





YOUR CATALYST FOR POSITIVE CHANGE™

Legal Discussion

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 future results of operations, financial condition, liquidity, prospects, growth, strategies, capital allocation programs (including our share repurchase program), product and service offerings, expected demand trends and financial 2024 outlook. Our actual results may differ materially from those contemplated by the forwardlooking statements. We caution you, therefore, against relying on any of these forward-looking statements. They are neither statements of historical fact nor quarantees 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, including tariffs and trade disputes, currency exchange rates, effects of inflation and other factors, including those described in the sections titled "Risk Factors" and "Management's 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, Free Cash Flow, Net Debt Leverage Ratio, and Cash Conversion, 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. In reliance upon the unreasonable efforts exemption provided under Item 10(e)(1)(i)(B) of Regulation S-K, 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. Because this information is uncertain, the Company is unable to address the probable significance of the unavailable information, which could be material to future results.



Legal Discussion

Supply Share and Industry Information

Certain statistical information used in this presentation is based on independent industry publications, reports by research firms or other published independent sources. Some statistical information is also based on our good faith estimates which are derived from management's knowledge of our industry and such independent sources referred to above. Certain supply share statistics, ranking and industry information included in this presentation, including the size of certain markets and our estimated supply share position and the supply share positions of our competitors, are based on management estimates. These estimates have been derived from our management's knowledge and experience in the industry and end uses into which we sell our products, as well as information obtained from surveys, reports by research firms, our customers, distributors, suppliers trade and business organizations and other contacts in the industries into which we sell our products. We believe these data to be accurate as of the date of this presentation. However, this information may prove to be inaccurate because this information cannot always be verified with complete certainty due to the limitations on the availability and reliability of raw data, the voluntary nature of the data gathering process and other limitations and uncertainties. Unless otherwise noted, all of our supply share position and industry information presented in this presentation herein is an approximation based on management's knowledge and is based on our, or, in the case supply share position information excludes volume attributable to manufacturers who produce primarily for their own consumption. In addition, references to various end uses into which we sell our products are based on how we define the end uses for our products.

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.



Ecovyst Business Profile & Value Proposition

An Industry-leading Provider of Specialty Catalysts and Services into Key End Uses



- Favorable organic growth trends driven by end use demand and growing need for sustainable products and services
- Revenue visibility arising from customer collaborations, qualified and specified products, and long-term contracts
- Unit margin stability provided by price leverage and contractual cost pass-through mechanisms
- Attractive segment Adjusted EBITDA margins in the 30% range
- Strong Cash Conversion¹ ratio 75% TTM 3/31/2024
- Leverage reduction remains a key priority—Net Debt Leverage Ratio of 2.9x at 3/31/2024, down from 3.0x at 12/31/2023

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



Key Highlights

Q1 2024 Key Highlights

\$161 Mln

GAAP Sales Q1 2024

\$46 Mln

Adj. EBITDA Q1 2024¹

25%

Adj. EBITDA Margin Q1 2024^{1,2}

2.9X

Net Debt Leverage Ratio^{1,4}

75%

Cash Conversion^{1,3} \$173 Mln

Liquidity⁵





- 1. See Appendix for Reconciliations of non-GAAP measures
- 2. Adjusted EBITDA margin calculation includes proportionate 50% share of sales from the Zeolyst Joint Venture
- 3. For TTM period ended 3/31/2024. Cash Conversion = (Adjusted EBITDA Capex)/Adjusted EBITDA)
- 4. Net Debt Leverage Ratio = (Total debt Cash and cash equivalents) / Adjusted EBITDA
- 5. Liquidity = \$103 million of Cash and Cash equivalents + Availability on revolving ABL facility of \$70 million



Ecovyst Reporting Segments

ECOSERVICES

\$585 Million 2023 Sales

\$200 Million 2023 Adjusted EBITDA1

Applications

Advanced Materials & Catalysts

\$106 Million 2023 Advanced Silicas Sales \$156 Million 2023 Zeolyst Joint Venture Sales²

\$82 Million 2023 Adjusted EBITDA1

Regeneration Services

Virgin Sulfuric Acid



Chem32

Treatment **Services**

Advanced **Silicas**

(100% Ownership)



Applications

- Regeneration services for refinery alkylation
- Chemical spent acid regeneration
- Oleum (nylon production)
- High strength for mining minerals and metals production
- Electrolyte grades (for water treatment, semiconductors, lead acid batteries)

