and Company-wide headcount reductions implemented to reduce fixed costs and support our strategy to become a world-competitive, "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



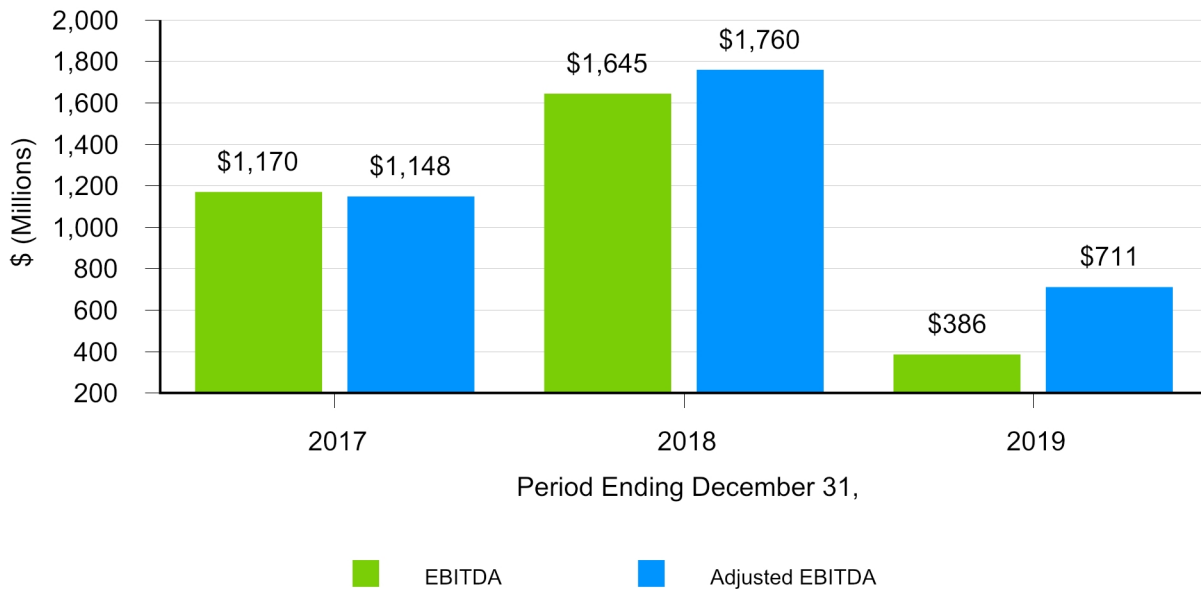
- After a significant earnings improvement in 2018, we faced a challenging year in 2019 as market conditions in the U.S. weakened in the latter half of the year. Our USSE segment faced significant market challenges from weakening economic conditions, primarily in the manufacturing sector.
- These amounts 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



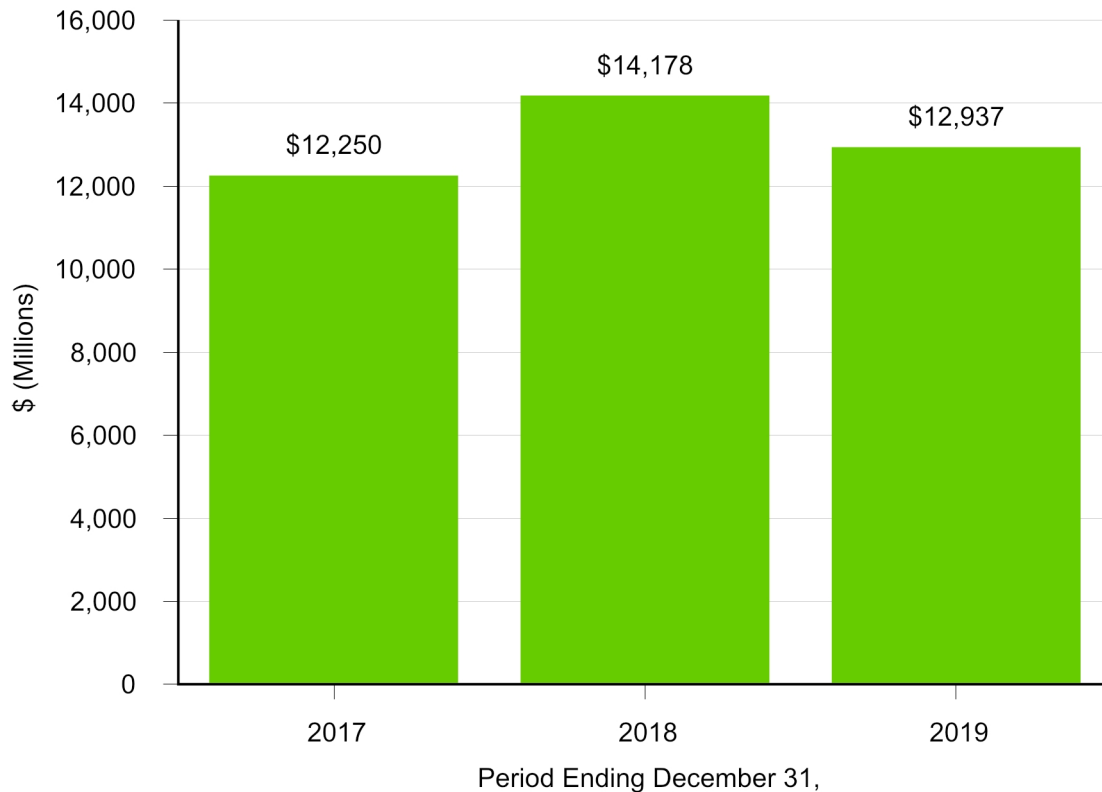
- See reconciliation from diluted net (loss) earnings per share to adjusted diluted net earnings per share on page 19.

