



PQ ADVANCES PORTFOLIO TRANSFORMATION

October 16, 2020



PQ Corporation

LEGAL DISCLAIMER

Forward-Looking Statements

Some of the information contained in this presentation constitutes “forward-looking statements.” Forward-looking statements can be identified by words such as “anticipates,” “intends,” “plans,” “seeks,” “believes,” “estimates,” “expects,” “projects” and similar references to future periods. Forward-looking statements are based on our current expectations and assumptions regarding our business, the economy and other future conditions. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict. Examples of forward-looking statements include, but are not limited to, statements regarding the sale of the Performance Materials business segment and the review of strategic alternatives for the Performance Chemicals business segment, including the intended use of proceeds therefrom, our product and service offerings and our 2020 outlook. Our actual results may differ materially from those contemplated by the forward-looking statements. We caution you, therefore, against relying on any of these forward-looking statements. They are neither statements of historical fact nor guarantees or assurances of future performance. Important factors that could cause actual results to differ materially from those in the forward-looking statements include, but are not limited to, our ability to close on the sale of the Performance Materials business segment on our anticipated timeline, or at all, our ability to identify a strategic alternative for the Performance Chemicals business segment, regional, national or global political, economic, business, competitive, market and regulatory conditions, including the ongoing COVID-19 pandemic, tariffs and trade disputes, currency exchange rates and other factors, including those described in the sections titled “Risk Factors” and “Management Discussion & Analysis of Financial Condition and Results of Operations” in our filings with the SEC, which are available on the SEC’s website at www.sec.gov. These forward-looking statements speak only as of the date of this presentation. Factors or events that could cause actual results to differ may emerge from time to time, and it is not possible for us to predict all of them. We undertake no obligation to update any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by applicable law.

Non-GAAP Financial Measures





This presentation includes certain non-GAAP financial measures, including adjusted EBITDA, and adjusted EBITDA margin, adjusted free cash flow, which are provided to assist in an understanding of our business and its performance. These non-GAAP financial measures should be considered only as supplemental to, and not as superior to, financial measures prepared in accordance with GAAP. Non-GAAP financial measures should be read only in conjunction with consolidated financials prepared in accordance with GAAP. Reconciliations of non-GAAP measures to the relevant GAAP measures are provided in the appendix of this presentation.

The Company is not able to provide a reconciliation of the Company’s non-GAAP financial guidance to the corresponding GAAP measures without unreasonable effort because of the inherent difficulty in forecasting and quantifying certain amounts necessary for such a reconciliation such as certain non-cash, nonrecurring or other items that are included in net income and EBITDA as well as the related tax impacts of these items and asset dispositions / acquisitions and changes in foreign currency exchange rates that are included in cash flow, due to the uncertainty and variability of the nature and amount of these future charges and costs.

Zeolyst Joint Venture

Zeolyst International and Zeolyst C.V. (our 50% owned joint ventures that we refer to collectively as our “Zeolyst Joint Venture”) are accounted for as an equity method investment in accordance with GAAP. The presentation of our Zeolyst Joint Venture’s sales in this presentation represents 50% of the sales of our Zeolyst Joint Venture. We do not record sales by our Zeolyst Joint Venture as revenue and such sales are not consolidated within our results of operations. However, our Adjusted EBITDA reflects our share of the earnings of our Zeolyst Joint Venture that have been recorded as equity in net income from affiliated companies in our consolidated statements of income for such periods and includes Zeolyst Joint Venture adjustments on a proportionate basis based on our 50% ownership interest. Accordingly, our Adjusted EBITDA margins are calculated including 50% of the sales of our Zeolyst Joint Venture for the relevant periods in the denominator.