- Ex-situ activation of catalysts for:
- Hydro-processing
- Renewable fuel production
- · Hazardous and nonhazardous waste
- Beneficial reuse of energy in waste
- HDPE and LLDPE production and supports
- · Polyethylene antiblocking agents (films)
- Chemical catalysts
- Sustainable materials
- Functionalized silicas

- Hydrocracking of traditional fuels
- Sustainable fuel supports & catalysts
- Emission control technologies
- Processes for plastic recycling
- Customized catalyst applications



^{2.} Represents 50% of ownership with Shell Catalysts & Technologies



Ecoservices

Financial Highlights

2023 Sales - \$585 Million 2023 Adjusted EBITDA1 - \$200 Million

Business Overview

Regeneration **Services**



Leading North American provider of sulfuric acid regeneration services

- Support U.S. customer's production of alkylate (the highest value gasoline blending component)
- Serve 6 of top 10 N.A. refineries

Demand Drivers

- Customer expansion of alkylation units
 - · Growth in premium fuel demand
 - More stringent fuel regulations
 - Export demand
- Spot sales driven by other supplier constraints

Virgin Sulfuric Acid



Leading North American producer of virgin sulfuric acid

End use applications include mining, production of nylon intermediates,, and industrial applications including lead acid batteries, petrochemical processes and semiconductor production

- Growth in mining production (copper, borates, lithium)
- Demand growth in industrial applications
- · Demand growth in petrochemical and chemical end uses

Chem32



Leading ex-situ provider of catalyst activation services

Activates catalysts for conventional hydroprocessing and for renewable fuels (renewable diesel and SAF)

- · Increasing regulations for cleaner fuels hydroprocessing
- Increasing demand for renewable fuels
- Continued outsourcing of catalyst activation to third party providers

Treatment Services



Treatment Services

- Converts hazardous and non-hazardous waste to energy
- Primarily Gulf-Coast

- Consumer spending (housing, construction, packaging, hygiene)
- Preferred option compared to other disposal methods



Advanced Materials & Catalysts

Financial Highlights

Advanced Silicas Sales - \$106 Million Zeolyst Joint Venture Sales - \$156 Million 2023 Adjusted EBITDA^{1,2} - \$82 Million

Business Overview

From concept to pilot to production leveraging deep Silica based material science & catalyst capability

- 40+ year legacy in Silica chemistry
 - Polyethylene catalysts & supports
 - Polyethylene antiblocks
 - · Chemical catalysts
 - Sustainable catalysts
 - Functionalized silicas

Demand Drivers

2X market growth from Industrial markets:

- Polyethylene Global demand growth & capacity additions
- · Technical solutions delivering share gain
- · Catalysts for chemical processes

Step change growth from Emerging markets:

- Renewable processes
- Enzyme immobilization³
- Clean water³
- Carbon capture⁵

Zeolyst International (50% ownership)

Advanced Silicas

From concept to pilot to production leveraging deep Zeolite based material science & catalyst capability

- · 35+ year partnership with Shell
 - Hydrocracking catalysts
 - · Sustainable fuel supports & catalysts
 - · Emission control supports
 - Custom Zeolite supports & catalysts
 - Advanced recycling catalysts
 - · Specialty & aromatic catalysts

GDP growth in Core markets:

- Hydrocracking value creation for refiners
- · Emission control applications

Accelerated growth from Industrial focused custom Zeolite supports and catalysts

Step change growth from Emerging markets:

- Renewable fuels⁴
- Catalyst based Advanced Recycling³
- Emerging Sustainable Aviation Fuels⁵



- . Adjusted EBITDA includes proportionate 50% share of sales from the Zeolyst Joint Venture
- 2. See Appendix for Reconciliations of non-GAAP measures.
- 3. Anticipated launch in 2024
- 4. Established in 2020, with Gen 2 expected in 2025 and 2026
- 5. Anticipated launch in 2025

First Quarter 2024 Financial Performance



Financial Performance - Q1 2024

First Quarter Financial Results

(\$ in millions)	First Quarter 2024	First Quarter 2023	\$ Change	% Change
Ecovyst Sales	160.5	160.9	(0.4)	(0.2)
Zeolyst Joint Venture Sales	23.5	22.1	1.4	6.3
Net Income (Loss)	1.2	(1.5)	2.7	180.0
Net Income Margin (%)	0.7	(0.9)		NM
Adjusted EBITDA ¹	45.5	42.9	2.6	6.1
Adjusted EBITDA Margin ^{1,2} (%)	24.7	23.4		130 bps

