



INVESTOR DAY

November 28, 2023

Legal Discussion

Continuing Operations Financial results are presented on a continuing operations basis, which excludes the Performance Materials business and Performance Chemicals business 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, our future results of operations, financial condition, liquidity, prospects, growth, goals, strategies, capital allocation programs (including our share repurchase program), product and service offerings, and expected end use demand trends and 2023-2028 financial goals. 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 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, Organic Adjusted EBITDA margin, adjusted free cash flow, net debt leverage ratio, return on average net tangible assets, 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.

Agenda

● — 9:00am–9:05am	Introduction and FLS	Gene Shiels, Director of Investor Relations
● — 9:05am – 9:25am	Strategy Update	Kurt Bitting, Chief Executive Officer
● — 9:25am – 9:35am	Sustainability Framework	Colleen Donofrio, VP, Environment & Sustainability
● — 9:35am – 10:00am	Ecoservices Overview	George L. Vann, President, Ecoservices
● — 10:00am – 10:10am	Break	
● — 10:10am – 10:35am	Advanced Materials & Catalysts Overview	Paul Whittleston, President, Advanced Materials & Catalysts
● — 10:35am – 10:50am	Financial Overview and Long-Term Targets	Mike Feehan, Chief Financial Officer
● — 10:50am – 11:30am	Q&A	All Speakers

Kurt Bitting, CEO

- More than **25 years** of experience
- Originally joined the company in **2006**, serving in Ecoservices, at the time a division of Rhodia, as **Sulfur Products Manager, Business Director and Vice President**
- Played a key role in **Ecoservices' divestiture** from Solvay and eventual merger with PQ Corp
- Appointed President, Ecoservices in **2019**
- Promoted to Chief Executive Officer in **April 2022**



Strategy Update

Kurt Bitting

Chief Executive Officer



Company Overview



Ecovyst
by the numbers

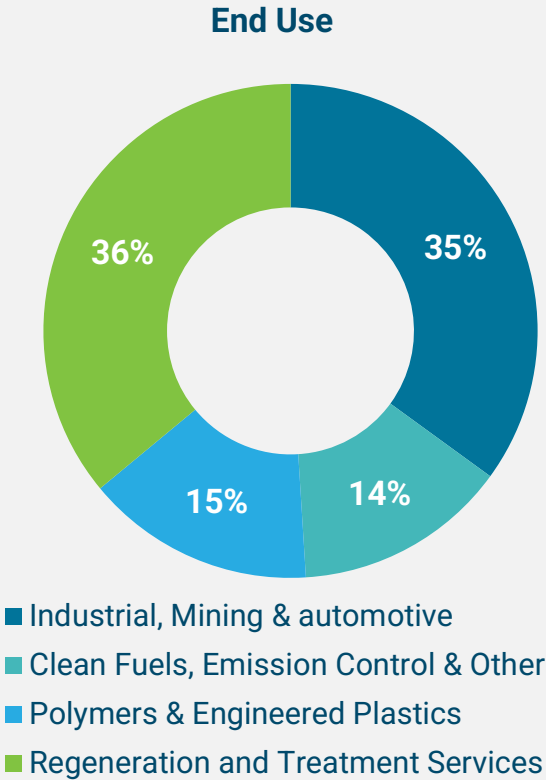
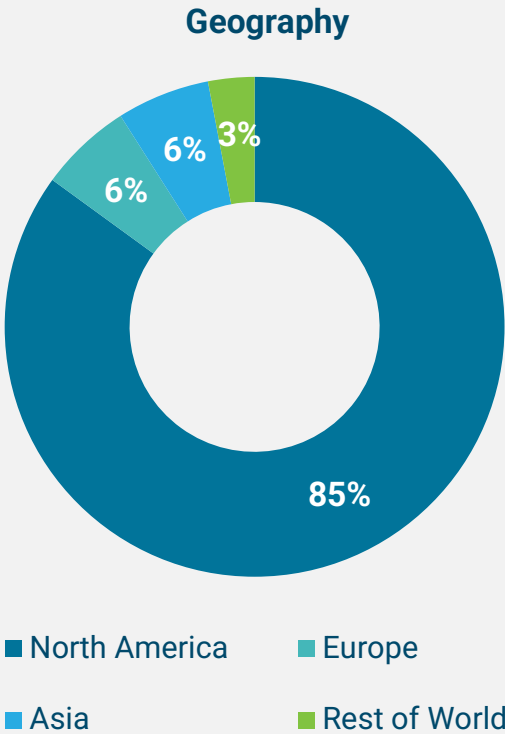
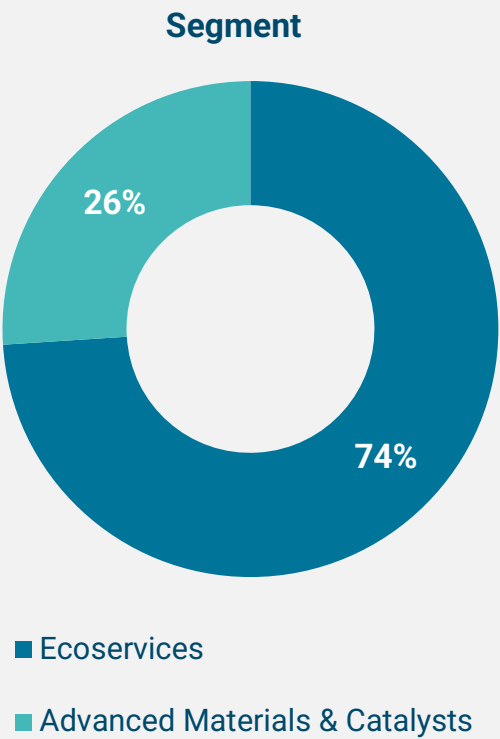
\$953M
2022 Sales¹