EBITDA and Adjusted EBITDA



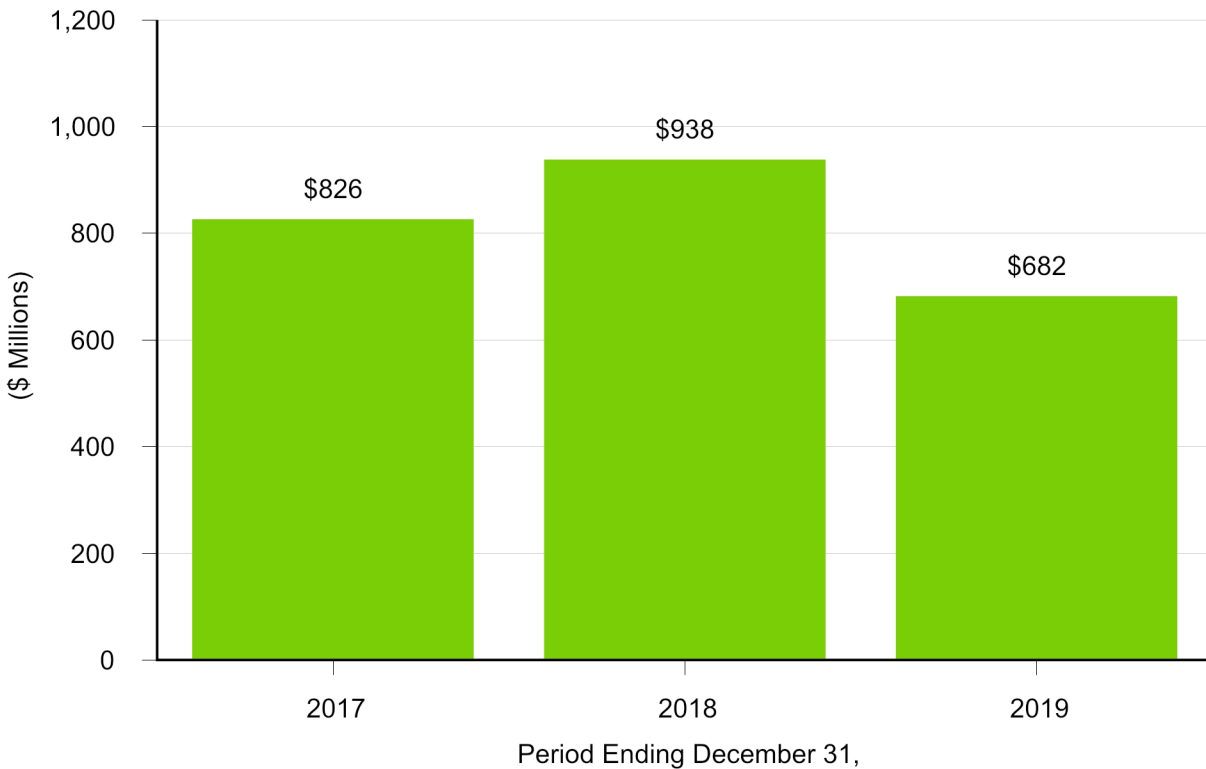
- These amounts are derived starting from net (loss) earnings as shown on page 7. For a full reconciliation of adjusted EBITDA see page 20.
- EBITDA decreased primarily in our Flat-Rolled and USSE segments in 2019. The primary driver of decreased EBITDA in our Flat-Rolled segment was lower average realized 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



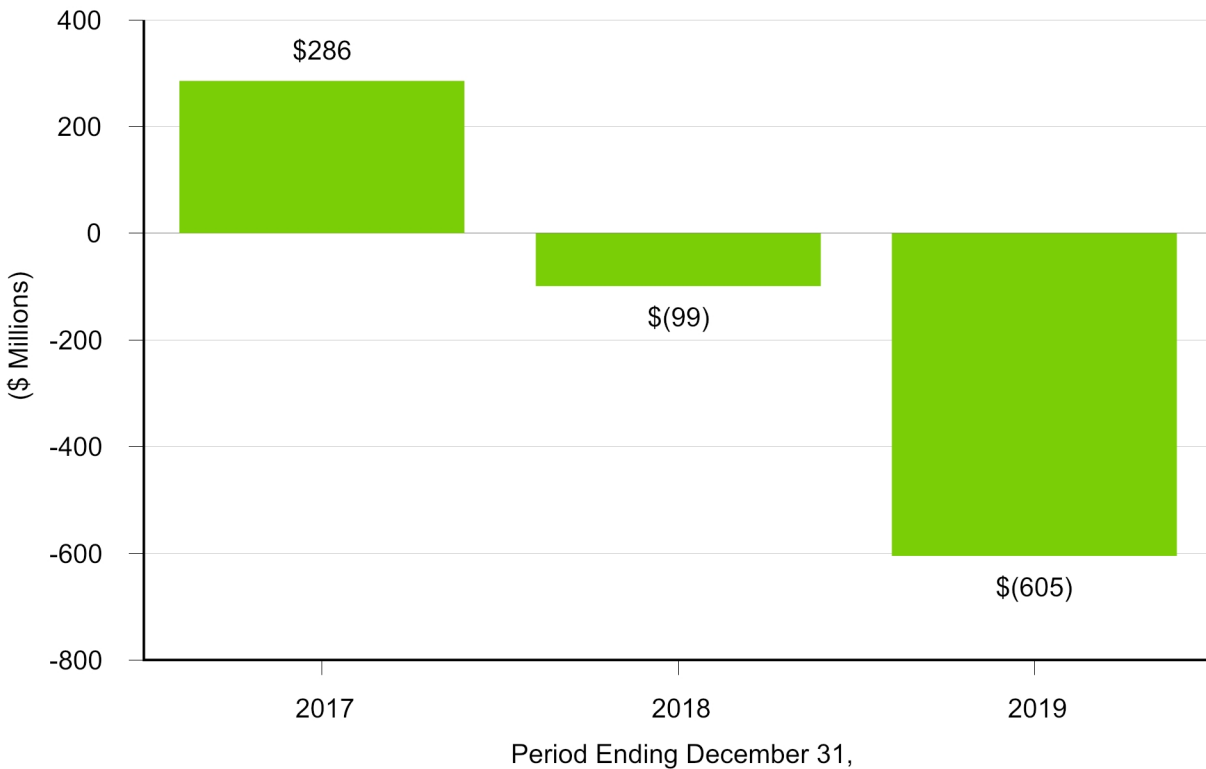
- The decrease in net sales in 2019 as compared to 2018 was primarily due to lower average realized prices in all of our reportable segments and significantly reduced shipments in our USSE segment. Lower average realized prices in our Flat-Rolled and Tubular segments reflect weakening market conditions 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



