

PQ ACCELERATES TRANSFORMATION

March 1, 2021



LEGAL DISCLAIMER

Forward-Looking Statements

Some of the information contained in this presentation and the discussion that follows 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 Chemicals business segment, including the intended use of proceeds therefrom, our future growth prospects, future financial performance and future strategic transactions. 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 Chemicals business segment on our anticipate timeline, our ability to successfully integrate Chem32, 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 prese

Non-GAAP Financial Measures

This presentation includes certain non-GAAP financial measures, including Performance Chemicals Non-GAAP adjusted EBITDA, and EBITDA margin, 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.



SALE OF PERFORMANCE CHEMICALS: ANOTHER MEANINGFUL STEP TO UNLOCK VALUE

TODAY'S ANNOUNCEMENT

Definitive agreement to sell
 Performance Chemicals to a
 partnership between Cerberus
 Capital Management, L.P. and Koch
 Minerals & Trading LLC

TRANSACTION VALUE

- Sale price of \$1.1 billion
- Attractive valuation multiple of
 9.4x LTM ended September 30,
 2020 Adjusted EBITDA¹

NEXT STEPS

 Close anticipated in 2021, subject to regulatory approvals



BALANCING DEBT REPAYMENT, DIVIDENDS AND INVESTING FOR GROWTH

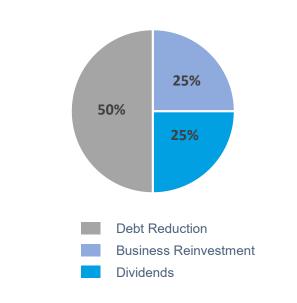
- Targeting special dividend of \$2.50 to \$3.25 per share
- Reducing debt in range of \$450 million to \$550 million
- Also acquired niche catalysts service company with cash on hand



Chem32

- \$44 million purchase price; ~ 6.7x on estimated 2021 Adjusted EBITDA (and acquisition tax benefits)
- Leading business for pre-activation of catalysts used in the production of traditional and renewable fuels
- Accretes to Refining Services top line growth and margin profile
- Adds patent protected technology
- Diversifies service offerings
- Increases participation in renewable fuels

Use of Robust Adjusted Free Cash Flows and Net Sale Proceeds, Since IPO¹





PQ PORTFOLIO TRANSFORMATION ACCELERATES

Simpler + STRONGER

2019

Evaluation & Positioning

- Delayered organization and separated into four distinct businesses
- Improved commercial/ operational performance and reduced capital intensity
- Sale of small non-core assets and product lines for ~\$60 million¹

2020 - 2021

Transformation

- Sale of non-core assets and product lines for ~\$30 million
- Sale of Performance
 Materials business for
 *\$650 million
- Sale of Performance Chemicals for \$1.1 billion²

FUTURE

Building "Target PQ"

Remaining core is an innovative catalyst and related services company positioned for high growth:

- Critical products and services; high growth, high Adjusted EBITDA margins in mid-to-high 30% range
- Leading product, process and application R&D capabilities
- Long-standing operating and technology relationships with customers that require expertise in transition to sustainable economy



- Includes asset sale during Q4 2018 for \$13 million
- 2) Expected to close in 2021

LOOKING AHEAD

PQ Group

Q4 2020 Earnings
Call

March 9, 2021 11:00 AM EST

Target PQ

Virtual Investor Conference

April 8, 2021 9:00 AM EST



APPENDIX



QUARTERLY SEGMENT SALES, ADJUSTED EBITDA AND MARGINS

		Three Months Ended					
(\$ in millions except %, unaudited)	December 31, 2019	March 31, 2020	June 30, 2020	September 30, 2020			
Sales:							
Refining Services	105.7	100.7	90.4	107.6			
Silica Catalysts	23.3	24.9	25.2	23.1			
Performance Materials	67.9	65.5	104.3	104.6			
Performance Chemicals	158.9	174.3	142.6	148.5			
Eliminations	(3.4)	(3.8)	(3.0)	(3.5)			
Total sales	352.4	361.6	359.5	380.3			
Zeolyst joint venture sales	47.3	32.3	41.0	26.6			
Adjusted EBITDA:							
Refining Services	41.9	37.2	35.0	44.3			
Catalysts	28.5	22.7	25.3	11.8			
Performance Materials	11.2	13.5	27.3	25.3			
Performance Chemicals	33.6	40.5	34.0	33.9			
Total Segment Adjusted EBITDA	115.2	113.8	121.6	115.3			
Corporate	(12.1)	(10.7)	(8.6)	(6.7)			
Total Adjusted EBITDA	103.1	103.1	113.0	108.6			
Adjusted EBITDA Margin:							
Refining Services	39.6%	36.9%	38.7%	41.2%			
-	40.4%	39.7%	38.2%	23.7%			
Catalysts ¹ Performance Materials	16.5%	20.6%	26.2%	24.2%			
Performance Chemicals	21.1%	23.2%	23.8%	22.8%			
Total Adjusted EBITDA Margin ¹	21.1%	26.2%	23.6%	26.7%			