\$277M
2022 Adjusted EBITDA²

10
Manufacturing Facilities

~880
Employees

2022 Sales¹

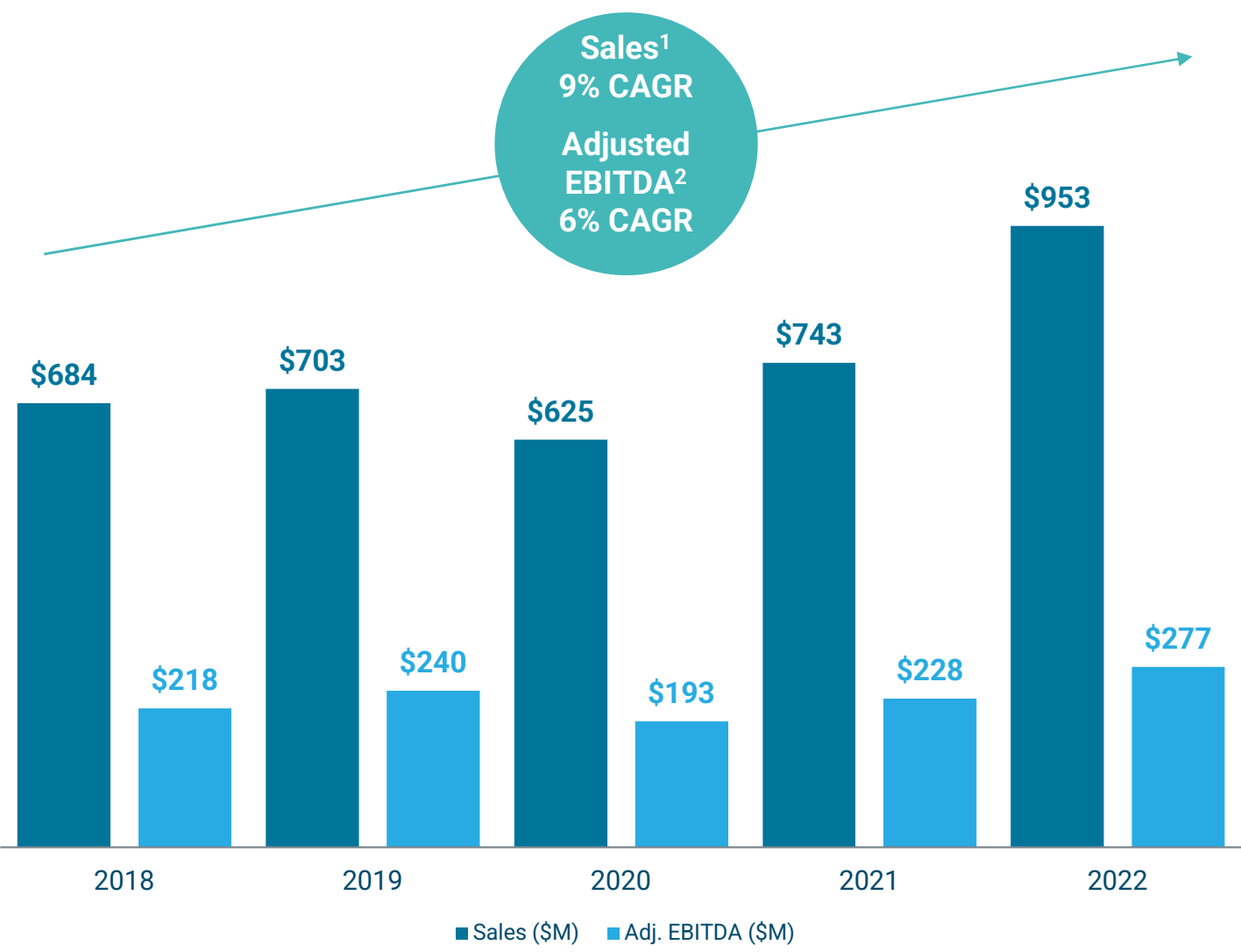


Company-Wide Commitment to **Sustainability** with a Focus on **Environmental Stewardship**



1. Calculations include \$133M of total sales attributable to the Zeolyst Joint Venture ("Zeolyst JV"), although such sales are not consolidated with our results or operations
2. See Appendix for reconciliation of non-GAAP measures

Historical Financial Performance



2018-2022

6%

Adjusted EBITDA CAGR²

~30%

Adjusted EBITDA Margins²