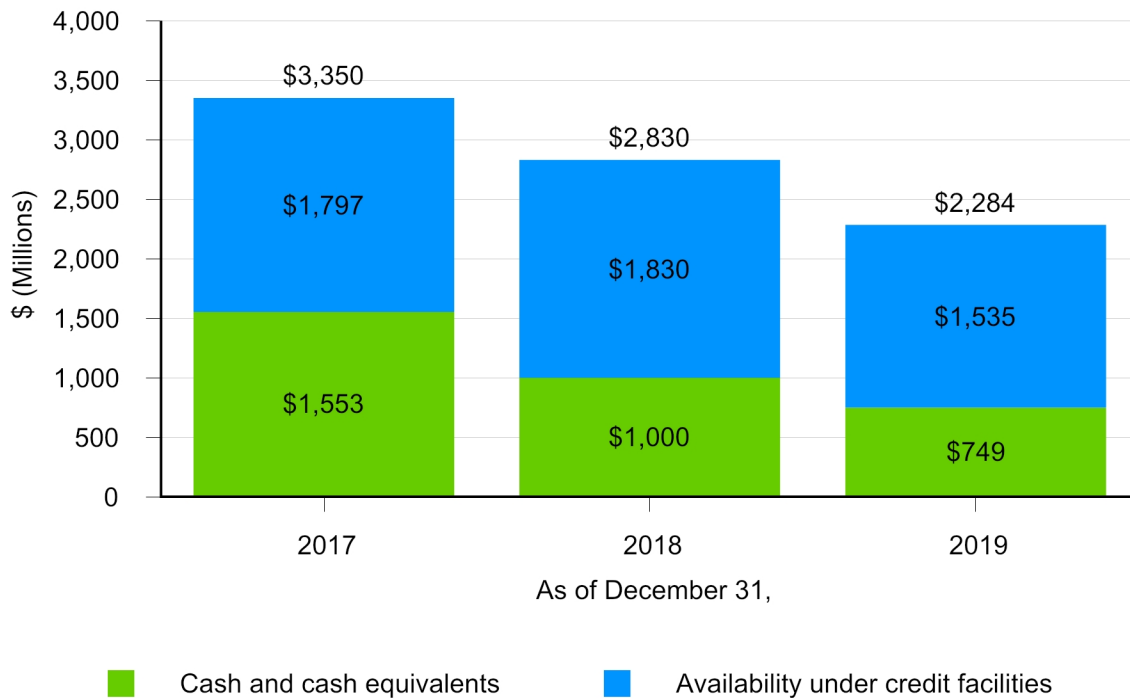
- In 2019, the positive cash flow from operations was primarily due to efficient use of working capital.
- In 2018 and 2017, improved financial performance more than offset the investment in working capital.
- Our cash conversion cycle was 30, 28 and 37 days for 2017, 2018 and 2019, respectively. See "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



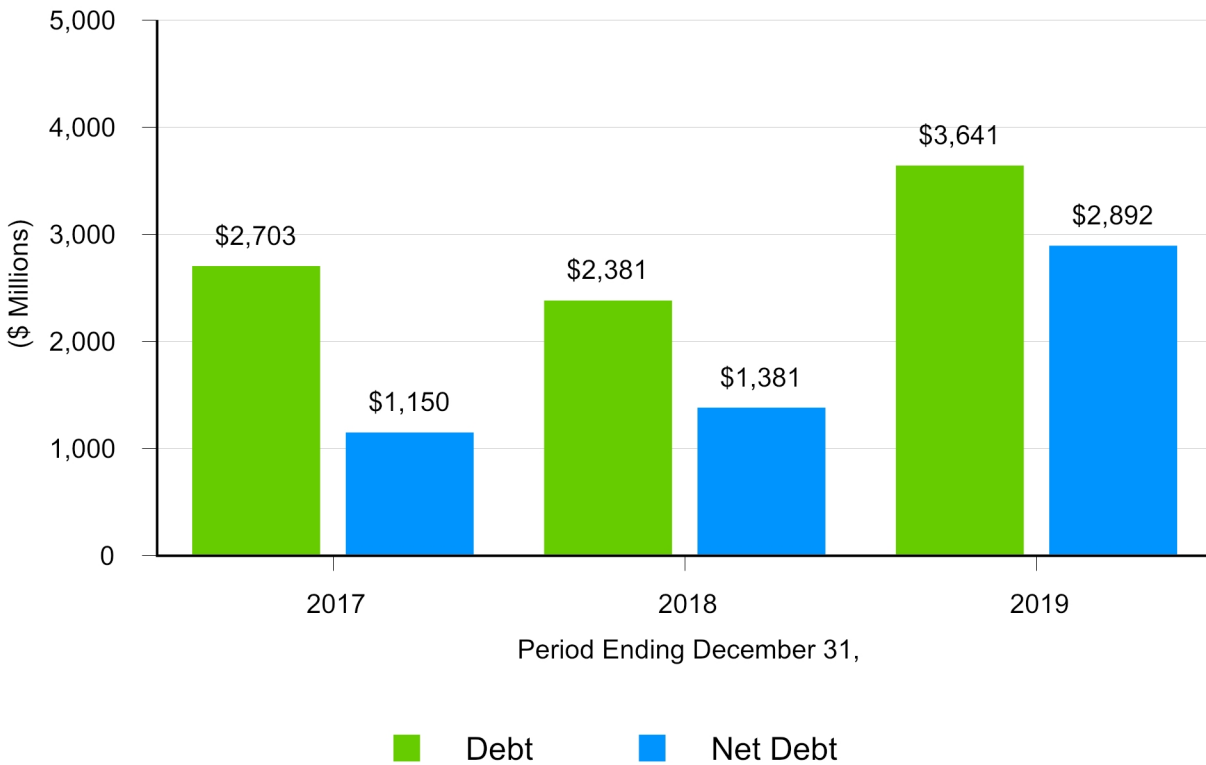
- The free cash flow shown above was derived starting from cash flow from operations as shown on page 12. For a full reconciliation of free cash flow see page 21.
- A portion of our cash from operations in 2019 was spent on major projects to pursue our strategy to become a world-competitive, "best of 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