OUR DIVERSIFIED SPECIALTY BUSINESSES

| FUTURE FOCUSED PORTFOLIO | | | | DIVESTITURE AGREED | | STRATEGIC REVIEW UNDERWAY | |
|---|--|--|--|--|--|---|--|
|  REFINING SERVICES | |  CATALYSTS¹ | |  PERFORMANCE MATERIALS | |  PERFORMANCE CHEMICALS | |
| Increased octane demand <ul style="list-style-type: none">○ Sulfuric acid production expertise○ Recycling of spent refinery acid catalyst○ End-to-end logistics & services | | Tighter fuels standards Light weighting demand <ul style="list-style-type: none">○ Tailored catalyst solutions○ Emission control solutions | | Higher highway safety standards <ul style="list-style-type: none">○ ~100 year glass technology leader | | Environmentally driven consumer demand <ul style="list-style-type: none">○ Silicate/Zeolite innovation○ Tailored product sizing and coating | |
| 2019 PERFORMANCE ² | | | | | | | |
| Sales (\$mm) | | Sales (\$mm) | | Sales (\$mm) | | Sales (\$mm) | |
| 447.1 | | Silica Catalysts Zeolyst JV | | 363.0 | | 685.1 | |
| | | 85.7 170.3 | | | | | |
| Adjusted EBITDA (\$mm) | | Adjusted EBITDA (\$mm) | | Adjusted EBITDA (\$mm) | | Adjusted EBITDA (\$mm) | |
| 175.6 | | 107.8 | | 76.7 | | 154.3 | |
| | | | | | | | |
| Adjusted EBITDA Margin | | Adjusted EBITDA Margin³ | | Adjusted EBITDA Margin | | Adjusted EBITDA Margin | |
| ~39% | | ~42% | | ~21% | | ~23% | |
| LONG TERM GROWTH DRIVERS | | | | | | | |
| <ul style="list-style-type: none">○ Demand for higher octane gasoline○ Rising gasoline exports | | <ul style="list-style-type: none">○ Broader adoption of industrial emissions standards○ Tightening vehicle emission standards○ Trend for lighter and stronger plastics | | <ul style="list-style-type: none">○ Steady highway demand○ Higher safety regulations○ Light weighting & materials substitution | | <ul style="list-style-type: none">○ Shifting consumer preferences○ Regulation driven substitution○ Higher performance standards | |

PQ'S *SIMPLER* + *STRONGER* STRATEGY

EVALUATION – 2018

SIMPLIFICATION – 2019

TRANSFORMATION – 2020

PATHWAY

- ✦ Delayed and reorganized into four distinct businesses
- ✦ Optimized the performance and positioning of our businesses, including cash
- ✦ Reduced capital intensity
- ✦ Continued active portfolio management

GOALS

- ✦ Enhance growth rate
- ✦ Achieve higher and sustainable Adjusted EBITDA margins
- ✦ Maintain strong cash conversion
- ✦ Balance debt reduction with return of cash to shareholders

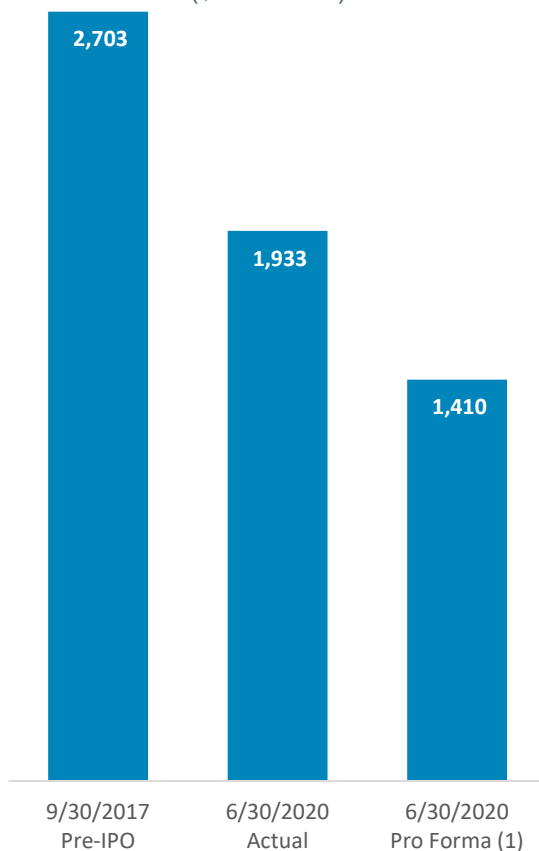
TRANSACTION OVERVIEW

- PQ taking most definitive step yet to transform portfolio to higher-growth, higher-margin company
- Enters definitive agreement to sell Performance Materials to an affiliate of The Jordan Company, L.P. (“TJC”) for \$650 million
 - Expected to close by year end 2020; subject to regulatory approvals
- Represents attractive valuation multiple of ~8.7x LTM June 30, 2020 Adjusted EBITDA¹
 - Premium of 0.8x to PQ’s current 2020 trading multiple, suggesting sum of the parts is greater than the whole
- Significant milestone aligned with PQ’s Simpler + Stronger strategy

