

Legal Discussion

Continuing Operations

Financial results for fiscal 2019A-2020A are on a continuing operations basis, which excludes the Performance Materials and Performance Chemicals business segments from all quarterly and yearly results presented, unless otherwise indications, as presented in the Company's Annual Report on Form 10-K for the year ended December 31, 2021 filed with the Securities and Exchange Commission (the "SEC") on March 1, 2022 (the "2021 Form 10-K").

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," "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, our future results of operations, financial condition, liquidity, prospects, growth, strategies, capital allocation programs (including the repurchase program), product and service offerings, including the impact of COVID-19 pandemic on such items, and expected end use demand trends. 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, including the ongoing COVID-19 pandemic, tariffs, and trade disputes, currency exchange rates, effects of inflation, the ongoing war in Ukraine 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

Non-GAAP Financial Measures

This presentation includes certain non-GAAP financial measures, including adjusted EBITDA, adjusted EBITDA margin, 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.

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. 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 industry information presented in this presentation herein is an approximation based on management's knowledge. 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





1. See Appendix for reconciliation of non-GAAP measures

- Favorable organic growth trends driven by end use demand and growing need for sustainable products and services
- Significant revenue visibility arising from customer collaborations, qualified and specified products, and long-term contracts
- Unit margin stability in inflationary environment provided by price leverage and contractual cost pass-through mechanisms
- Attractive segment Adjusted EBITDA margins in the 30% range
- Strong Cash Conversion¹ ratio (74% in 2021), with expectation for further improvement
- Improving leverage profile (2.8x at 6/30/2022 vs. 3.8x at 9/30/2021), with annual improvement via earnings growth and strong cash generation
- \$450 million/4-year share repurchase authorization expands capital allocation flexibility with \$376.3 million remaining as of 8/10/2022 – can include directed, negotiated buybacks from sponsors



Ecovyst At a Glance

Ecovyst by the numbers

\$876.5 Million

June 2022 TTM Sales1

\$264.7 Million

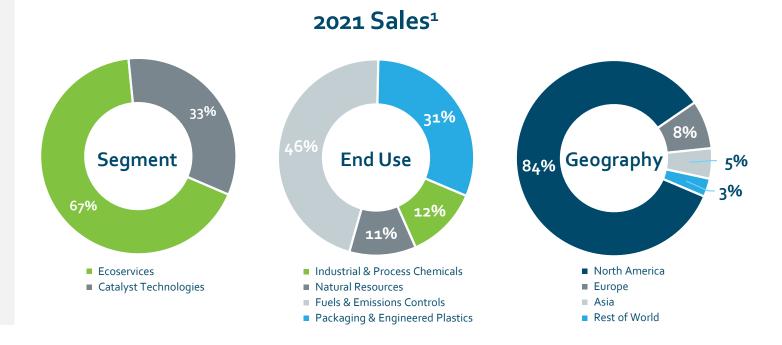
June 2022 TTM Adjusted FRITDA²

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Manufacturing Facilities

~880 **Employees**

Ecovyst is a leading, integrated provider of specialty catalysts and services. Through our **Ecoservices** and **Catalyst Technologies** businesses, we deliver chemistry-based technologies and solutions that help our customers meet the increasing demand for high-performing and sustainable products and services.





Calculations include \$134 million of total sales attributable to the Zeolyst Joint Venture ("Zeolyst JV") See Appendix for reconciliation of non-GAAP measures.

