



Fourth Quarter and Year 2017

March 21, 2018 – 10:00 AM ET



INVESTOR PRESENTATION

LEGAL DISCLAIMER

Forward-Looking Statements

Some of the information contained in this presentation, the conference call during which this presentation is reviewed and any discussions that follow 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 our results of operations, financial condition, liquidity, prospects, growth, strategies, product and service offerings and 2018 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, regional, national or global political, economic, business, competitive, market and regulatory conditions, 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. Any forward-looking statement made by us in this presentation, the conference call during which this presentation is reviewed and any discussions that follow speaks only as of the date on which it is made. Factors or events that could cause our 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.

Certain supply share statistics included in this presentation, including our estimated supply share positions, are based on management estimates.

Non-GAAP Financial Measures

This presentation includes certain non-GAAP financial measures, including Adjusted EBITDA, Adjusted EBITDA margin, adjusted net income, adjusted EPS adjusted diluted EPS, and 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 both in the appendix of this presentation and in our SEC filings.

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, including transaction and restructuring related, that are included in net income and EBITDA as well as the related tax impacts of these items, due to the uncertainty and variability of the nature and amount of these future charges and costs.

Business Combination

On May 4, 2016, we consummated a series of transactions (the “Business Combination”) to reorganize and combine the businesses of PQ Holdings Inc. and Eco Services Operations LLC under a new holding company, PQ Group Holdings Inc. In this presentation, we present pro forma information for the year ended December 31, 2016, which gives effect to the Business Combination and the related financing transactions as if they occurred on January 1, 2015. Such information is illustrative and not intended to represent what our results of operations would have been had the Business Combination and related financing transactions occurred at any time prior to May 4, 2016 or to project our results of operations for any future period. Such information may not be comparable to, or indicative of, future performance.

Zeolyst Joint Venture

Our zeolite catalysts product group operates through Zeolyst International and Zeolyst C.V. (our 50% owned joint ventures that we refer to collectively as our “Zeolyst Joint Venture”), which we account for as an equity method investment in accordance with GAAP. The presentation of our Zeolyst Joint Venture’s total net sales in this presentation represents 50% of the total net 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 operations 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 total net sales of our Zeolyst Joint Venture for the relevant periods in the denominator.

PQ INVESTMENT HIGHLIGHTS

Leading Global Producer of Specialty Catalysts & Services, Specialty Materials & Chemicals

- 🟡 #1 and #2 positions in nearly all product lines
- 🟡 GDP+ growth
- 🟡 Input cost small as % of customer total product cost
- 🟡 High margin environmentally friendly applications
- 🟡 Track record of innovation
- 🟡 Strong sustainable free cash flows

39%^{1,2}

2017 Adjusted EBITDA margin

24%¹

ENVIRONMENTAL CATALYSTS & SERVICES (EC&S)



REFINING SERVICES



SILICA CATALYST



ZEOLYST JV

PERFORMANCE MATERIALS & CHEMICALS (PM&C)



PERFORMANCE CHEMICALS



PERFORMANCE MATERIALS

2017 – STRONG FINANCIAL PERFORMANCE LEADS TO RECORD YEAR

- ◆ **Financial results improved year-over-year and exceeded our guidance**
 - Q4 Sales up 10.9% Y-o-Y and Adjusted EBITDA up 10.3%
 - 2017 Sales up 4.9% Y-o-Y, Adjusted EBITDA up 7.7% and margins expanded 70bps to 28.1%
- ◆ **Reduced leverage by 1x to 4.9x Net Debt/Adjusted EBITDA; Positioned for significant free cash flow growth**
 - ~\$2.0bn debt payment and refinancing since IPO extending maturities to 2025
 - Cash interest now ~\$90 million lower than pre-IPO levels
- ◆ **Completed and integrated Sovitec acquisition to grow highway safety business in Europe and Latin America**
- ◆ **Team is executing at high levels across the business**