EXPANDING CAPITAL ALLOCATION PRIORITIES

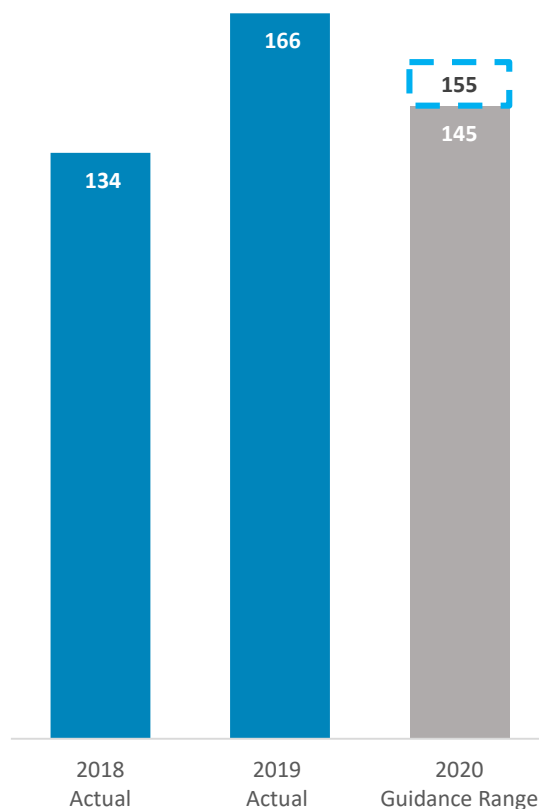
SIGNIFICANT DEBT REDUCTION...

(\$ in millions)



CONSISTENT ADJUSTED FREE CASH FLOW GENERATION²...

(\$ in millions)