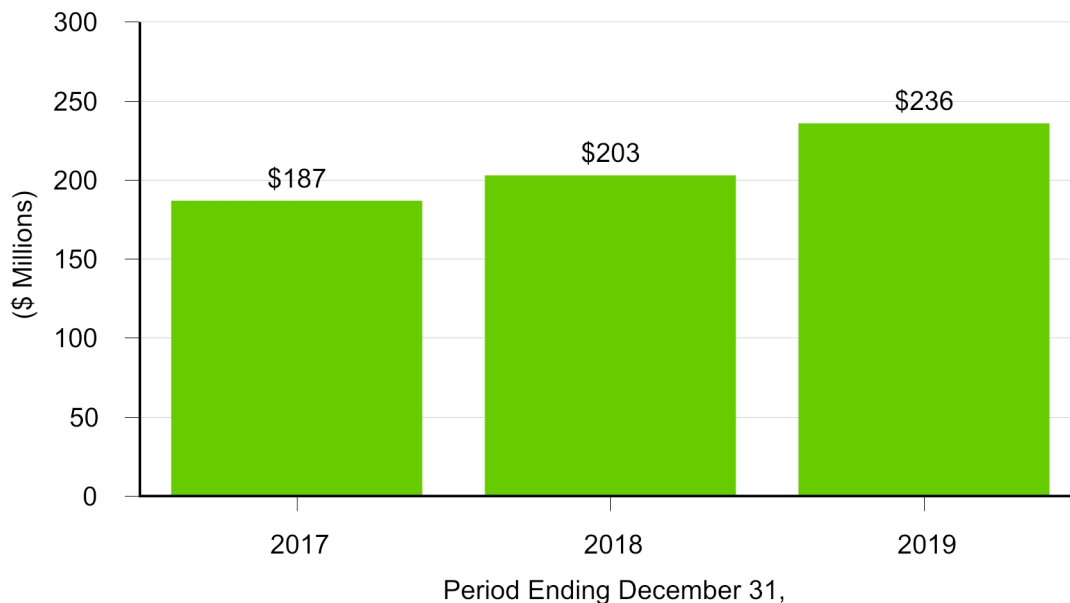
- In the years leading up to 2018 and 2019, the Company undertook a focused effort to repay or refinance its debt in order to ensure a secure foundation to support execution of its strategy. Beginning with the asset revitalization program, and continuing with the "best of both" strategy, the Company 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



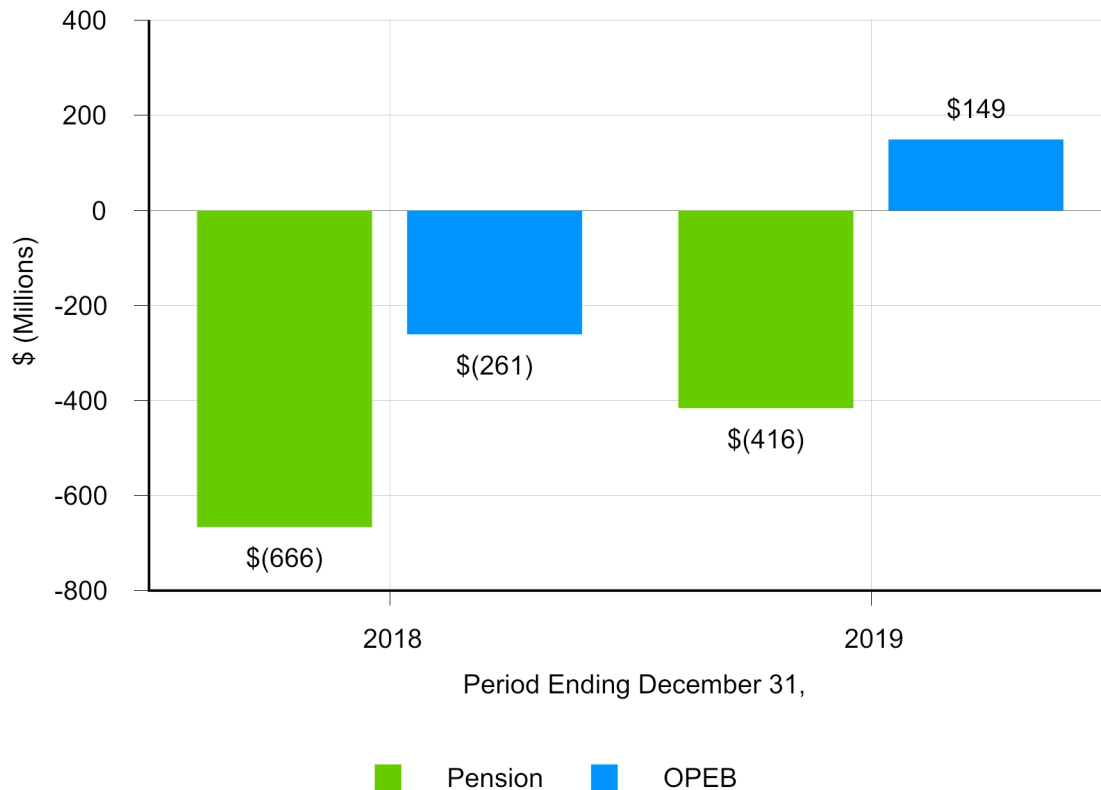
- The increase in debt in 2019 was primarily related to net drawings that totaled approximately \$760 million on our credit facilities, the \$350 million issuance of senior convertible notes and the net increase in environmental revenue bonds of \$220 million.
- Net debt was derived starting from total 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

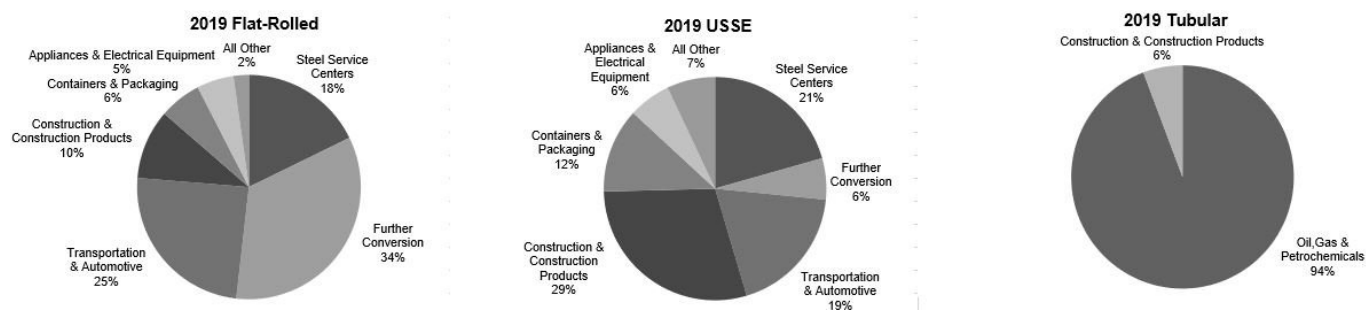
The Tubular segment includes the operating results of U. S. Steel's tubular production facilities and an equity investee in the United States. These operations produce and sell seamless and electric resistance welded (ERW) steel casing and tubing (commonly known as OCTG), and standard and line pipe and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