2018 – POSITIONED FOR GROWTH AND SIGNIFICANT CASH FLOW

OUR GOALS:

◆ Deliver industry leading financial results

- Sales growth of 5% to 7%, Adjusted EBITDA growth of 4% to 8% with sustained high margins
- Free cash flow of \$120 million to \$140 million; ~\$55 million benefit from reduced cash interest

◆ Consistent capital allocation

- Pay down debt targeting 3.0x to 3.5x net debt to Adjusted EBITDA
- Invest in organic high growth projects and selective accretive tuck-in acquisitions

◆ Accelerate our innovation product pipeline



2017 FINANCIAL HIGHLIGHTS

Growth Across Our Key End Markets

| (\$ in millions) | Fourth Quarter 2017 | Fourth Quarter 2016 | % Change | Full Year 2017 | Full Year Pro Forma 2016 | % Change |
|-------------------------------------|---------------------|---------------------|----------|----------------|--------------------------|----------|
| Sales | 358.1 | 322.8 | 10.9% | 1,472.1 | 1,403.0 | 4.9% |
| Adjusted EBITDA | 109.4 | 99.2 | 10.3% | 453.3 | 420.8 | 7.7% |
| Adjusted EBITDA Margin ¹ | 27.3% | 26.9% | 40 bps | 28.1% | 27.4% | 70 bps |



ENVIRONMENTAL CATALYSTS & SERVICES PERFORMANCE HIGHLIGHTS

Continued Robust Demand for Fuel and Emissions Controls

| (\$ in millions) | Fourth Quarter 2017 | Fourth Quarter 2016 | % Change | Full Year 2017 | Full Year Pro Forma 2016 | % Change |
|---|---------------------|---------------------|------------------|----------------|--------------------------|----------------|
| Sales | | | | | | |
| PQ | 122.9 | 114.3 | 7.5% | 473.7 | 457.9 | 3.5% |
| Zeolyst JV | 42.8 | 46.0 | (7.0%) | 143.8 | 131.3 | 9.5% |
| Adjusted EBITDA | 61.0 | 61.8 | (1.3%) | 243.6 | 221.8 | 9.8% |
| Adjusted EBITDA Margin¹ | 36.8% | 38.6% | (180 bps) | 39.4% | 37.6% | 180 bps |

- Sales growth led by higher regeneration services pricing and strong demand for emission control and specialty catalysts
- Adjusted EBITDA rose nearly double-digit despite Hurricane Harvey impact
- Margins expanded to over 39%



PERFORMANCE MATERIALS & CHEMICALS PERFORMANCE HIGHLIGHTS

Diverse Product Group Drives Performance

| (\$ in millions) | Fourth Quarter 2017 | Fourth Quarter 2016 | % Change | | Full Year 2017 | Full Year Pro Forma 2016 | % Change |
|------------------------|---------------------|---------------------|----------|--|----------------|--------------------------|----------|
| Sales | 235.9 | 209.1 | 12.8% | | 1,001.8 | 947.2 | 5.8% |
| Adjusted EBITDA | 55.4 | 47.5 | 16.6% | | 240.2 | 231.8 | 3.6% |
| Adjusted EBITDA Margin | 23.5% | 22.7% | 80bps | | 24.0% | 24.5% | (50bps) |

- Sales rose on higher demand for sodium silicate and Sovitec acquisition
- Adjusted EBITDA improved on volume increases from a combination of organic and tuck-in acquisition
- Margins down slightly from ThermoDrop® start-up costs and mix in Performance Materials



GROWTH ACROSS ALL PRODUCT GROUPS

Expected in 2018

| SEGMENT | Environmental Catalysts & Services | | | Performance Materials & Chemicals | |
|--------------------|------------------------------------|---|---|---|----------------------------------|
| | Refining Services | Silica Catalyst | Zeolyst JV | Performance Chemicals | Performance Materials |
| KEY DEMAND DRIVERS | Increased Octane demand | Growth in lighter more durable plastics | More stringent emissions requirements for fuels | Environmentally friendly personal care products | Highway safety and road striping |
| 2018 OUTLOOK | ↑↑ | ↑↑ | ↑ | ↑ | ↑↑ |