(\$ in millions)	\$ Change	% Change
Sales Change Factors ³	(0.4)	(0.2)
Volume	15.7	9.8
Price (ex sulfur pass-through)	(11.2)	(7.0)
Price impact of sulfur pass-through	(5)	(3.0)



- 1. See Appendix for Reconciliations of non-GAAP measures
- 2. Adjusted EBITDA margin calculation includes proportionate 50% share of sales from the Zeolyst Joint Venture
- 3. Sales Change Factors exclude the Zeolyst Joint Venture

Ecoservices - Q1 2024 Financial Performance

(\$ in millions)	First Quarter 2024	First Quarter 2023	\$ Change	% Change
Sales	141.6	137.8	3.8	2.8
Adjusted EBITDA ¹	41.5	36.8	4.7	12.8
Adjusted EBITDA Margin¹ (%)	29.3	26.7		260 bps

Highlights

- First quarter sales reflect higher sales volume for virgin sulfuric acid and regeneration services, partially offset by the pass through of lower sulfur costs of approximately \$5 million and pass-through of lower natural gas, electricity and other variable costs.
- Increase in Adjusted EBITDA primarily driven by higher sales volume for virgin sulfuric acid and regeneration services
- Adjusted EBITDA margin of 29.3%, up 260 basis points, primarily reflecting higher sales volume and the positive price to cost impact

Advanced Materials & Catalysts - Q1 2024 Financial Performance

(\$ in millions)	First Quarter 2024	First Quarter 2023	\$ Change	% Change
Advanced Silicas Sales	18.9	23.1	(4.2)	(18.2)
Zeolyst Joint Venture Sales	23.5	22.1	1.4	6.3
Adjusted EBITDA ¹	11.1	13.0	(1.9)	(14.6)
Adjusted EBITDA Margin ^{1,2} (%)	26.2	28.8		(260) bps

Highlights

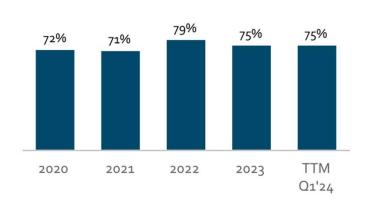
- Lower sales of advanced silicas used for the production of polyethylene associated with customer order timing and limited destocking
- Zeolyst Joint Venture sales increased on higher sales of catalysts used in sustainable fuel production and growth in customized catalyst applications
- Adjusted EBITDA decrease reflects lower sales for Advanced Silicas, partially offset by higher sales in the Zeolyst Joint Venture



Cash & Leverage

Strong Cash Conversion Provides for Capital Allocation Flexibility





Cash Generation

- Continued strong cash flow from operations
- Available liquidity of \$173 million³ as of March 31, 2024

Share repurchase authorization

- Originally \$450 million/4 years
- Returned capital to shareholders via \$137 million of share repurchases in 2022 and \$79 million in
- Approximately \$235 million remaining under authorization

Net Debt Leverage Ratio²



Leverage Ratio and Debt Profile

- Strong cash generation capability has provided for historic reduction in leverage, limited by recent share repurchases
- No significant debt maturities until 2028
- No maintenance covenants on leverage
- Interest rate caps limit rate exposure

- 1. Cash Conversion = (Adjusted EBITDA Capex)/Adjusted EBITDA). See Appendix for Reconciliations of non-GAAP measures
- 2. Net Debt Leverage Ratio = (Total debt Cash and cash equivalents) / Adjusted EBITDA. See Appendix for Reconciliations of non-GAAP measures
- 3. Liquidity = \$103 million of Cash & Cash Equivalents + availability on Revolving ABL facility of \$70 million