<i>(Thousands of Tons)</i>	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

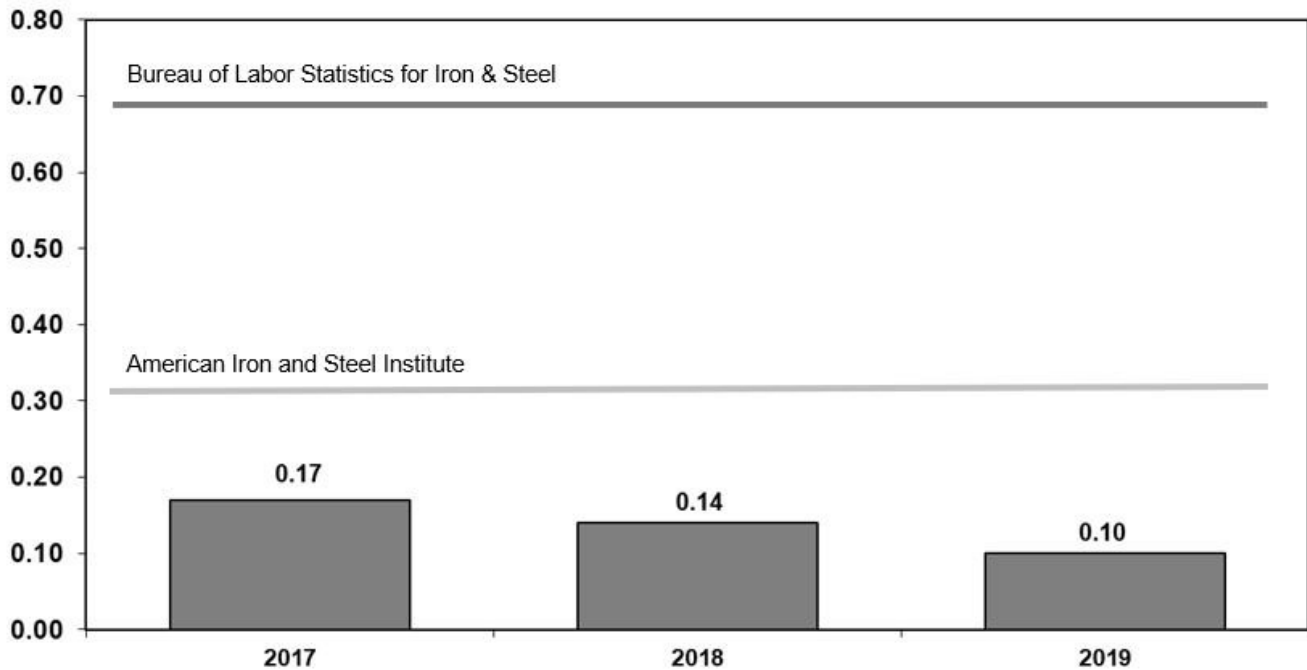
U. S. Steel has a long-standing commitment to the safety and health of the men and women who work in our facilities. Safety is our primary core value. Every employee deserves to return home safely at the end of every day, and we are working to eliminate all injuries and incidents at all of our facilities. 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



Frequency of Injuries (per 200,000 manhours)

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 cyclical nature 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
- ③④ 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
- ②⑪ 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
- ⑰ Lone Star Tubular
- ⑰⑫ Wheeling Machine Products
- ⑬ Patriot Premium Threading Services

USSE Segment

- ⑭ U. S. Steel Košice

Other Businesses

- ⑮ Big River Steel
- ③ Transtar*

Administrative and Research

- ③ Corporate Headquarters
- ③ Research and Technology Center
- ⑯ U. S. Steel Tubular Products Innovation
- ⑭ 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.

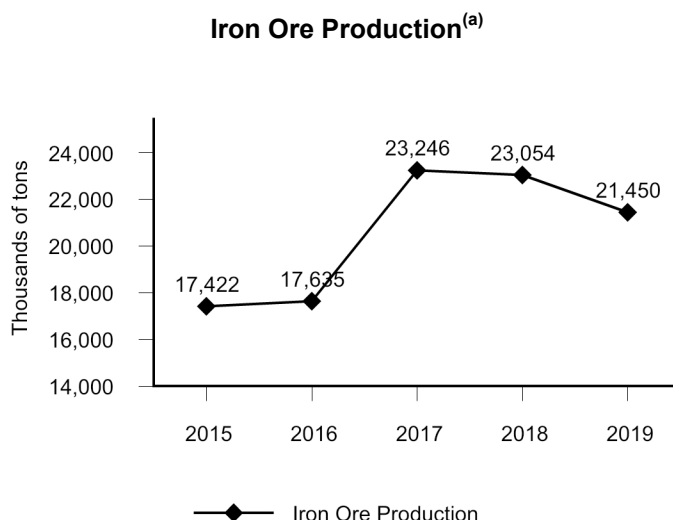
U. S. Steel owns, develops and manages various real estate assets, which include approximately 50,000 acres of surface rights primarily in Alabama, Michigan, Minnesota, Pennsylvania and Illinois. In addition, U. S. Steel holds ownership interests in a joint venture that is developing real estate projects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

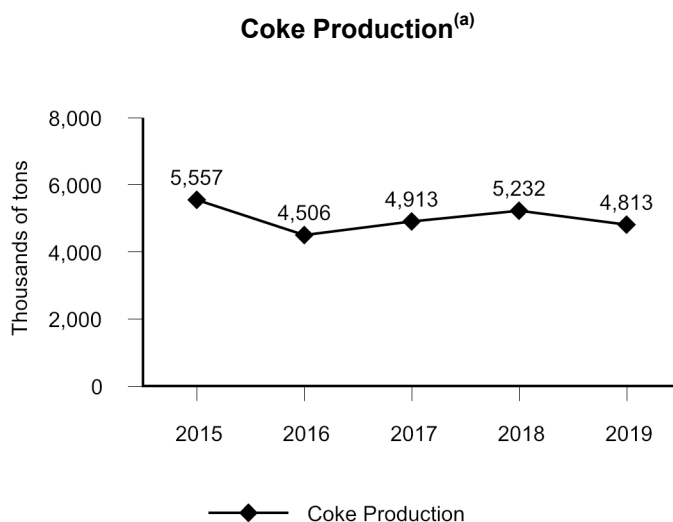
Coking Coal

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 NOVs, 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.