~70%

Cash Conversion^{2,3}

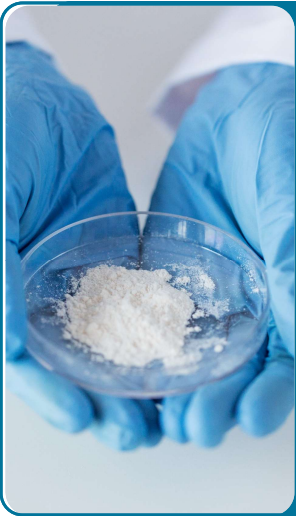
~24

Million Shares Repurchased since April 2022



1. Includes 50% share of sales from Zeolyst Joint Venture
2. See Appendix for reconciliation of non-GAAP measures
3. Cash conversion % = (Adjusted EBITDA – CapEx) / (Adjusted EBITDA)

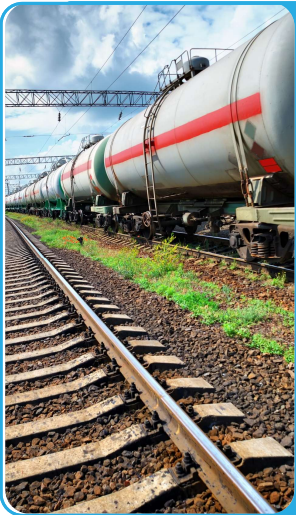
Key Supplier of Essential Products And Services




**Global
Leadership**

Advanced Materials & Catalysts

Formerly Catalyst Technologies
—
Silica Catalysts for HDPE
—
Hydrocracking Catalysts
—
Renewable Fuels Materials