Annual Segment Sales, Adjusted EBITDA and Margins

	Trailing Twelve Months Ended (TTM)		Year Ended		
(\$ in millions, except %)	March 31, 2024	2023	2022	2021	2020
Sales:					
Ecoservices	588.7	584.8	702.5	500.5	401.9
Advanced Silicas	102.0	106.3	117.7	110.7	94.0
Total sales	690.7	691.1	820.2	611.2	495-9
Zeolyst Joint Venture sales	158.0	156.5	132.6	131.3	128.6
Adjusted EBITDA1:					
Ecoservices	204.7	200.0	227.8	177.7	157.2
Advanced Materials & Catalysts	80.1	81.9	78.0	88.0	74.5
Unallocated corporate expenses	(22.3)	(22.0)	(29.0)	(38.1)	(39.1)
Total Adjusted EBITDA	262.5	259.9	276.8	227.6	192.6
Adjusted EBITDA Margin¹:					
Ecoservices	34.8%	34.2%	32.4%	35.5%	39.1%
Advanced Materials & Catalysts	30.8%	31.2%	31.2%	36.4%	33.5%
Total Adjusted EBITDA Margin ^{1,2}	30.9%	30.7%	29.0%	30.7%	30.8%

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



^{1.} See Appendix for Reconciliations of non-GAAP measures

Ecoservices: North American Leader in Sulfuric Acid Recycling and Related Services with Key Competitive Position in Gulf Coast and California

ANTICIPATED FUTURE GROWTH FACTORS

- Existing customer re-contracting, and favorable alkylate fundamentals expected to drive growth for regeneration services
- Rising virgin acid consumption for electrification and green infrastructure enabling materials mining
- Increasing demand for sustainable waste solutions from industrials benefitting Treatment Services
- Accelerating off site Catalyst Activation demand from sustainable fuels producers and traditional refineries



UNRIVALED SUPPLY INFRASTRUCTURE

- Managing end to end supply chain & customer inventories
- Production redundancy in key refining locations enables the highest degree of reliability

FAVORABLE CUSTOMER POSITIONS

- Long-term contracts with cost passthrough
- Typically, 100% of supply for customer sites
- Take-or-pay and capacity reservation fees



Advanced Materials & Catalysts: Global Leader in Tailored Catalyst Solutions

ANTICIPATED FUTURE GROWTH FACTORS

- Preferred technology and increasing product offerings for strengthening & light weighting of materials projected to drive growth in polyethylene catalysts
- Growing demand for sustainable fuels
- New product launches supporting the ongoing product development and collaboration with customers, including plastic recycling



FLEXIBLE MANUFACTURING NETWORK

- Improved manufacturing network efficiencies
- Continued debottlenecking production capacity for sold out product lines

FAVORABLE CUSTOMER POSITIONS

- Historical growth higher than market with existing polyethylene customers
- Strong growth in custom catalysts; diversified across multiple chemical processes
- Collaborating on multiple product development projects for new offerings in sustainable fuels and materials and recycling of polymers



Quarterly Segment Sales, Adjusted EBITDA and Margins

	Three Mor	nths Ended
(\$ in millions, except %)	March 31, 2024	March 31, 2023
Sales:		
Ecoservices	141.6	137.8
Advanced Silicas	18.9	23.1
Total sales	160.5	160.9
Zeolyst Joint Venture sales	23.5	22.1
Adjusted EBITDA: 1		
Ecoservices	41.5	36.8
Advanced Materials & Catalysts	11.1	13.0
Unallocated corporate expenses	(7.1)	(6.9)
Total Adjusted EBITDA	45∙5	42.9
Adjusted EBITDA Margin¹:		
Ecoservices	29.3%	26.7%
Advanced Materials & Catalysts	26.2%	28.8%
Total Adjusted EBITDA Margin ^{1,2}	24.7%	23.4%

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



^{1.} See Appendix for Reconciliations of non-GAAP measures

^{2.} Totals include corporate costs

Sales and Adjusted EBITDA Major Change Factors

Sales

	Three Months Ended March 31, 2024						
Sales (in \$ millions and %) Ecovyst Ecoservice		Ecovyst Ecoservices				anced icas	
Sales:	\$	%	\$	%	\$	%	
Volume	15.7	9.8	20.1	14.8	(4.4)	(18.9)	
Price/Mix	(16.1)	(10.0)	(16.3)	(12.0)	0.2	0.7	
Sales Change	(0.4)	(0.2)	3.8	2.8	(4.2)	(18.2)	