Ecovyst Reporting Segments

		Ecose	rvices		Catalyst Technologies					
June 2022 TTM Sales		\$627 N		\$250 Million ²						
June 2022 TTM Segment Adj. EBITDA ¹	\$214 Million \$87 Million									
	Regeneration Services	Virgin Sulfuric Acid	Treatment Services	Catalyst Activation	Silica Catalysts (100% Ownership)	Zeolyst International (50% Ownership) ³				
		ZAA								
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)	Hazardous and non-hazardous waste Beneficial reuse of energy in waste	Ex-situ activation of catalysts for: • Hydro-processing • Renewable fuel production	 HDPE and LLDPE production Polyethylene antiblocking agents (films) Renewable materials Metal recovery 	Hydrocracking of traditional fuels Production of renewable fuels Emission control technologies Processes for plastic recycling				
Expected Growth Drivers	 Favorable alkylate demand for high octane fuels High industry utilization 	Electrification and growing needs for industrial applications (mining, nylon)	Debottlenecking providing for further growth opportunities	Growing demand for ex-situ activation in both traditional and renewable fuels	Strengthening & light weighting of materials Recycling of materials	 Growing demand for renewable fuels Increasing regulation driving reduction in emissions 				



- Excludes unallocated corporate expenses of \$36.1 million. See appendix reconciliation of non-GAAP measures included in Appendix.
 Includes sales attributable to 50% ownership in Zeolyst JV.
 Represents 50% of ownership with Shell Catalysts & Technologies

 INVESTOR PRESENTATION

An Attractive Growth Platform

Expected to Drive Customer Solutions in High-growth, Higher Margin Industry Segments

Increase Share in Attractive Growth Industries

- · Anticipated growth above underlying industry growth in polyethylene
- Advantaged virgin acid asset footprint positioned to capture growth tied to electrification
- Leverage Chem32 acquisition for potential international growth and diversification

Sustainability-Driven Innovation

- Catalysts and services that support renewable fuel production
- Product improvements to meet new emission regulations
- Catalysts that we believe position Ecovyst to be a leader in a circular economy, with a focus on plastics recycling and next generation bioplastics

Capital-Efficient Expansion and Inorganic Growth

- Anticipate catalyst capacity expansion, debottlenecking alkylation and treatment services capabilities
- Attractive bolt-on M&A strategy



Demand Fundamentals Remain Favorable

	End Use	Key Products	2021 Total Sales	Industry Growth Rate	2022 Anticipated Demand Drivers
	CLEAN FUELS	Regeneration For Alkylation	~32%	~4%	Rebounding gasoline demand and exports Increasing U.S. refinery utilization to >90%
Ecoservices	INDUSTRIAL	Virgin Sulfuric Acid for Automotive, Mining & Industrial	~28%	~5%	Green infrastructure and vehicle electrification driving high mining metals demand
	CA/WT	Catalyst Activation & Waste Treatment	~7%	> 25%	Global Renewable Diesel share of total Diesel expected to Increase from 2% in 2019 to 5% in 2025
Technologies	POLYMERS	Packaging and Engineered Plastics	~14%	~4%	PE growth driven by global demand for film and packaging
Catalyst Techn	an //AIR	Catalyst for Emissions Control and Hydrocracking		~4%	Global refinery utilization driving strong demand for HCC catalyst. Regulations driving demand for reduced emissions in HDD
Catalyst CLEAN FUELS/AIR	CLE, FUELS	Catalyst for Renewable Fuels	. ~15%	> 25%	Catalyst demand growth from renewable diesel and SAF production



Innovation Portfolio Focused on Sustainable Solutions and Services



- Greater than 71%¹ of end use sales address customer and consumer demand for more sustainable products and services
 - More than 80%¹ of innovation investment focused on products and services that enhance sustainability

















Global Sustainability Trend

Our products provide solutions that...

