



PQ Corporation

ecovyst



First Quarter 2021

May 6, 2021 – 11am EST

Investor Presentation



Legal Discussion

Continuing Operations

Financial results are presented to exclude the Performance Materials business and the Performance Chemicals business, which is subject to a pending sale which the Company previously announced on March 1, 2021, from all quarterly and yearly results presented unless otherwise indicated.

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 the sale of the Performance Chemicals business segment, including the intended uses of proceeds therefrom, our future results of operations, financial condition, liquidity, prospects, growth, strategies, capital allocation programs, product and service offerings and end use demand trends, including the impact of the COVID-19 pandemic on such items, and financial 2021 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 Chemicals business segment on our anticipated timeline, or at all, 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. 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.

Non-GAAP Financial Measures




This presentation includes certain non-GAAP financial measures, including adjusted EBITDA, adjusted EBITDA margin, and 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 the “Zeolyst Joint Venture”), are accounted for as an equity method investment in accordance with GAAP. The presentation of the Zeolyst Joint Venture’s sales in this presentation represents 50% of the sales of the Zeolyst Joint Venture. We do not record sales by the 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 the 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 the Zeolyst Joint Venture for the relevant periods in the denominator.









Highlights: Executing Well on Multiple Fronts

Focus Area	Highlights
 <p>OPERATIONAL</p>	<ul style="list-style-type: none"> ■ Safety improved by ~ 28% and “Perfect Days” by ~16% over Q1 2020 ■ Completed storm damage repairs in time to meet rising refinery demand
 <p>COMMERCIAL</p>	<ul style="list-style-type: none"> ■ Catalysts: Increasing sales into diesel renewable fuels ■ Refining Services: Growing demand for treatment services in Gulf Coast region
 <p>STRATEGIC</p>	<ul style="list-style-type: none"> ■ Sale of Performance Chemicals business expected to close in second half of 2021, with expected net proceeds of \$995 million¹ ■ Closed acquisition of Chem32, a niche off-site catalyst activation service business
 <p>FINANCIAL</p>	<ul style="list-style-type: none"> ■ Higher sales, Adjusted EBITDA and margin absent winter storm Uri ■ 27% Adjusted EBITDA margin², including 460 basis points impact from storm ■ On track to achieve 2021 financial outlook, with adjusted free cash flow of \$75 to \$85 million

1. Expected after-tax proceeds, net of transaction costs and closing adjustments

2. Adjusted EBITDA margin calculation includes proportionate 50% share of sales from Zeolyst Joint Venture

Refining, Fuels and Emissions Control Expected to Recover to Pre-COVID Levels by Year End; PE Demand Remains Strong Amid Pandemic Recovery

					END USE DEMAND RECOVERY	
			YoY Trend		Expected Demand Trends	
			Q1/Q2	Q3/Q4	● Mid-single digit or higher demand growth vs 2020 ● Flat or below 2020	
End Use	Key Products	2020 % Total Sales ¹				
FUELS AND EMISSIONS	 Regeneration for Fuel Catalyst Recycling	~35%			<ul style="list-style-type: none"> Gasoline demand and vehicle miles traveled strengthening to near 2019 levels in Q2 driven by pandemic mitigation, rising employment and increases in disposable income Increased refinery utilization to >90% and recovered US gasoline exports Impact of Tier 3 gasoline sulfur standards (implemented in 2020) 	
	 Catalyst for Emissions Control	~15%			<ul style="list-style-type: none"> 2H refinery turnaround schedule is stronger than H1 due to increasing utilization with continued demand growth in 2022 Sustainability trends and government incentives driving ~30% increase YoY for renewable diesel HDD production recovering rapidly from low point with some supply chain restrictions 	
VIRGIN SULFURIC ACID ²	 Virgin Sulfuric Acid for Automotive, Electronics & Industrial	~30%			<ul style="list-style-type: none"> Rising global demand for sulfuric acid due to rebounding industrial, mining and agricultural applications Strong mining sector anticipated driven by recoveries in construction, electronics and automotive and new demand for green infrastructure 	
POLYETHYLENE	 Packaging and Engineered Plastics	~20%			<ul style="list-style-type: none"> HDPE demand rose YoY >10% in Q1 and expected to grow ~8% in Q2 as material is preferentially selected for its high strength and light weight Demand for film/sheet expected to grow ~7% YoY in 2021 as food and hygiene packaging products continue to play an important role in providing consumer well being 	