Adjusted EBITDA

		Three Mo	onths End	led March	31, 2024	
Adj. EBITDA (in \$ millions and %)	Ecovyst		Ecovyst Ecoservic		Advanced Materials (Catalysts	
Adj EBITDA:	\$	%	\$	%	\$	%
Volume/Mix	9.6	22.4	9.1	24.7	0.5	3.8
Price ¹	(11.0)	(25.6)	(11.4)	(31.0)	0.4	3.1
Variable Cost ¹	12.4	28.9	12.4	33.6	_	_
Currency	0.1	0.2	_	_	0.1	0.8
Other	(8.5)	(19.7)	(5.4)	(14.5)	(2.9)	(22.3)
Adj EBITDA Change	2.6	6.2	4.7	12.8	(1.9)	(14.6)

^{1.} Excludes the sulfur cost pass-through impact reflected in price and the associated sulfur cost reflected in variable cost; \$5 for the three months ended March 31, 2024



Reconciliation of Net Income to Adjusted EBITDA

	Three Months Ended	ТТМ		Year	Ended	
(\$ in millions, except %)	March 31, 2024	March 31, 2024	December 31, 2023	December 31,	December 31, 2021	December 31, 2020
Reconciliation of net income to Adjusted EBITDA						
Net income	1.2	73.9	71.2	69.8	1.8	54.3
Provision (benefit) for income taxes	1.2	11.1	10.8	24.9	12.1	(52.1)
Interest expense, net	13.4	48.3	44.7	37.2	37.0	50.4
Depreciation and amortization	21.9	86.3	84.6	79.2	79.7	76.9
EBITDA	37-7	219.6	211.3	211.1	130.6	129.5
Joint venture depreciation, amortization and interest(a)	3.3	13.1	13.4	16.0	15.6	14.7
Amortization of investment in affiliate step-up(b)	1.6	6.4	6.4	6.4	6.5	6.6
Debt extinguishment costs	_	_	_	_	26.9	25.0
Net loss on asset disposals ^(c)	0.6	3.5	4.1	3.6	5.7	4.7
Foreign currency exchange loss (gain) ^(d)	0.2	(0.3)	(1.3)	1.4	4.7	(5.3)
LIFO (benefit) expense ^(e)	(1.1)	1.0	3.5	(0.2)	(1.9)	(5.3)
Transaction and other related costs ^(f)	0.1	1.7	3.0	7.0	2.0	1.1
Equity-based compensation	3.7	15.6	16.0	20.6	31.8	17.2
Restructuring, integration and business optimization expenses ^(g)	0.2	1.9	2.7	11.6	3.0	2.0
Other ^(h)	(0.8)	_	0.8	(0.7)	2.7	2.4
Adjusted EBITDA ¹	45.5	262.5	259.9	276.8	227.6	192.6



 ^{1.} For additional information with respect to each adjustment, see appendix "Descriptions for reconciliations of Non-GAAP financial measures"
 * Rounding discrepancies may arise when rounding results from dollars (in thousands) to dollars (in millions)

Reconciliation of Net (Loss) Income to Adjusted EBITDA

	Three Months Ended	TTM		Thre	e Months Ended		Twelve Months Ended
(\$ in millions, except %)	March 31, 2024	March 31, 2024	March 31,	June 30,	September 30,	December 31,	December 31,
Reconciliation of net (loss) income to Adjusted EBITDA							
Net (loss) income	1.2	73.9	(1.5)	26.1	16.6	30.0	71.2
Provision (benefit) for income taxes	1.2	11.1	0.9	8.8	7.9	(6.8)	10.8
Interest expense, net	13.4	48.3	9.9	9.2	11.8	13.9	44.7
Depreciation and amortization	21.9	86.3	20.2	21.0	21.3	22.1	84.6
EBITDA	37.7	219.6	29.5	65.1	57.6	59.2	211.3
Joint venture depreciation, amortization and interest ^(a)	3.3	13.1	3.6	3.2	3.3	3.3	13.4
Amortization of investment in affiliate step-up(b)	1.6	6.4	1.6	1.6	1.6	1.6	6.4
Net loss on asset disposals ^(c)	0.6	3.5	1.2	1.1	1.0	0.8	4.1
Foreign currency exchange loss (gain)(d)	0.2	(0.3)	(0.7)	(0.4)	0.8	(0.9)	(1.3)
LIFO (benefit) expense ^(e)	(1.1)	1.0	1.4	1.1	_	1.0	3.5
Transaction and other related costs ^(f)	0.1	1.7	1.4	1.2	0.2	0.2	3.0
Equity-based compensation	3.7	15.6	4.1	5.0	3.5	3.4	16.0
Restructuring, integration and business optimization expenses(g)	0.2	1.9	1.0	1.1	0.3	0.3	2.7
Other ^(h)	(0.8)	_	(0.2)	0.3	(0.4)	0.9	0.8
Adjusted EBITDA ¹	45.5	262.5	42.9	79-3	67.9	69.8	259.9
EBITDA Adjustments by Line Item							
EBITDA	37-7	219.6	29.5	65.1	57.6	59.2	211.3
Cost of goods sold	(1.9)	(2.2)	0.6	0.3	(0.8)	0.2	0.4
Selling, general and administrative expenses	3.7	15.7	4.1	5.0	3.5	3.5	16.1
Other operating expense, net	1.0	9.0	4.1	3.7	1.8	2.5	12.1
Equity in net (income) from affiliated companies	1.6	6.4	1.6	1.6	1.6	1.6	6.4
Other (income) expense, net ²	0.2	1.0	(0.6)	0.4	0.9	(0.5)	0.2
Joint venture depreciation, amortization and interest ^(a)	3.2	13.0	3.6	3.2	3.3	3.3	13.4
Adjusted EBITDA	45-5	262.5	42.9	79-3	67.9	69.8	259.9