Clean Air

...Remove sulfur in diesel and Nox from emissions

... Enable higher alkylation for improved fuel economy

Plastics Circularity

...Create more durable and lighter weight plastics

...Enable chemical recycle and reuse of plastics

Renewable Fuels & Materials

...Help transform biomass into biofuels & synthetic rubber for green tires

Electrification

...Critical component in the production of metals and minerals needed for low carbon technologies

Waste Treatment

... Beneficial reuse of energy in hazardous and nonhazardous waste, averting landfill or deep well disposal



Financial Performance – Q2 2022

Second Quarter Financial Results

(\$ in millions)	Second Quarter 2022	Second Quarter 2021	\$ Change	% Change
Ecovyst Sales	225.2	147.0	78.2	53.2
Zeolyst JV Sales	35.9	33.2	2.7	8.2
Adjusted EBITDA ¹	72.9	52.7	20.2	38.3
Adjusted EBITDA Margin ^{1,2} (%)	27.9	29.3		(140 bps)

(\$ in millions)	\$ Change	% Change
Sales Change Factors ³		
Volume	19.6	13.4
Price (ex sulfur pass-through)	22.9	15.5
Price impact of sulfur pass-through	36.6	24.9
Currency	(0.9)	(0.6)



- 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 - Q2 2022 Financial Performance

(\$ in millions)	Second Quarter 2022	Second Quarter 2021	\$ Change	% Change
Ecoservices Sales	193.0	120.8	72.2	59.8
Adjusted EBITDA ¹	60.0	40.5	19.5	48.1
Adjusted EBITDA Margin¹(%)	31.1	33.5		(240 bps)

Ecoservices Highlights

- Strong demand for virgin sulfuric acid driven by diversified industrial needs and mining for metals, with increased demand for alkylate and higher refinery utilization driving growth in regeneration services
- Sales up 60% reflecting an increase in volume and higher average selling prices, largely associated with the contractual cost pass-through of higher variable costs, including sulfur, natural gas and freight
- Adjusted EBITDA up 48% reflecting the drop through of higher sales volume, improved pricing and cost efficiencies
 - The \$37 million pass-through of higher sulfur costs unfavorably impacted Adjusted EBITDA margins by 840 basis points.



Catalyst Technologies – Q2 2022 Financial Performance

(\$ in millions)	Second Quarter 2022	Second Quarter 2021	\$ Change	% Change
Silica Catalysts Sales	32.2	26.2	6.0	22.9
Zeolyst JV Sales	35.9	33.2	2.7	8.2
Adjusted EBITDA ¹	21.4	20.7	0.7	3.4
Adjusted EBITDA Margin ^{1,2} (%)	31.4	34.9		(350 bps)

Catalyst Technologies Highlights

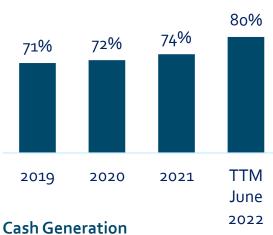
- Demand remained positive with continued growth in polyethylene catalyst; high refinery utilization continued to support hydrocracking and niche custom catalyst sales
- Price increases implemented late in 2021 and an energy surcharge program helped to mitigate inflationary pressures
- Growth in Adjusted EBITDA reflects higher sales volume and higher average selling prices partially offset by unfavorable product mix and higher production costs



Cash, Leverage & Liquidity

Strong Cash Conversion Provides for Capital Allocation Flexibility and Improving Leverage Profile

Cash Conversion¹



- Historically modest capital spending
- Expect further improvement in conversion ratio with growth in Adjusted EBITDA

Share repurchase authorization

- \$450 million / 4 years, with \$376.3 million remaining as of 8/10/2022
- Repurchased 1,077,640 shares in July 2022 at an average price of \$9.77 per share; and repurchased 6,500,000 shares at a price of \$8.35625 per share upon the close of a secondary offering in early August 2022





- Robust cash generation capability has provided for annual reduction in leverage
- No significant debt maturities until 2028
- No maintenance covenants on leverage
- Interest caps limit rate exposure



Q3-2021 Q4-2021 Q1-2022 Q2-2022

Liquidity

- At 6/30/2022 Liquidity comprised of Cash of \$151 million and availability under the Revolving ABL facility of \$85 million4
- Liquidity can support capital allocation strategy including organic growth initiatives, additional bolt-on acquisitions, and in conjunction with strong cash generation capability, the share repurchase authorization