2018 OUTLOOK

Expected Free Cash Flow of \$120 Million to \$140 Million

| (\$ in millions except %) | 2017 Actual | 2018 Outlook | Change |
|--|-------------|-------------------|----------------|
| Sales | \$1,472.1 | \$1,545 - \$1,575 | 5% - 7% |
| Adjusted EBITDA | \$453.3 | \$470 - \$490 | 4% - 8% |
| Free Cash Flow | (\$24.4) | \$120 - \$140 | ~\$145 - \$165 |
| Interest Expense | \$179.0 | \$120 - \$130 | (~\$50 - \$60) |
| Depreciation & Amortization ¹ | \$177.1 | \$175 - \$185 | |
| Capital Expenditures | \$140.5 | \$150 - \$155 | |
| Effective Tax Rate | NM | Mid 20% range | |



APPENDIX

SALES AND ADJUSTED EBITDA MAJOR CHANGE FACTORS

Fourth Quarter and Year 2017

SALES

| Sales (in \$ millions and %) | Three Months Ended December 31, 2017 | | | | | | Year Ended December 31, 2017 ¹ | | | | | |
|---------------------------------|---|-------------|--|------------|---|-------------|--|------------|--|------------|---|------------|
| | PQ Group Holdings Inc. | | Environmental Catalysts & Services | | Performance Materials & Chemicals | | PQ Group Holdings Inc. | | Environmental Catalysts & Services | | Performance Materials & Chemicals | |
| Sales: | \$ | % | \$ | % | \$ | % | \$ | % | \$ | % | \$ | % |
| Volume | 10.5 | 3.2 | (0.1) | (0.1) | 10.7 | 5.2 | 6.4 | 0.5 | (6.9) | (1.5) | 14.4 | 1.5 |
| Price/Mix | 7.8 | 2.4 | 8.0 | 7.0 | (0.2) | (0.1) | 32.0 | 2.3 | 23.0 | 5.1 | 9.1 | 1.0 |
| Acquisition | 9.1 | 2.8 | | | 9.1 | 4.3 | 26.3 | 1.9 | | | 26.3 | 2.8 |
| Foreign Exchange | 7.9 | 2.5 | 0.7 | 0.6 | 7.2 | 3.4 | 4.4 | 0.2 | (0.3) | (0.1) | 4.8 | 0.5 |
| Sales Change | 35.3 | 10.9 | 8.6 | 7.5 | 26.8 | 12.8 | 69.1 | 4.9 | 15.8 | 3.5 | 54.6 | 5.8 |

ADJUSTED EBITDA

| Adjusted EBITDA (in \$ millions and %) | Three Months Ended December 31, 2017 | | | | | | Year Ended December 31, 2017 ¹ | | | | | |
|---|---|-------------|--|--------------|---|-------------|--|------------|--|------------|---|------------|
| | PQ Group Holdings Inc. | | Environmental Catalysts & Services | | Performance Materials & Chemicals | | PQ Group Holdings Inc. | | Environmental Catalysts & Services | | Performance Materials & Chemicals | |
| Adjusted EBITDA: | \$ | % | \$ | % | \$ | % | \$ | % | \$ | % | \$ | % |
| Foreign Exchange | 2.3 | 2.3 | 0.2 | 0.3 | 2.0 | 4.2 | 1.0 | 0.2 | (0.3) | (0.1) | 1.4 | 0.6 |
| Volume/Mix | (1.1) | (1.1) | (7.5) | (12.2) | 6.4 | 13.5 | 10.1 | 2.4 | 0.6 | 0.3 | 9.6 | 4.1 |
| Price | 7.8 | 7.9 | 8.0 | 13.0 | (0.2) | (0.4) | 32.0 | 7.6 | 22.9 | 10.3 | 9.1 | 3.9 |
| Variable Cost | (6.7) | (6.8) | (5.1) | (8.3) | (1.6) | (3.4) | (20.1) | (4.8) | (6.7) | (3.0) | (13.8) | (5.9) |
| Acquisition | 2.3 | 2.3 | | | 2.3 | 4.8 | 4.9 | 1.2 | | | 4.9 | 2.1 |
| Other | 5.6 | 5.7 | 3.6 | 5.9 | (1.0) | (2.1) | 4.6 | 1.1 | 5.3 | 2.3 | (2.8) | (1.2) |
| Adjusted EBITDA Change | 10.2 | 10.3 | (0.8) | (1.3) | 7.9 | 16.6 | 32.5 | 7.7 | 21.8 | 9.8 | 8.4 | 3.6 |