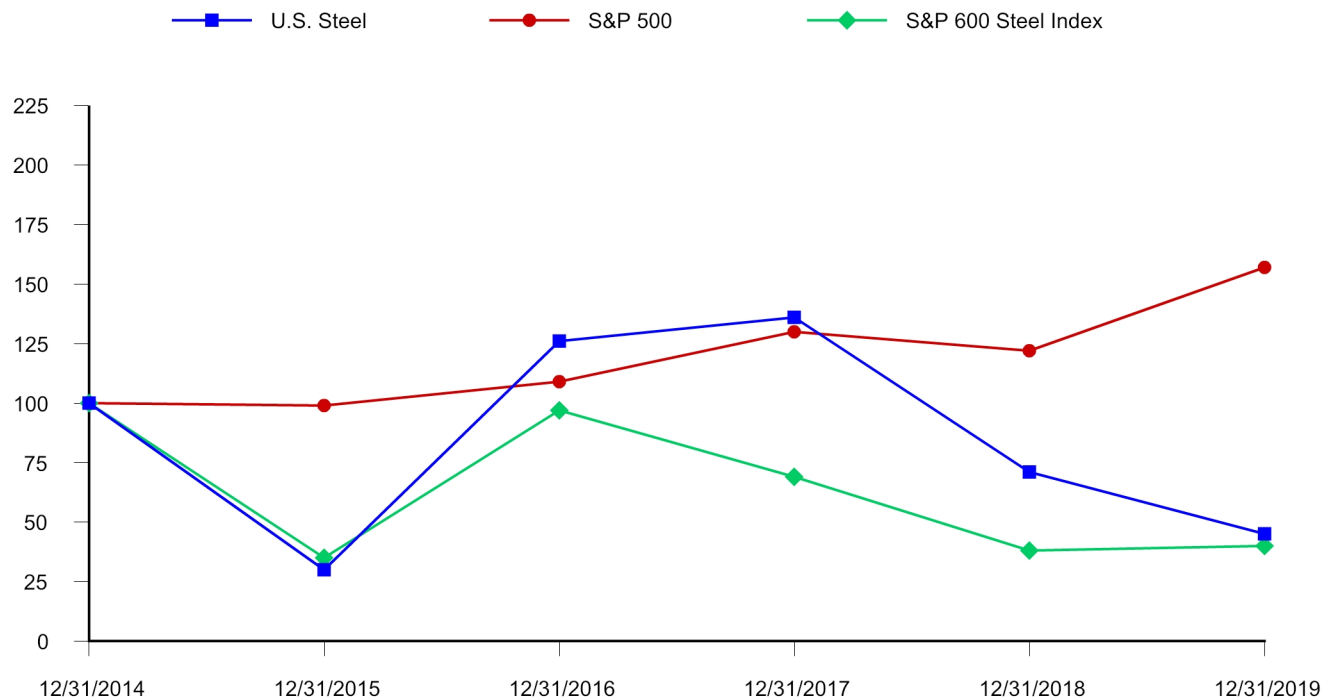
Purchases of Equity Securities by the Issuer and the Affiliated Purchasers

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.

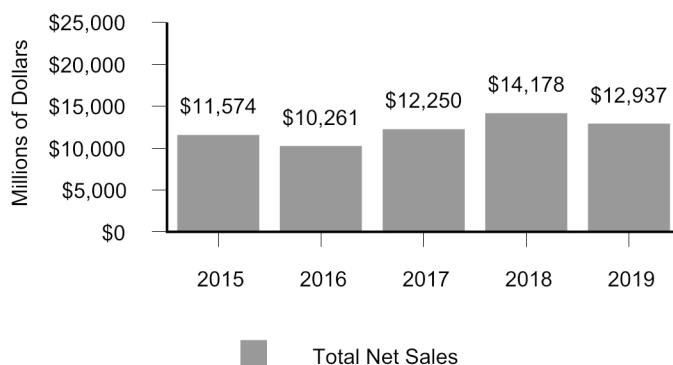
The USSE segment includes the operating results of U. S. Steel Košice (USSK), U. S. Steel’s integrated steel plant and coke production facilities in Slovakia, and its subsidiaries. USSE conducts its business mainly in Central and Western Europe and primarily serves customers in the European transportation (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

Total Net Sales



Net Sales by Segment

<i>(Dollars in millions, excluding intersegment sales)</i>	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

<i>(Dollars in millions)</i>	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.

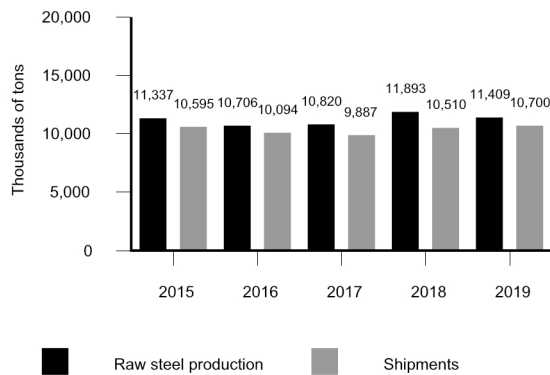
(b) Included in restructuring and other charges on the Consolidated Statements of Operations. See Note 25 to the Consolidated Financial Statements.