- 1. Cash Conversion = (Adjusted EBITDA-Capex)/(Adjusted EBITDA). See appendix for reconciliation of non-GAAP measures
- 2. Leverage Ratio = (Total debt cash and cash equivalents) / Adjusted EBITDA. See appendix for reconciliation of non-GAAP measures
- 3. Liquidity = Cash on hand + Availability on Revolving ABL Facility
- 4. Net of \$8.3 million of outstanding Letters of Credit



Ecovyst: Robust Metrics at an Attractive Valuation

Enterprise Value / LTM Adjusted EBITDA



Adjusted EBITDA Margin (2021A) Cash Conversion¹ (2021A)



Circularity Exposure

Adjusted EBITDA Margins > 30%

Source: Enterprise Values per CapIQ as of 29-Jul-2022. Valuation multiples represent Enterprise Value divided by latest available trailing twelve months EBITDA. Note: Air Products and Ashland have fiscal year end of September. H.B. Fuller has fiscal year end of November. All other companies have fiscal year end of December.

¹Cash Conversion = (Adjusted EBITDA - Capex)/(Adjusted EBITDA).

²See appendix for reconciliation of non-GAAP measures.

²See appendix for reconciliation of non-GAAP measures.

³The presentation of non-GAAP financial measures may differ from similar measures reported by other companies and may not be comparable to other INVESTOR PRESENTATION August 2022 / 14

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

NEAR-TERM GROWTH FACTORS

- Existing customer re-contracting, and favorable alkylate fundamentals expected to drive mid-to-high single digit volume 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 renewable fuels producers and traditional refineries



ROBUST 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 pass-through
- Typically, 100% of supply for customer sites
- Take-or-pay and capacity reservation fees



Catalyst Technologies: A Global Leader in Tailored Catalyst Solutions

NEAR-TERM GROWTH FACTORS

- Preferred technology and potential increase in product offerings for strengthening & light weighting of materials projected to drive growth in polyethylene catalysts
- Anticipated growing demand for renewable fuels
- Increasing regulation expected to drive reduction in vehicle emissions
- New product launches expected to support the ongoing product development and collaboration with customers



FLEXIBLE MANUFACTURING NETWORK

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

FAVORABLE CUSTOMER POSITIONS

- Believe growing faster 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 renewable fuels and materials and recycling of polymers



Quarterly Sales, Adjusted EBITDA and Margins

	Three Mon	ths Ended	Six Months Ended		Three M	Ionths Ended		Six Months Ended	Year Ended	TTM Ended
(\$ in millions, except %)	March 31, 2022	June 30, 2022	June 30, 2022	March 31, 2021	June 30, 2021	September 30, 2021	December 31, 2021	June 30, 2021	December 31, 2021	June 30, 2022
Sales:						,				
Ecoservices	154.0	193.0	347.0	100.2	120.8	137.5	142.0	221.0	500.5	626.5
Silica Catalysts	25.7	32.2	57.9	26.4	26.2	29.9	28.2	52.6	110.7	116.0
Total sales	179.7	225.2	404.9	126.6	147.0	167.4	170.2	273.6	611.2	742.5
Zeolyst Joint Venture sales	29.0	35.9	64.9	29.0	33.2	32.8	36.3	62.2	131.3	134.0
Adjusted EBITDA:										
Ecoservices	49.3	60.0	109.3	33.0	40.5	51.9	52.3	73.5	177.7	213.5
Catalyst Technologies	17.0	21.4	38.4	18.5	20.7	25.5	23.4	39.2	88.0	87.3
Corporate	(7.1)	(8.5)	(15.6)	(9.2)	(8.5)	(8.0)	(12.5)	(17.6)	(38.1)	(36.1)
Total Adjusted EBITDA	59.2	72.9	132.1	42.3	52.7	69.4	63.2	95.1	227.6	264.7
Adjusted EBITDA Margin:										
Ecoservices	32.0%	31.1%	31.5%	32.9%	33.5%	37.7%	36.8%	33.3%	35.5%	34.1%
Catalyst Technologies ¹	31.1%	31.4%	31.3%	33.4%	34.9%	40.7%	36.3%	34.2%	36.4%	34.9%
Total Adjusted EBITDA Margin ^{1,2}	28.4%	27.9%	28.1%	27.2%	29.3%	34.7%	30.6%	28.3%	30.7%	30.2%



Note: Financial performance for 2019 – 2021 as presented in the 2021 Form 10-K.