#1 Supplier
in North
America Regen
and Virgin Acid

Ecoservices

Regeneration for North American
Refining, Supplying Leading Refineries
—
Largest Producer
of Merchant Sulfuric Acid
—
Leader in Catalyst Activation Technologies

Competitive Advantages Drive Value Proposition



Core material science expertise highly aligned with decarbonization technologies



Established solutions in sustainable segments with large growth potential



Longstanding, sticky relationships with high barriers to entry

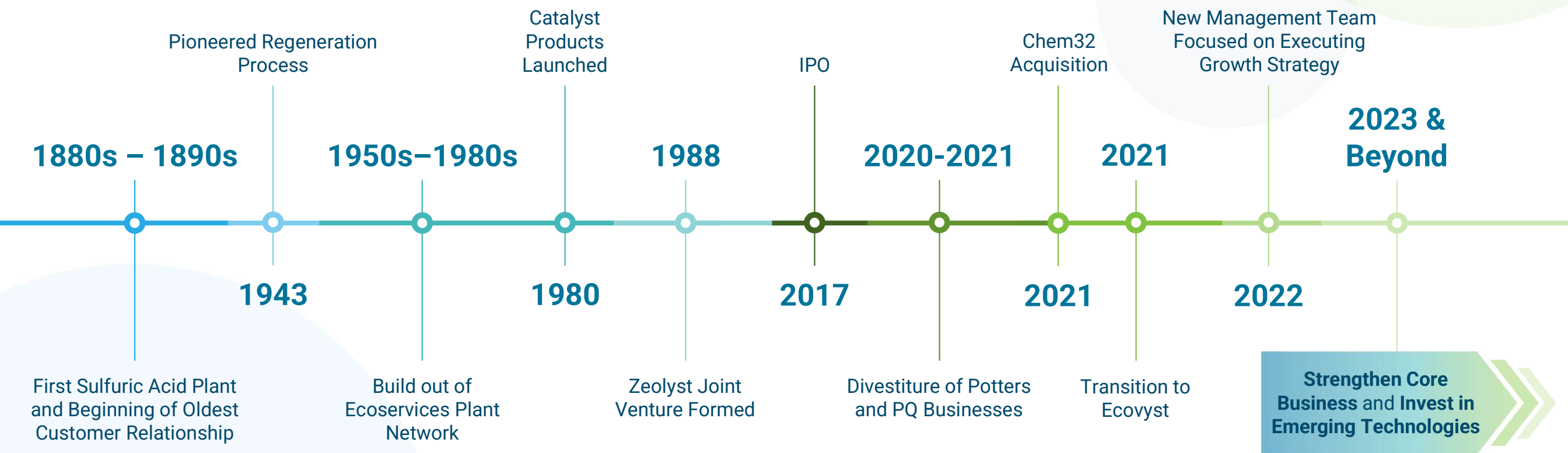


Favorable industry structures that protect margins and balance sheet



Unrivaled supply infrastructure and manufacturing networks

Decades of History, Adapting to Solve the Problems of the Future



Strategy for Creating Shareholder Value



Strengthen Leading Positions in Core Segments

- Maximize production capabilities and reliability via digitization, AI, and efficiency gains
- Deliver strong margins and cash generation through commercial excellence



Capture Share in Industrial Segments

- Growth through capacity expansion and debottlenecking
- Leverage technology and service advantages to capture share



Accelerate Growth in Emerging Sustainable and Low Carbon Segments

- Drive innovation through material science expertise
- Commercialize new products through deep customer relationships
- Expand capacity and technology via organic and inorganic investments