⁽¹⁾ Adjusted EBITDA margin calculation includes proportionate 50% share of net sales from Zeolyst Joint Venture

^{*} Rounding discrepancies may arise when rounding results from dollars (in thousands) to dollars (in millions)

RECONCILIATION OF NET INCOME TO SEGMENT ADJUSTED EBITDA

	Three Months Ended			
(\$ in millions)	December 31, 2019	March 31, 2020	June 30, 2020	September 30, 2020
Reconciliation of net income attributable to PQ Group Holdings Inc. to Segment Adjusted EBITDA				
Net income attributable to PQ Group Holdings Inc.	19.1	0.2	15.9	7.5
Provision for income taxes	1.2	1.4	16.3	11.8
Interest expense, net	26.7	24.5	22.3	18.6
Depreciation and amortization	46.9	45.7	44.8	45.8
EBITDA	93.9	71.8	99.3	83.7
Joint venture depreciation, amortization and interest(a)	3.5	3.8	3.7	3.6
Amortization of investment in affiliate step-up(b)	1.7	1.7	1.7	1.7
Impairment of fixed assets, intangibles, and goodwill	1.6	_	_	_
Debt extinguishment costs	1.6	2.5	_	14.0
Net loss (gain) on asset disposals(c)	(5.3)	9.4	(1.0)	(4.5)
Foreign currency exchange loss (gain) (d)	(2.6)	3.3	(0.9)	(4.6)
LIFO (benefit) expense(e)	0.3	(0.3)	(1.5)	(8.0)
Transaction and other related costs(f)	1.8	2.1	0.7	3.3
Equity-based and other non-cash compensation	4.6	5.9	6.4	6.1
Restructuring, integration and business optimization expenses(g)	2.7	2.0	3.6	4.6
Defined benefit pension plan (benefit) cost(h)	0.7	(0.2)	(0.3)	0.4
Other(i)	(1.4)	1.1	1.3	1.1
Adjusted EBITDA	103.1	103.1	113.0	108.6
Unallocated corporate costs	12.1	10.7	8.6	6.7
Total Segment Adjusted EBITDA ¹	115.2	113.8	121.6	115.3
EBITDA Adjustments by Line Item				
EBITDA	93.9	71.8	99.3	83.7
Cost of goods sold	0.9	0.4	(0.4)	(0.1)
Selling, general and administrative expenses	5.6	6.5	7.0	6.8
Other operating expense (income), net	(1.0)	13.4	3.5	3.9
Equity in net (income) from affiliated companies	1.7	1.7	1.7	1.7
Other expense (income), net ²	(1.5)	5.5	(1.8)	9.0
Joint venture depreciation, amortization and interest(a)	3.5	3.8	3.7	3.6
Adjusted EBITDA	103.1	103.1	113.0	108.6



⁽¹⁾ For additional information with respect to each adjustment, see "Reconciliation of Non-GAAP Financial Measures"

⁽²⁾ Other expense (income), net includes debt extinguishment costs

^{*} Rounding discrepancies may arise when rounding results from dollars (in thousands) to dollars (in millions)

DESCRIPTIONS FOR RECONCILIATION OF NON-GAAP FINANCIAL MEASURES

- 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) 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.
- d) 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.
- e) 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.
- f) Relates to certain transaction costs, including debt financing, due diligence and other costs related to transactions that are completed, pending or abandoned, that we believe are not representative of our ongoing business operations.
- g) Includes the impact of restructuring, integration and business optimization expenses which are incremental costs that are not representative of our ongoing business operations.
- h) Represents adjustments for defined benefit pension plan (benefit) 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 (income) expenses as core to our ongoing business operations.
- i) 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).