1. Sales percentage includes proportionate 50% share of sales from Zeolyst Joint Venture. Sales percentages are % of total 2020 sales by Refining Services and Catalysts business segments

2. Virgin sulfuric acid product group also includes a portion of natural resources end use

Source: U.S. Energy Information Administration; Rhein Associates; PQ Estimates, IHS, EIA, LMC

First Quarter 2021 Financial Results

(\$ in millions)	First Quarter 2021	First Quarter 2020	\$ Change	% Change
Sales	126.6	125.6	1.0	0.8
Adjusted EBITDA ¹	42.3	48.6	(6.3)	(13.0)
Adjusted EBITDA Margin ^{1,2} (%)	27.2	30.8		(360 bps)

- Winter storm Uri impact:
 - Sales \$6 million
 - Adjusted EBITDA \$9 million
 - Margin 460 bps

1. See Appendix for Reconciliations of non-GAAP measures.

2. Adjusted EBITDA margin calculation includes proportionate 50% share of sales from Zeolyst Joint Venture

Refining Services

(\$ in millions)	First Quarter 2021	First Quarter 2020	\$ Change	% Change
Sales	100.2	100.7	(0.5)	(0.5)
Adjusted EBITDA ¹	33.0	37.2	(4.2)	(11.3)
Adjusted EBITDA Margin ¹ (%)	32.9	36.9		(400 bps)

- Sales in line with prior year as lower Gulf Coast volume was offset by the pass through of higher sulfur pricing of \$3 million and higher West Coast regeneration and mining volumes
- Adjusted EBITDA and margins reflect storm-related lower sales and higher repair expenses; mitigated storm through favorable mix and spot sales
- Winter storm Uri impacted sales by 6% and Adjusted EBITDA by 21%

Q1 Change Factors	
Sales:	%
Volume	(6.3)
Price/Mix	5.8
Currency	-
Sales Change	(0.5)

1. See Appendix for Reconciliations of non-GAAP measures.

Catalysts

(\$ in millions)	First Quarter 2021	First Quarter 2020	\$ Change	% Change
Sales				
Silica Catalysts	26.4	24.9	1.5	6.0
Zeolyst JV	29.0	32.3	(3.3)	(10.3)
Adjusted EBITDA ¹	18.5	22.7	(4.2)	(18.5)
Adjusted EBITDA Margin ^{1,2} (%)	33.4	39.7		(630 bps)

- Sales reflect continued strength in polyethylene demand
- Zeolyst JV sales and Adjusted EBITDA down year on year, as expected, from lower hydrocracking and specialty catalysts deferred, partially mitigated by increasing demand of catalyst materials for renewable fuels
- Adjusted EBITDA margin of 33% reflects lower Zeolyst JV volumes and unfavorable fixed cost absorption from reduction of inventory

Silica Catalysts Q1 Change Factors	
Sales:	%
Volume	1.2
Price/Mix	3.2
Currency	1.6
Sales Change	6.0

1. See Appendix for Reconciliations of non-GAAP measures.

2. Adjusted EBITDA margin calculation includes proportionate 50% share of sales from Zeolyst Joint Venture

Reaffirming 2021 Financial Outlook

CONTINUING OPERATIONS ¹		
(\$ in millions, except per share)	2020 Actual	2021 Outlook
Sales ²	\$496	\$555 – 565
Zeolyst JV Sales	\$129	\$140 – 150
Adjusted EBITDA	\$193	\$215 – 225
Adjusted Free Cash Flow ^{3,4}	\$153	\$75 – 85
Capital Expenditures	\$46	\$50 – 55
Depreciation & Amortization		
PQ	\$77	\$80 - 85
Zeolyst JV	\$15	\$14 - 16