QUARTERLY SEGMENT SALES AND ADJUSTED EBITDA

Year 2017

| (\$ in millions) | For the Quarter Ended | | | | Total 2017 |
|---|-----------------------|---------------|--------------------|-------------------|----------------|
| | March 31, 2017 | June 30, 2017 | September 30, 2017 | December 31, 2017 | |
| Sales: | | | | | |
| Silica Catalysts | 17.2 | 20.0 | 15.1 | 23.0 | 75.3 |
| Refining Services | 94.1 | 104.0 | 100.4 | 99.9 | 398.4 |
| Environmental Catalysts & Services | 111.3 | 124.0 | 115.5 | 122.9 | 473.7 |
| Performance Materials | 53.8 | 99.5 | 104.4 | 66.5 | 324.2 |
| Performance Chemicals | 171.0 | 169.0 | 175.5 | 172.1 | 687.6 |
| Eliminations | (2.1) | (2.4) | (2.8) | (2.7) | (10.0) |
| Performance Materials & Chemicals | 222.7 | 266.1 | 277.1 | 235.9 | 1,001.8 |
| Inter-segment sales eliminations | (1.1) | (0.8) | (0.8) | (0.7) | (3.4) |
| Total sales | 332.9 | 389.3 | 391.8 | 358.1 | 1,472.1 |
| Zeolyst International sales | 32.7 | 30.7 | 37.6 | 42.8 | 143.8 |
| Adjusted EBITDA: | | | | | |
| Environmental Catalysts & Services | 56.4 | 64.3 | 61.9 | 61.0 | 243.6 |
| Performance Materials & Chemicals | 52.6 | 66.3 | 65.9 | 55.4 | 240.2 |
| Total Segment Adjusted EBITDA | 109.0 | 130.6 | 127.8 | 116.4 | 483.8 |
| Corporate | (7.7) | (7.9) | (7.9) | (7.0) | (30.5) |
| Total Adjusted EBITDA | 101.3 | 122.7 | 119.9 | 109.4 | 453.3 |
| Adjusted EBITDA Margin: | | | | | |
| Environmental Catalysts & Services ¹ | 39.2% | 41.6% | 40.4% | 36.8% | 39.4% |
| Performance Materials & Chemicals | 23.6% | 24.9% | 23.8% | 23.5% | 24.0% |
| Total Adjusted EBITDA Margin¹ | 27.7% | 29.2% | 27.9% | 27.3% | 28.1% |