¹ See Appendix for Reconciliations of non-GAAP measures.

^{*} Rounding Discrepancies may arise when rounding results from dollars (in thousands) to dollars (in running STOR PRESENTATION August 2022 / 17

Reconciliation of Net (Loss) Income to Adjusted EBITDA

		Months ded	Six Months Ended		Three Mo	onths Ended		Six Months Ended	Year Ended	TTM Ended
(\$ in millions)	March 31, 2022	June 30, 2022	June 30, 2022	March 31, 2021	June 30, 2021	September 30, 2021	December 31, 2021	June 30, 2021	December 31, 2021	June 30, 2022
Reconciliation of net income (loss) from continuing operations to Adjusted EBITDA										
Net income (loss) from continuing operations	7.9	19.2	27.1	(2.8)	(7.9)	4.7	7.8	(10.6)	1.8	39.6
Provision (benefit) for income taxes	5.7	7.3	13.0	(5.2)	7.7	2.6	7.0	2.5	12.1	22.6
Interest expense, net	8.5	8.9	17.3	10.5	8.7	9.0	8.8	19.2	37.0	35.1
Depreciation and amortization	19.5	19.7	39.2	19.5	20.0	20.6	19.6	39.5	79.7	79.4
EBITDA	41.6	55.1	96.6	22.0	28.5	36.9	43.2	50.6	130.6	176.7
Joint venture depreciation, amortization and interest(a)	4.1	4.0	8.1	3.6	3.7	4.1	4.2	7.3	15.6	16.4
Amortization of investment in affiliate step-up(b)	1.6	1.6	3.2	1.7	1.6	1.6	1.6	3.3	6.5	6.4
Debt extinguishment costs	_	_	_	_	11.7	15.2	_	11.7	26.9	15.2
Net loss on asset disposals(c)	0.1	0.6	0.7	8.0	1.6	2.2	1.2	2.4	5.7	4.1
Foreign currency exchange losses (gains)(d)	0.6	0.5	1.1	5.1	(1.2)	0.9	(0.1)	3.9	4.7	1.9
LIFO expense (benefit)(e)	0.2	0.2	0.4	(0.3)	(0.5)	(1.3)	0.1	(0.7)	(1.9)	(8.0)
Transaction and other related costs(f)	4.3	0.8	5.1	0.5	0.6	0.5	0.4	1.1	2.0	6.0
Equity-based compensation	7.3	5.4	12.7	6.3	6.3	10.2	9.0	12.6	31.8	31.9
Restructuring, integration and business optimization expenses(g)	0.4	4.7	5.1	2.3	0.1	0.1	0.6	2.3	3.0	5.8
Defined benefit plan pension benefit(h)	(0.6)	(0.6)	(1.1)	(0.6)	(0.6)	(1.0)	1.3	(1.2)	(0.9)	(8.0)
Other(i)	(0.4)	0.6	0.2	0.9	0.9	_	1.7	1.7	3.6	1.9
Adjusted EBITDA ¹	59.2	72.9	132.1	42.3	52.7	69.4	63.2	95.0	227.6	264.7



¹ See Appendix for Reconciliations of non-GAAP measures.

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



².Totals include corporate costs.

Descriptions for Reconciliation of Non-GAAP Financial Measures

- a) We use Adjusted EBITDA as a performance measure to evaluate our financial results. Because the Catalyst Technologies 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 Ecovyst 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, 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).



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