+ 10 – 15%
in 2021 from 2020
assuming midpoint
of guidance

- Reaffirm guidance despite the storm impact on first quarter
- Continued strong cash generation with debt repayment as the priority
 - Expect year-end pro forma leverage in the mid-to-high 3x range

1. Represents Refining Services, Catalysts and unallocated Corporate only, except otherwise noted

2. GAAP sales only; Excludes proportionate 50% share of Zeolyst Joint Venture sales

3. Adjusted free cash flow defined as net cash provided by operating activities less purchases of property, plant and equipment, adjusted for proceeds from sale of assets, net interest proceeds on swaps designated as net investment hedges and cash paid for costs related to segment disposals

4. Includes proportionate share of cash generation from discontinued operations for the period presented. 2020 includes Performance Materials until the transaction closed on December 14, 2020. 2021 includes Performance Chemicals through an estimated September 30, 2021 transaction close

Off to a Strong Start

Simpler + STRONGER ^{S²}

TARGET : 2025

- > \$ 1.0 B total Sales* with inorganic contribution
- High 30's Adjusted EBITDA margins
- Cash Conversion > 80%
- Growing share of transition driven products sales

SUSTAINABLE GROWTH / TRANSITION FOCUS

- 80% of innovation tied to sustainability
- Innovation in polymer recycling catalysts
- Development of novel renewable material catalysts
- Tailored proprietary customer solutions and services

NEAR TERM PROGRESS

- Regeneration demand recovering
- Integrating Chem32 business
- Growing virgin sulfuric acid for industrials and mining
- Above market growth in polyethylene
- Recovering hydrocracking catalyst demand into 2022
- Growing renewable fuels demand

Growing + **GREENING**

^{G²}

* Target total sales represents PQ, 50% share in Zeolyst Joint Venture and 10% projected inorganic growth

A close-up photograph of laboratory glassware. In the center, a graduated cylinder is tilted, containing a bright green liquid. The cylinder has markings for 300, 400, and 600 ml. To the left, the neck of a beaker is visible. To the right, a test tube is partially filled with the same green liquid. The background is a soft, out-of-focus light blue. A semi-transparent teal rectangle is overlaid on the left side of the image, containing the word 'APPENDIX' in white capital letters.

APPENDIX

Quarterly Segment Sales, Adjusted EBITDA and Margins

(\$ in millions, except %)	Three months ended March 31, 2021	Three months ended March 31, 2020
Sales:		
Refining Services	100.2	100.7
Silica Catalysts	26.4	24.9
Total sales	126.6	125.6
Zeolyst Joint Venture sales	29.0	32.3
Adjusted EBITDA:		
Refining Services	33.0	37.2
Catalysts	18.5	22.7
Total Segment Adjusted EBITDA	51.5	59.9
Corporate	(9.2)	(11.3)
Total Adjusted EBITDA	42.3	48.6
Adjusted EBITDA Margin:		
Refining Services	32.9%	36.9%
Catalysts ¹	33.4%	39.7%
Total Adjusted EBITDA Margin¹	27.2%	30.8%

For additional information with respect to each adjustment, see "Descriptions for Reconciliation of Non-GAAP Financial Measures"

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

Sales and Adjusted EBITDA Major Change Factors

Sales

Sales (in \$ millions and %)	Three months ended March 31, 2021					
	PQ Group Holdings Inc.		Refining Services		Silica Catalysts	
	\$	%	\$	%	\$	%
Sales:						
Volume	(6.0)	(4.8)	(6.3)	(6.3)	0.3	1.2
Price/Mix	6.6	5.3	5.8	5.8	0.8	3.2
Currency	0.4	0.3	—	—	0.4	1.6
Sales Change	1.0	0.8	(0.5)	(0.5)	1.5	6.0