DEBT AND FREE CASH FLOW

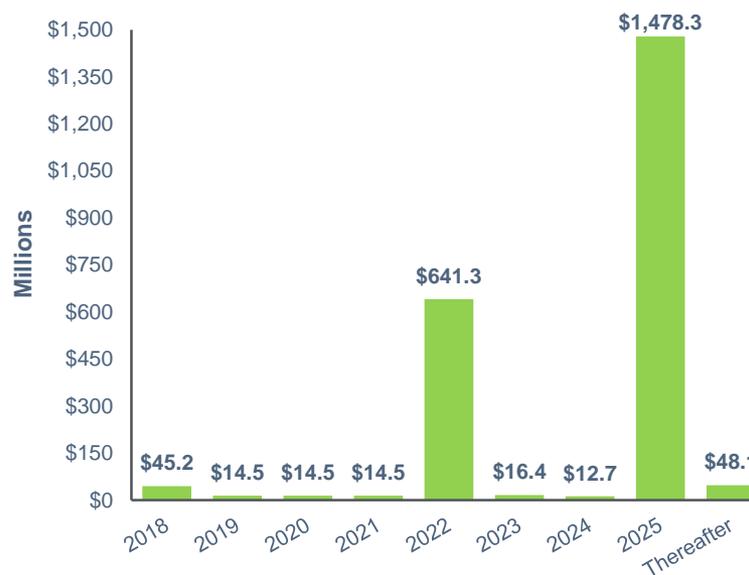
2017 Overview

| Capitalization (in millions) | Year 2017 | Pro-Forma 2017 ¹ |
|---|----------------|--------------------------------|
| Debt: | | |
| ABL Revolving Credit Facility | 25.0 | 25.0 |
| USD First Lien Term Loan | 916.2 | – |
| EUR First Lien Term Loan | 335.8 | – |
| New USD First Lien Term Loan | – | 1,267.0 |
| First Lien Secured Notes | 625.0 | 625.0 |
| Total First Lien Debt | 1,902.0 | 1,917.0 |
| Senior Unsecured Notes | 300.0 | 300.0 |
| Other debt | 68.3 | 68.3 |
| Total Debt | 2,270.3 | 2,285.3 |
| Cash | 66.2 | 66.2 |
| Net Debt | 2,204.1 | 2,219.1 |
| Net Debt/Adjusted EBITDA² | | 4.9x |

| Cash Flow (\$ in millions) | 2017 Actual |
|--|----------------|
| Cash Flow from Operations before Interest and Tax | 315.4 |
| Less: | |
| Cash paid for taxes | (29.2) |
| Cash paid for interest | (170.1) |
| Cash Flow from Operations | 116.1 |
| Less: Capital Investments ^{3,4} | (140.5) |
| Free Cash Flow | (24.4) |

- Lowered cost of debt to ~4.5%
- Flexibility to accelerate debt repayment without penalty
- Extended maturities and lowered interest costs
- Completed swaps to hedge foreign currency risk