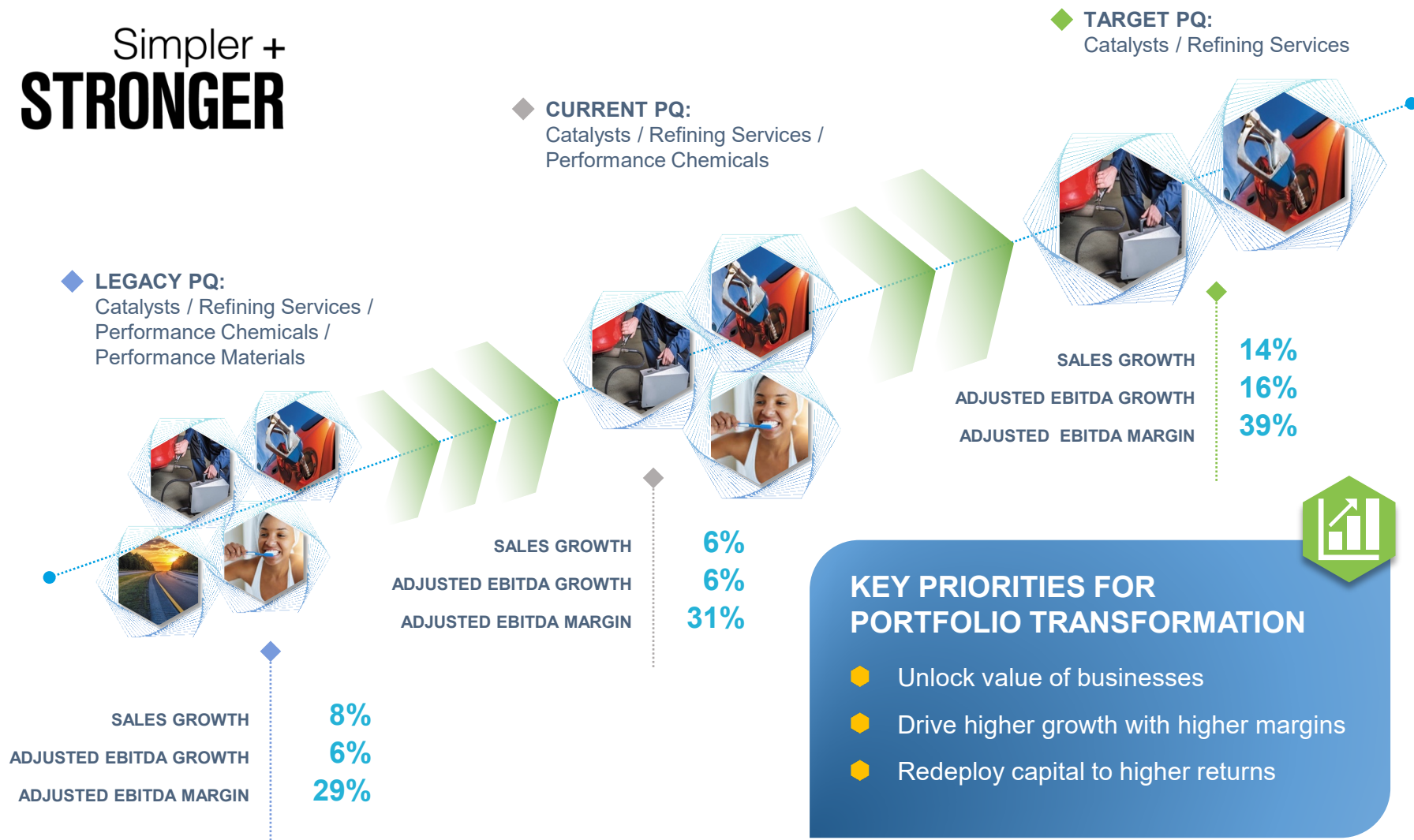


TRANSACTION AND CASH GENERATION PROVIDE USE OF PROCEEDS FLEXIBILITY...

- Expect to reduce debt by ~\$460 million
- Targeting special dividend of up to \$250 million, or \$1.84 per share, subject to board approval and declaration
- Will consider opportunistic dividends going forward

PORTFOLIO SHIFTS TO HIGHER GROWTH AND MARGINS

Simpler +
STRONGER



NEXT PORTFOLIO FOCUS: PERFORMANCE CHEMICALS



PERFORMANCE CHEMICALS

KEY CUSTOMERS

Diverse Consumer Product and Industrial Product manufacturers

COMPETITIVE STRENGTHS

- Technology leader in silica-based materials (process and product application)
- Largest global sodium silicates supplier, at least 2x larger than nearest competitor
- 50+ year customer relationships

GROWTH DRIVERS

- \$10 to \$15 million Adjusted EBITDA annualized improvement from ongoing operational transformation by late 2021
- Demand increase from industrial recovery in 2021/2022
- Positioned to capture more high margin sales
- M&A opportunities for adjacencies and vertical integration



Simplifies the portfolio



Allows capital to be allocated to higher growth businesses



Sharpens focus on dynamic polymer and refining industries

UNLOCKING THE VALUE WITHIN PQ

TODAY'S ANNOUNCEMENT

Definitive agreement to sell Performance Materials to TJC for \$650 million

Most significant step to date in transforming the PQ portfolio

TRANSACTION VALUATION

Attractive valuation multiple of 8.7x LTM June 30, 2020 pro forma Adjusted EBITDA

Demonstrates disconnect in portfolio valuation

TARGETED USE OF PROCEEDS

~\$460 million debt reduction and up to \$250 million, or \$1.84 per share, dividend to shareholders