Gross Margin by Segment

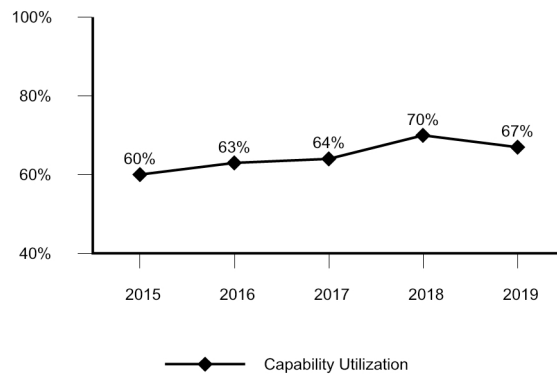
	Year Ended December 31,	
	2019	2018
Flat-Rolled	8 %	15%
USSE	3 %	15%
Tubular	(1)%	1%

Segment results for Flat-Rolled

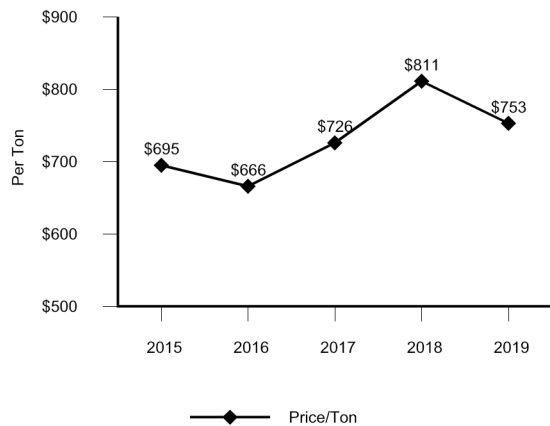
Raw Steel Production and Shipments



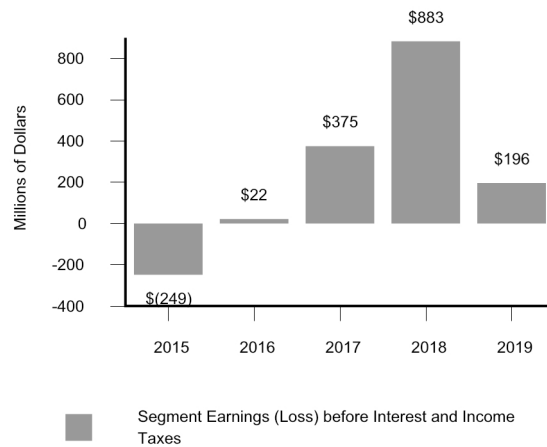
Raw Steel Capability Utilization



Average Realized Price Per Ton



Segment Earnings (Loss) before Interest and Income Taxes

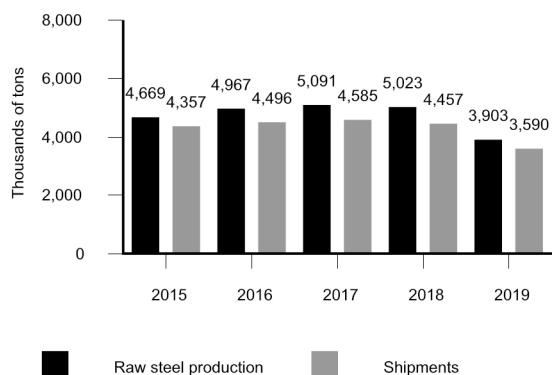


The Flat-Rolled segment had earnings of \$196 million for the year ended December 31, 2019 compared to earnings of \$883 million for the year ended December 31, 2018. The decrease in Flat-Rolled results for 2019 compared to 2018 resulted primarily from lower average realized prices (approximately \$570 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).

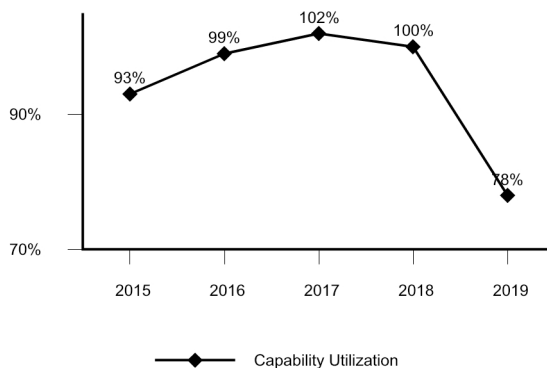
Gross margin for 2019 as compared to 2018 decreased primarily as a result of lower average prices due to lower spot prices and adjustable, spot market index-based contract prices, both of which consistently decreased throughout 2019.

Segment results for USSE

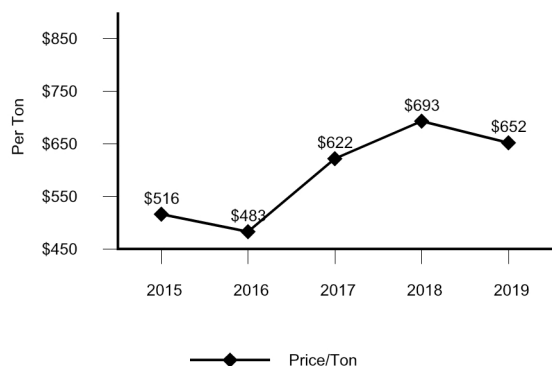
Raw Steel Production and Shipments



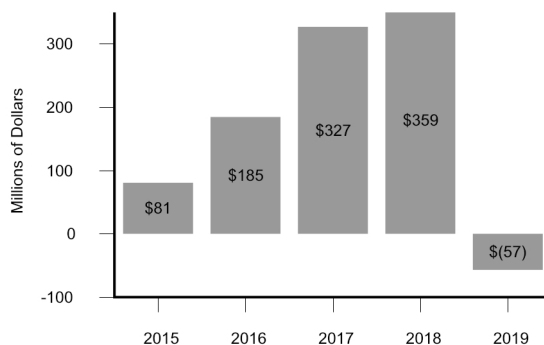
Raw Steel Capability Utilization



Average Realized Price Per Ton



Segment Earnings (Loss) Before Interest and Income Taxes

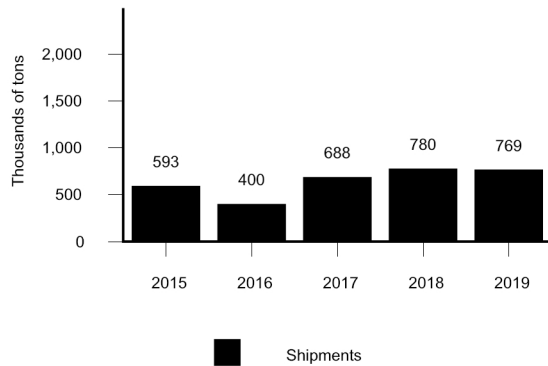


The USSE segment had a loss of \$57 million for the year ended December 31, 2019 compared to earnings of \$359 million for the year ended December 31, 2018. The decrease in USSE results in 2019 compared to 2018 was primarily due to significant market challenges from weakening economic conditions resulting 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).