^{1.} For additional information with respect to each adjustment, see appendix "Descriptions for reconciliations of Non-GAAP financial measures"

^{2.} Other (income) expense, 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

- We use Adjusted EBITDA as a performance measure to evaluate our financial results. Because our Advanced Materials & 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 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 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, effectively reflecting the results as if these inventories were valued using the FIFO method, which we believe provides a means of comparison to other companies that may not use the same basis of accounting for inventories.
- 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.
- Includes the impact of restructuring, integration and business optimization expenses, which are incremental costs that are not representative of our ongoing business operations.
- h. Other consists of adjustments for items that are not core to our ongoing business operations. These adjustments include environmental remediation and other legal costs, expenses for capital and franchise taxes, and defined benefit pension and postretirement plan (benefits) costs, for which our obligations are under plans that are frozen. Also included in this amount are adjustments to eliminate the benefit realized in cost of goods sold of the allocation of a portion of the contract manufacturing payments under the five-year agreement with the buyer of the Performance Chemicals business to the financing obligation under the failed sale-leaseback. Included in this line-item are rounding discrepancies that may arise from rounding from dollars (in thousands) to dollars (in millions).



Free Cash Flow

(\$ in millions)	Full Year 2023	Three months ended March 31, 2024
Net cash provided by operating activities	137.6	36.5
Less: Purchases of property, plant and equipment ¹	65.3	17.4
Free cash flow	72.3	19.1

(\$ in millions)	Full Year 2023	Three months ended March 31, 2024
Included in net cash provided by operating activities are the following supplemental cash items:		
Cash paid for taxes	22.4	3.6
Cash paid for interest ²	42.1	12.6

- 1. Excludes the Company's proportionate 50% share of capital expenditures from the Zeolyst Joint Venture
- 2. Shown net of capitalized interest and includes the cash received or paid on interest rate cap agreements
- * Rounding discrepancies may arise when rounding results from dollars (in thousands) to dollars (in millions)



Cash Conversion & Leverage

Cash Conversion

(\$ in millions, except %)	2020	2021	2022	2023	TTM Q1 2024
Adjusted EBITDA	192.6	227.6	276.8	259.9	262.5
Less: Capex ¹	54.5	66.4	59.5	65.3	66.4
Cash Conversion	138.1	161.2	217.5	194.6	196.1
Cash Conversion %2	72%	71%	79%	75%	75%

Net Debt Leverage Ratio

(\$ in millions, except %)	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Q1 2024
Total debt	884.3	882.0	879.8	877.5	875.3
Less: Cash and cash equivalents	61.6	29.2	38.3	88.4	103.1
Net debt	822.7	852.8	841.5	789.1	772.2
Net income	59.9	67.4	62.7	71.2	73.9
Adjusted EBITDA	260.5	266.8	259.3	259.9	262.5
Net Debt to Net Income Ratio	13.7X	12.7X	13.4X	11.1X	10.4X
Net Debt Leverage Ratio	3.2X	3.2X	3.2X	3.ox	2.9X



Capex for cash conversion includes 50% of spend for the Zeolyst Joint Venture
 Cash Conversion % = (Adjusted EBITDA – Capex)/(Adjusted EBITDA)