Adjusted EBITDA

Adj. EBITDA (in \$ millions and %)	Three months ended December 31, 2021					
	PQ Group Holdings Inc.		Refining Services		Catalysts	
	\$	%	\$	%	\$	%
Adj EBITDA:						
Volume/Mix	(7.1)	(14.5)	(4.5)	(12.1)	(2.6)	(11.5)
Price	5.9	12.1	5.8	15.6	0.1	0.3
Variable Cost	(3.4)	(7.0)	(2.5)	(6.7)	(0.8)	(3.7)
Currency	0.3	0.6	—	—	0.3	1.3
Other	(2.1)	(4.2)	(3.0)	(8.1)	(1.1)	(4.9)
Adj EBITDA Change	(6.4)	(13.0)	(4.2)	(11.3)	(4.1)	(18.5)

Reconciliation of Net Loss to Segment Adjusted EBITDA

(\$ in millions)	Three months ended March 31, 2021	Three months ended March 31, 2020
Reconciliation of net loss from continuing operations to Segment Adjusted EBITDA		
Net loss from continuing operations	(2.8)	(3.3)
Benefit for income taxes	(5.2)	(1.7)
Interest expense, net	10.5	15.3
Depreciation and amortization	19.5	18.7
EBITDA	22.0	29.0
Joint venture depreciation, amortization and interest(a)	3.6	3.7
Amortization of investment in affiliate step-up(b)	1.7	1.7
Debt extinguishment costs	—	2.5
Net loss on asset disposals(c)	0.8	0.2
Foreign currency exchange loss(d)	5.1	7.1
LIFO benefit(e)	(0.3)	(1.7)
Transaction and other related costs(f)	0.5	0.8
Equity-based compensation	6.3	4.3
Restructuring, integration and business optimization expenses(g)	2.3	0.3
Defined benefit plan pension benefit(h)	(0.6)	(0.1)
Other(i)	0.9	0.8
Adjusted EBITDA	42.3	48.6
Unallocated corporate costs	9.2	11.3
Total Segment Adjusted EBITDA¹	51.5	59.9
EBITDA Adjustments by Line Item		
EBITDA	22.0	29.0
Cost of goods sold	(0.3)	(1.7)
Selling, general and administrative expenses	6.3	4.5
Other operating expense, net	3.8	1.4
Equity in net (income) from affiliated companies	1.7	1.7
Other expense, net ²	5.2	10.0
Joint venture depreciation, amortization and interest(a)	3.6	3.7
Adjusted EBITDA	42.3	48.6

1. For additional information with respect to each adjustment, see "Descriptions for Reconciliation of Non-GAAP Financial Measures"

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

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. 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 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. All of our defined benefit pension plan obligations are under defined benefit pension plans that are frozen. As such, we do not view such income or 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 a business combination consummated in a prior year period and capital and franchise taxes. Included in this line-item are rounding discrepancies that may arise from rounding from dollars (in thousands) to dollars (in millions).

Adjusted Free Cash Flow

(\$ in millions)	Full Year 2020
Cash Flow from Operations before interest and tax	349.0
Less: Cash paid for taxes	35.0
Less: Cash paid for interest ¹	90.4
Cash Flow from Operations	223.6
Less: Purchases of property, plant and equipment ²	109.6
Free Cash Flow	114.0
Plus: Proceeds from sale of assets	11.1
Plus: Net interest proceeds on currency swaps	5.0
Plus: Cash paid for costs related to segment disposals	22.5
Adjusted Free Cash Flow	152.5

(1) Excludes net interest proceeds on swaps designated as net investment hedges

(2) Excludes the Company's proportionate 50% share of capital expenditures from the Zeolyst Joint Venture

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



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YOUR CATALYST FOR POSITIVE CHANGE