PRO FORMA¹ DEBT MATURITY SCHEDULE



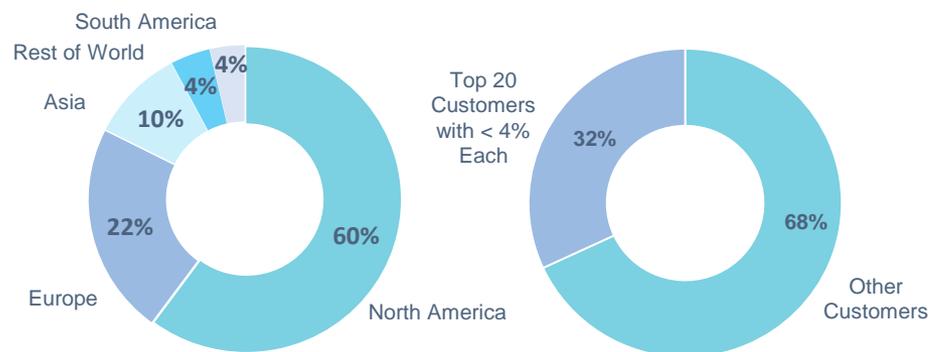
2017 SUPPLEMENTAL INFORMATION

Capital Expenditures, Revenues by End Use, Customer and Region

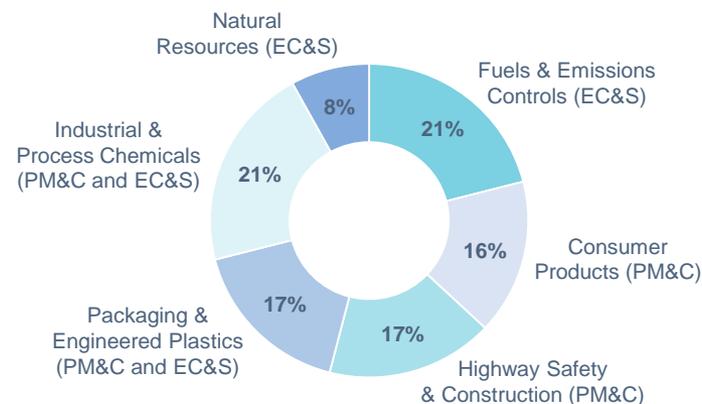
| CAPITAL EXPENDITURES (\$ in millions) | Full Year 2017 | Pro Forma Full Year 2016 |
|---|-------------------|--------------------------------|
| By Segment | | |
| Performance Materials & Chemicals | 84.8 | 92.1 |
| Environmental Catalysts & Services ¹ | 53.1 | 59.9 |
| Corporate & Adjustments | 2.6 | 6.1 |
| Total Capital Expenditures | 140.5 | 158.0 |
| Maintenance ² | 113.8 | 117.1 |
| Expansion | 26.7 | 41.0 |
| Total | 140.5 | 158.0 |

| % SALES GROWTH BY END USE ² | |
|--|-------|
| Fuels & Emissions Controls | + 10% |
| Highway Safety & Construction | + 8% |
| Industrial & Process Chemicals | + 4% |
| Natural Resources | + 3% |
| Consumer Products | + 1% |
| Packaging & Engineered Plastics | + 4% |