Balances debt reduction with return of cash to shareholders

NEXT STEPS

Complete strategic review for Performance Chemicals

Reshape portfolio for higher growth, margins and cash conversion

APPENDIX



ANNUAL SEGMENT SALES, ADJUSTED EBITDA AND MARGINS

| (\$ in millions except %, unaudited) | Year Ended December 31, | | |
|---|----------------------------|----------------|----------------|
| | 2019 | 2018 | 2017 |
| Sales: | | | |
| Refining Services | 447.1 | 455.6 | 398.4 |
| Silica Catalysts | 85.7 | 72.1 | 75.3 |
| Performance Materials | 363.0 | 378.3 | 324.2 |
| Performance Chemicals | 685.1 | 717.3 | 687.6 |
| Eliminations | (13.8) | (15.1) | (13.4) |
| Total sales | 1,567.1 | 1,608.2 | 1,472.1 |
| Zeolyst joint venture sales | 170.3 | 156.7 | 143.8 |
| Adjusted EBITDA: | | | |
| Refining Services | 175.6 | 176.5 | 154.2 |
| Catalysts | 107.8 | 81.1 | 89.4 |
| Performance Materials | 76.7 | 72.5 | 69.7 |
| Performance Chemicals | 154.3 | 170.9 | 170.5 |
| Total Segment Adjusted EBITDA | 514.4 | 501.0 | 483.8 |
| Corporate | (40.1) | (37.0) | (30.5) |
| Total Adjusted EBITDA | 474.3 | 464.0 | 453.3 |
| Adjusted EBITDA Margin: | | | |
| Refining Services | 39.3% | 38.7% | 38.7% |
| Catalysts ¹ | 42.1% | 35.4% | 40.8% |
| Performance Materials | 21.1% | 19.2% | 21.5% |
| Performance Chemicals | 22.5% | 23.8% | 24.8% |
| Total Adjusted EBITDA Margin¹ | 27.3% | 26.3% | 28.1% |

RECONCILIATION FOR ADJUSTED FREE CASH FLOW

| (\$ in millions) | Full Year 2019 | Full Year 2018 | Full Year 2017 |
|---|-------------------|-------------------|-------------------|
| Cash Flow from Operations before interest and tax | 401.9 | 377.5 | 364.5 |
| Less: | | | |
| Cash paid for taxes | 17.4 | 23.8 | 29.2 |
| Cash paid for interest ¹ | 116.8 | 105.1 | 170.1 |
| Cash Flow from Operations | 267.7 | 248.6 | 165.2 |
| Less: Purchases of property, plant and equipment ² | 127.6 | 131.7 | 140.5 |
| Free Cash Flow | 140.1 | 116.9 | 24.7 |
| Plus: Proceeds from sale of assets | 17.6 | 12.4 | - |
| Plus: Net interest proceeds on currency swaps | 8.5 | 4.9 | - |
| Adjusted Free Cash Flow | 166.2 | 134.2 | 24.7 |

RECONCILIATION FOR NET INCOME TO SEGMENT ADJUSTED EBITDA

| (\$ in millions) | Year Ended December 31, 2019 | Year Ended December 31, 2018 | Year Ended December 31, 2017 |
|---|------------------------------------|------------------------------------|------------------------------------|
| Reconciliation of net income attributable to PQ Group Holdings Inc. to Segment Adjusted EBITDA | | | |
| Net income attributable to PQ Group Holdings Inc. | 79.5 | 58.3 | 57.6 |
| Provision for (benefit from) income taxes | 40.7 | 29.0 | (119.2) |
| Interest expense | 111.5 | 113.7 | 179.0 |
| Depreciation and amortization | 182.1 | 185.2 | 177.1 |
| EBITDA | 413.8 | 386.2 | 294.5 |
| Joint venture depreciation, amortization and interest ^a | 14.7 | 12.6 | 11.1 |
| Amortization of investment in affiliate step-up ^b | 7.5 | 6.6 | 8.6 |
| Amortization of inventory step-up ^c | — | 1.6 | 0.9 |
| Impairment of intangible assets | 1.6 | — | — |
| Debt extinguishment costs | 3.4 | 7.8 | 61.9 |
| Net loss (gain) on asset disposals ^d | (13.1) | 6.6 | 5.8 |
| Foreign currency exchange (gain) loss ^e | 2.8 | 13.8 | 25.8 |
| LIFO expense ^f | 11.1 | 8.4 | 3.7 |
| Management advisory fees ^g | — | — | 3.8 |
| Transaction and other related costs ^h | 3.6 | 0.9 | 7.4 |
| Equity-based compensation | 18.2 | 19.5 | 8.8 |
| Restructuring, integration and business optimization expenses ⁱ | 4.1 | 14.0 | 13.2 |
| Defined benefit plan pension cost (benefit) ^j | 3.1 | (0.8) | 2.9 |
| Gain on contract termination ^k | — | (20.6) | — |
| Other ^l | 3.5 | 7.4 | 4.9 |
| Adjusted EBITDA | 474.3 | 464.0 | 453.3 |
| Unallocated corporate costs | 40.1 | 37.0 | 30.5 |
| Total Segment Adjusted EBITDA¹ | 514.4 | 501.0 | 483.8 |
| EBITDA Adjustments by Line Item | | | |
| EBITDA | 413.8 | 386.2 | 294.5 |
| Cost of goods sold | 13.0 | 16.3 | 7.9 |
| Selling, general and administrative expenses | 21.6 | 23.0 | 13.2 |
| Other operating expense (income), net | — | (0.9) | 31.5 |
| Equity in net (income) from affiliated companies | 7.7 | 6.6 | 8.6 |
| Other expense (income), net ² | 3.5 | 20.2 | 86.5 |
| Joint venture depreciation, amortization and interest ^a | 14.7 | 12.6 | 11.1 |
| Adjusted EBITDA | 474.3 | 464.0 | 453.3 |