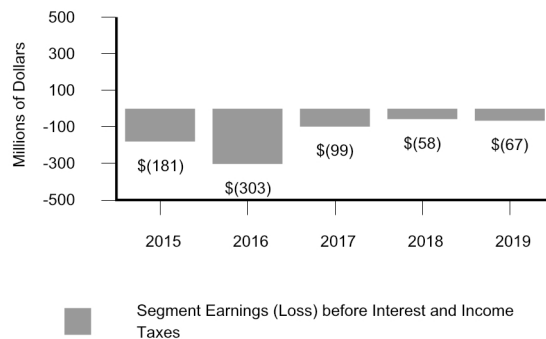
Gross margin decreased from 2019 as compared to 2018 primarily due to lower average realized prices.

Segment results for Tubular

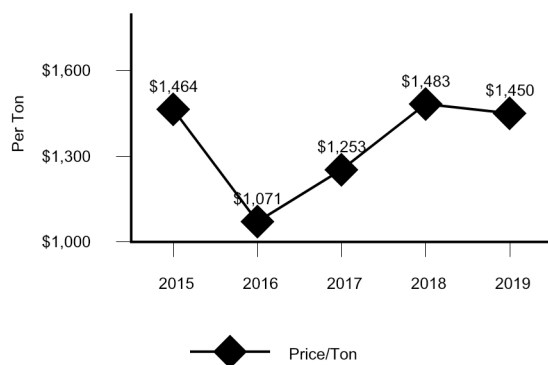
Shipments



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

<i>(Dollars in millions)</i>	Year Ended December 31,	
	2019	2018
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.

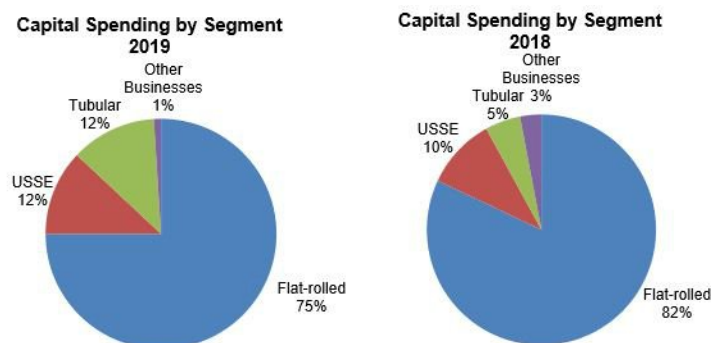
^(d) Calculated as Accounts Receivable Days plus Inventory Days less Accounts Payable Days.

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

Employee Benefits Payments

<i>(Dollars in millions)</i>	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.

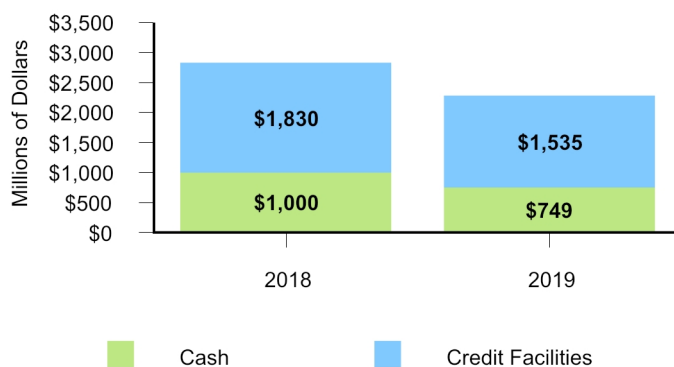
Liquidity

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 ^(a) (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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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.



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
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	<u>\$ 179</u>	<u>\$ 177</u>	<u>\$ 176</u>	<u>178,555</u>	<u>177,386</u>	<u>176,425</u>
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	<u>\$ (173)</u>	<u>\$ (78)</u>	<u>\$ (76)</u>	<u>(8,509)</u>	<u>(2,858)</u>	<u>(1,203)</u>
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	<u>\$ 4,020</u>	<u>\$ 3,917</u>	<u>\$ 3,932</u>			

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 Bellville 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 a 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	422	972
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	407	541
Net deferred tax asset	\$ 15	\$ 431

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%
Fer Alloy 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)	Balance Sheet Location	December 31, 2019	December 31, 2018
Designated as Hedging Instruments			
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)	2019			
	12/31/2018	Amortization	Activity	12/31/2019
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:

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)	
Asset Classes				
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	<u>\$ 2,758</u>	<u>\$ 164</u>	<u>\$ 2,277</u>	<u>\$ 317</u>
Investments measured at net asset value ^(e)	<u>2,648</u>			
Investments at fair value	<u>\$ 5,406</u>			

(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	<u>\$ 2,277</u>

(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	<u>2,170</u>	N/A	N/A	N/A
Investments measured at net asset value	<u>\$ 2,648</u>			

(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	<u>\$ 2,596</u>	<u>\$ 122</u>	<u>2,143</u>	<u>\$ 331</u>
Investments measured at net asset value ^(f)	2,364			
Investments at fair value	<u>\$ 4,960</u>			

(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	<u>\$ 2,143</u>

(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	<u>\$ 2,364</u>			

(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.

Fair Value Measurements at December 31, 2019 (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	\$ 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)				
	Total	Quoted Prices in Active Markets (Level 1)	Other Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Asset Classes				
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	<u>15,312</u>	<u>16,916</u>	<u>15,911</u>	<u>15,673</u>	<u>16,006</u>
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	<u>22,000</u>	<u>22,000</u>	<u>22,000</u>	<u>22,000</u>	<u>22,000</u>
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	<u>4,813</u>	<u>5,232</u>	<u>4,913</u>	<u>4,506</u>	<u>5,557</u>
Iron Ore Pellet Production^(b)					
Total	<u>21,450</u>	<u>23,054</u>	<u>23,246</u>	<u>17,635</u>	<u>17,422</u>
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	<u>15,059</u>	<u>15,747</u>	<u>15,160</u>	<u>14,990</u>	<u>15,545</u>
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., Eskoslovenská 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.
(III)	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
EGLE	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

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