**% SALES AND ZEOLYST JV TOTAL NET SALES:
BY REGION AND CUSTOMER²**



**% SALES AND ZEOLYST JV NET SALES:
BY END USE²**



RECONCILIATION OF NON-GAAP FINANCIAL MEASURES

Net Income (Loss) to Segment Adjusted EBITDA

| (\$ in millions) | Historical | | | Historical | | Historical | Pro Forma |
|--|-------------------|--|-----------------------|--|--------------|------------------------------------|--------------|
| | March 31, 2017 | Three Months Ended June 30, 2017 | September 30, 2017 | Three Months Ended December 31, 2017 | 2016 | Year ended December 31, 2017 | 2016 |
| Reconciliation of net income (loss) attributable to PQ Group Holdings Inc. to Segment Adjusted EBITDA | | | | | | | |
| Net income (loss) attributable to PQ Group Holdings Inc. | (2.5) | (1.5) | (3.4) | 65.0 | 10.7 | 57.6 | (59.0) |
| Provision for (benefit from) income taxes | (2.9) | 3.0 | 5.2 | (124.5) | (26.0) | (119.2) | 58.0 |
| Interest expense | 46.8 | 48.1 | 49.1 | 35.0 | 45.9 | 179.0 | 187.9 |
| Depreciation and amortization | 40.6 | 42.6 | 45.9 | 48.0 | 42.7 | 177.1 | 165.8 |
| EBITDA | 82.0 | 92.2 | 96.8 | 23.5 | 73.3 | 294.5 | 352.7 |
| Joint venture depreciation, amortization and interest ^a | 2.6 | 2.9 | 2.6 | 3.0 | 2.4 | 11.1 | 10.3 |
| Amortization of investment in affiliate step-up ^b | 3.5 | 1.7 | 1.7 | 1.7 | 11.7 | 8.6 | 5.8 |
| Amortization of inventory step-up ^c | 0.9 | — | — | — | 5.6 | 0.9 | 4.9 |
| Impairment of fixed assets, intangibles and goodwill | — | — | — | — | 6.9 | — | 6.9 |
| Debt extinguishment costs | — | — | 0.5 | 61.4 | 1.9 | 61.9 | 1.8 |
| Net loss on asset disposals ^d | 0.3 | 2.6 | 3.5 | (0.6) | 1.9 | 5.8 | 4.8 |
| Foreign currency exchange loss ^e | 2.0 | 14.3 | 5.3 | 4.2 | (9.8) | 25.8 | (9.0) |
| Non-cash revaluation of inventory, including LIFO | 2.4 | — | 0.8 | 0.5 | 0.5 | 3.7 | 1.3 |
| Management advisory fees ^f | 1.3 | 1.2 | 1.3 | — | 1.3 | 3.8 | 5.3 |
| Transaction related costs ^g | 1.4 | 2.9 | 1.0 | 2.1 | (1.5) | 7.4 | 2.6 |
| Equity-based and other non-cash compensation | 1.7 | 1.2 | 1.0 | 4.9 | 2.1 | 8.8 | 6.5 |
| Restructuring, integration and business optimization expenses ^h | 1.7 | 1.3 | 5.0 | 5.2 | 1.7 | 13.2 | 17.9 |
| Defined benefit plan pension cost ⁱ | 0.7 | 0.7 | 0.8 | 0.7 | (1.2) | 2.9 | 2.8 |
| Other ^j | 0.8 | 1.7 | (0.4) | 2.8 | 2.4 | 4.9 | 6.2 |
| Adjusted EBITDA | 101.3 | 122.7 | 119.9 | 109.4 | 99.2 | 453.3 | 420.8 |
| Unallocated corporate costs | 7.7 | 7.9 | 7.9 | 7.0 | 10.1 | 30.5 | 32.8 |
| Total Segment Adjusted EBITDA | 109.0 | 130.6 | 127.8 | 116.4 | 109.3 | 483.8 | 453.6 |
| EBITDA Adjustments by Line Item | | | | | | | |
| EBITDA | 82.0 | 92.2 | 96.8 | 23.5 | 73.3 | 294.5 | 352.7 |
| Cost of goods sold | 4.0 | 0.7 | 2.2 | 1.0 | 6.6 | 7.9 | 8.9 |
| Selling, general and administrative expenses | 2.0 | 2.0 | 1.9 | 5.7 | 1.9 | 11.6 | 9.3 |
| Other operating expense, net | 4.7 | 9.0 | 9.1 | 8.7 | 12.5 | 31.5 | 41.1 |
| Equity in net (income) loss from affiliated companies | 3.5 | 1.7 | 1.7 | 1.7 | 11.7 | 8.6 | 5.8 |
| Other expense (income), net ¹ | 2.5 | 14.2 | 5.6 | 65.8 | (9.2) | 88.1 | (7.3) |
| Joint venture depreciation, amortization and interest(a) | 2.6 | 2.9 | 2.6 | 3.0 | 2.4 | 11.1 | 10.3 |
| Adjusted EBITDA | 101.3 | 122.7 | 119.9 | 109.4 | 99.2 | 453.3 | 420.8 |