DESCRIPTIONS TO NON-GAAP RECONCILIATION

- a) We use Adjusted EBITDA as a performance measure to evaluate our financial results. Because our Catalysts segment includes our 50% interest in the Zeolyst Joint Venture, we include an adjustment for our 50% proportionate share of depreciation, amortization and interest expense of the Zeolyst Joint Venture.
- b) Represents the amortization of the fair value adjustments associated with the equity affiliate investment in the Zeolyst Joint Venture as a result of the combination of the businesses of PQ Holdings Inc. and Eco Services Operations LLC in May 2016 (the "Business Combination"). We determined the fair value of the equity affiliate investment and the fair value step-up was then attributed to the underlying assets of the Zeolyst Joint Venture. Amortization is primarily related to the fair value adjustments associated with inventory, fixed assets and intangible assets, including customer relationships and technical know-how.
- c) As a result of the Sovitec acquisition and the Business Combination, there was a step-up in the fair value of inventory, which is amortized through cost of goods sold in the statements of income.
- d) When asset disposals occur, we remove the impact of net gain/loss of the disposed asset because such impact primarily reflects the non-cash write-off of long-lived assets no longer in use. During the year ended December 31, 2019, the net gain on asset disposals includes the gains related to the sale of a non-core product line and sale of property.
- e) Reflects the exclusion of the foreign currency transaction gains and losses in the statements of income primarily related to the non-permanent intercompany debt denominated in local currency translated to U.S. dollars and, during 2018 and 2017, the Euro-denominated term loan (which was settled as part of the February 2018 term loan refinancing).
- f) Represents non-cash adjustments to the Company's LIFO reserves for certain inventories in the U.S. that are valued using the LIFO method, which we believe provides a means of comparison to other companies that may not use the same basis of accounting for inventories.
- g) Reflects consulting fees paid to CCMP and affiliates of INEOS for consulting services that include certain financial advisory and management services. These consulting agreements were terminated upon completion of our initial public offering ("IPO") on October 3, 2017.
- h) Represents the costs related to several transactions that are completed, pending or abandoned and that we believe are not representative of our ongoing business operations.
- i) Includes the impact of restructuring, integration and business optimization expenses which are incremental costs that are not representative of our ongoing business operations.
- j) Represents adjustments for defined benefit pension plan costs in our statements of income. More than two-thirds of our defined benefit pension plan obligations are under defined benefit pension plans that are frozen, and the remaining obligations primarily relate to plans operated in certain of our non-U.S. locations that, pursuant to jurisdictional requirements, cannot be frozen. As such, we do not view such expenses as core to our ongoing business operations.
- k) Represents a non-cash gain on the write-off of the remaining liability under a contractual supply arrangement. As part of the acquisition by Eco Services Operations LLC of substantially all of the assets of Solvay USA Inc.'s sulfuric acid refining business unit on December 1, 2014, we recognized a liability as part of business combination accounting related to our obligation to serve a customer under a pre-existing unfavorable supply agreement. In December 2018, the customer who was party to the agreement closed its facility, and as a result, we were relieved from our obligation to continue to supply the customer on the below market contract. Because the fair value of the unfavorable contract liability was recognized as part of the application of business combination accounting, and since the write-off of the remaining liability was non-cash in nature, we believe this gain is a special item that is not representative of our ongoing business operations.
- l) Other costs consist of certain expenses that are not core to our ongoing business operations, including environmental remediation-related costs associated with the legacy operations of our business prior to the Business Combination, capital and franchise taxes, non-cash asset retirement obligation accretion and the initial implementation of procedures to comply with Section 404 of the Sarbanes-Oxley Act. Included in this line-item are rounding discrepancies that may arise from rounding from dollars (in thousands) to dollars (in millions).



Shaping
our path for a
sustainable
future