RECONCILIATION OF NON-GAAP FINANCIAL MEASURES

Net Income to Adjusted Net Income

| (\$ in millions) | Historical Three Months Ended December 31, | | Historical | Pro Forma |
|--|--|-------------|------------------------------------|---------------|
| | 2017 | 2016 | Year ended December 31, 2017 | 2016 |
| Reconciliation of net income (loss) attributable to PQ Group Holdings Inc. to Adjusted Net Income (Loss) ¹ | | | | |
| Net income (loss) attributable to PQ Group Holdings Inc. | 65.0 | 10.7 | 57.6 | (59.0) |
| Amortization of investment in affiliate step-up ^b | 2.5 | 7.2 | 6.5 | 3.6 |
| Amortization of inventory step-up ^c | 0.1 | 3.7 | 0.6 | 3.0 |
| Impairment of fixed assets, intangibles and goodwill | — | 4.3 | — | 4.3 |
| Debt extinguishment costs | 46.1 | 1.2 | 46.4 | 1.1 |
| Net loss on asset disposals ^d | 0.2 | 1.2 | 3.9 | 3.1 |
| Foreign currency exchange loss ^e | 1.2 | (1.6) | 16.1 | (1.6) |
| Non-cash revaluation of inventory, including LIFO | 0.9 | 0.3 | 2.8 | 0.8 |
| Management advisory fees ^f | 0.6 | 0.8 | 2.8 | 3.3 |
| Transaction related costs ^g | 2.5 | (1.0) | 5.6 | 1.5 |
| Equity-based and other non-cash compensation | 4.4 | 1.3 | 6.6 | 4.0 |
| Restructuring, integration and business optimization expenses ^h | 3.0 | 1.2 | 7.6 | 11.4 |
| Defined benefit plan pension cost ⁱ | 0.7 | (0.7) | 2.0 | 2.0 |
| Other ^j | 4.7 | 1.6 | 5.9 | 3.8 |
| Adjusted Net Income (Loss) | 131.9 | 30.2 | 164.4 | (18.7) |
| Impact of tax reform ² | (106.5) | | (106.5) | |
| Adjusted Net Income (Loss), excluding tax reform | 25.4 | | 57.9 | |
| Adjusted Net Income (Loss) per share: | | | | |
| Basic income (loss) per share | 0.19 | 0.29 | 0.52 | NM |
| Diluted income (loss) per share | 0.19 | 0.29 | 0.52 | NM |
| Weighted average shares outstanding: | | | | |
| Basic | 133.1 | 103.9 | 111.3 | NM |
| Diluted | 133.9 | 103.9 | 111.7 | NM |

- (1) The adjustments to net income (loss) to PQ Group Holdings are shown net of applicable taxes
- (2) Represents the provisional benefit of \$89.5 million for the impact of the U.S. Tax Cuts and Jobs Act of 2017 recorded in Net Income and an additional \$17.0mm related to the tax reform impact on the adjustments to Net income.

RECONCILIATION OF NON-GAAP FINANCIAL MEASURES

Descriptions to PQ Non-GAAP Reconciliations

Descriptions to PQ Non-GAAP Reconciliations

- a) We use Adjusted EBITDA, adjusted net income, and adjusted basic and diluted EPS, as a performance measure to evaluate our financial results. Because our environmental catalysts and services segment includes our 50% interest in our Zeolyst Joint Venture, we include an adjustment for our 50% proportionate share of depreciation, amortization and interest expense of our Zeolyst Joint Venture.
- b) Represents the amortization of the fair value adjustments associated with the equity affiliate investment in our Zeolyst Joint Venture as a result of 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 our Zeolyst Joint Venture. Amortization is primarily related to the fair value adjustments associated with inventory, fixed assets and intangible assets, such as customer relationships, formulations and product technology.
- c) As a result of the Business Combination, there was a step-up in the fair value of inventory at PQ Holdings, which is amortized through cost of goods sold in the income statement.
- d) We do not have a history of significant asset disposals. However, 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.
- e) Reflects the exclusion of the negative or positive transaction gains and losses of foreign currency in the income statement primarily related to the Euro denominated term loan and the non-permanent intercompany debt denominated in local currency translated to U.S. dollars.
- f) Reflects consulting fees paid to CCMP and affiliates of INEOS for consulting services that include certain financial advisory and management services. These payments ceased as of the effective date of our initial public offering.
- g) Relates to certain transaction costs described in our consolidated financial statements for the year ended December 31, 2017 as well as other costs related to several transactions that are completed, pending or abandoned and that we believe are not representative of our ongoing business operations.
- h) Includes the impact of restructuring, integration and business optimization expenses that are related to specific, one-time items, including severance for a reduction in force and post-merger integration costs that are not expected to recur.
- i) Represents adjustments for defined benefit pension plan costs in our income statement. 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.
- j) Other costs consist of certain expenses that are not core to our ongoing business operations and are generally related to specific, one-time items, 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.



PQ Corporation