Sustain an industry-leading safe and responsible workplace



Regeneration
Hydrocracking
Treatment Services
Emissions Controls

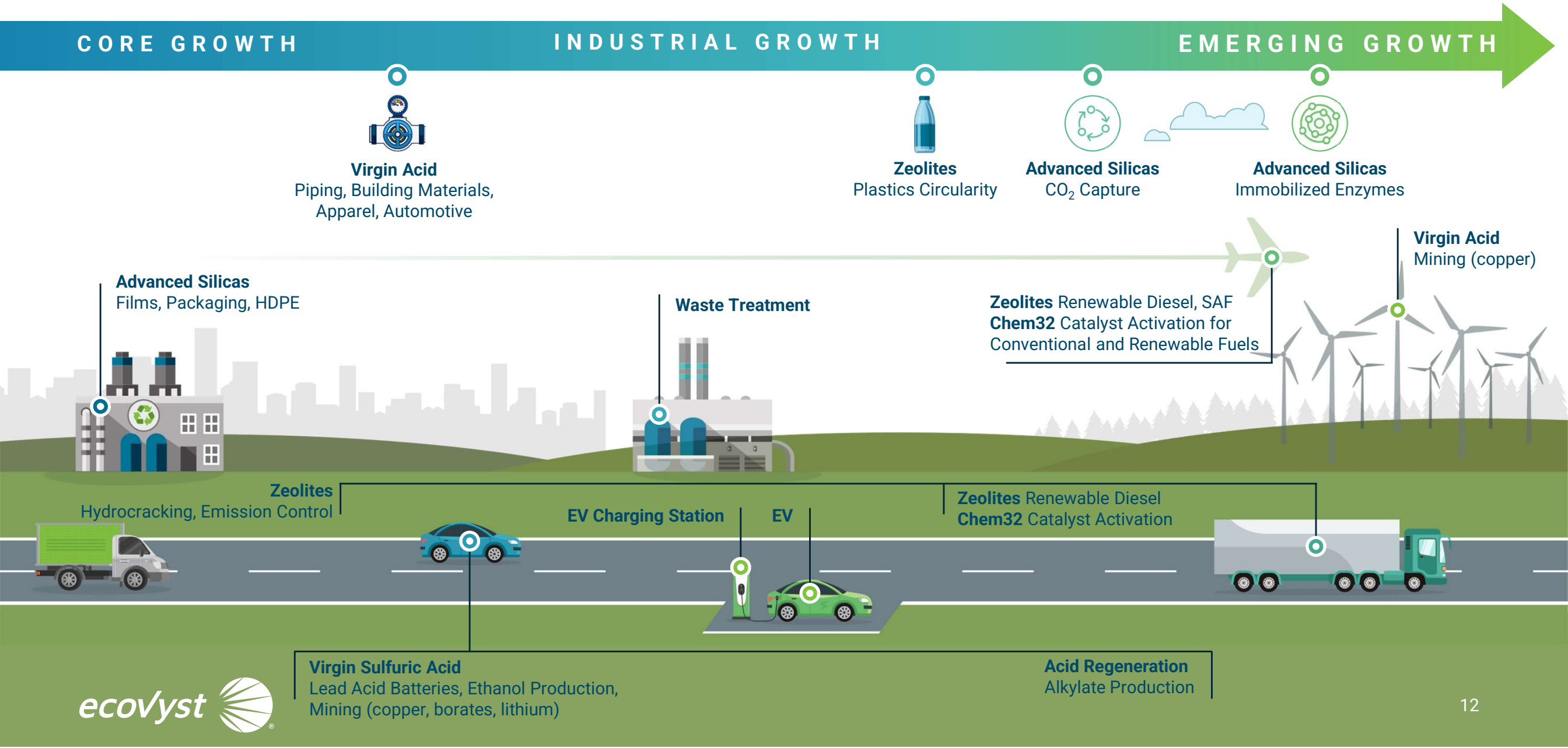


Polyethylene
Virgin Acid
Custom & Chemical Catalysts



Renewable Fuels
Functional Silica/Enzymes
Advanced Plastics Recycling
Activation and Services
Carbon Capture

Enabling Customers to Solve Complex, Everyday Challenges

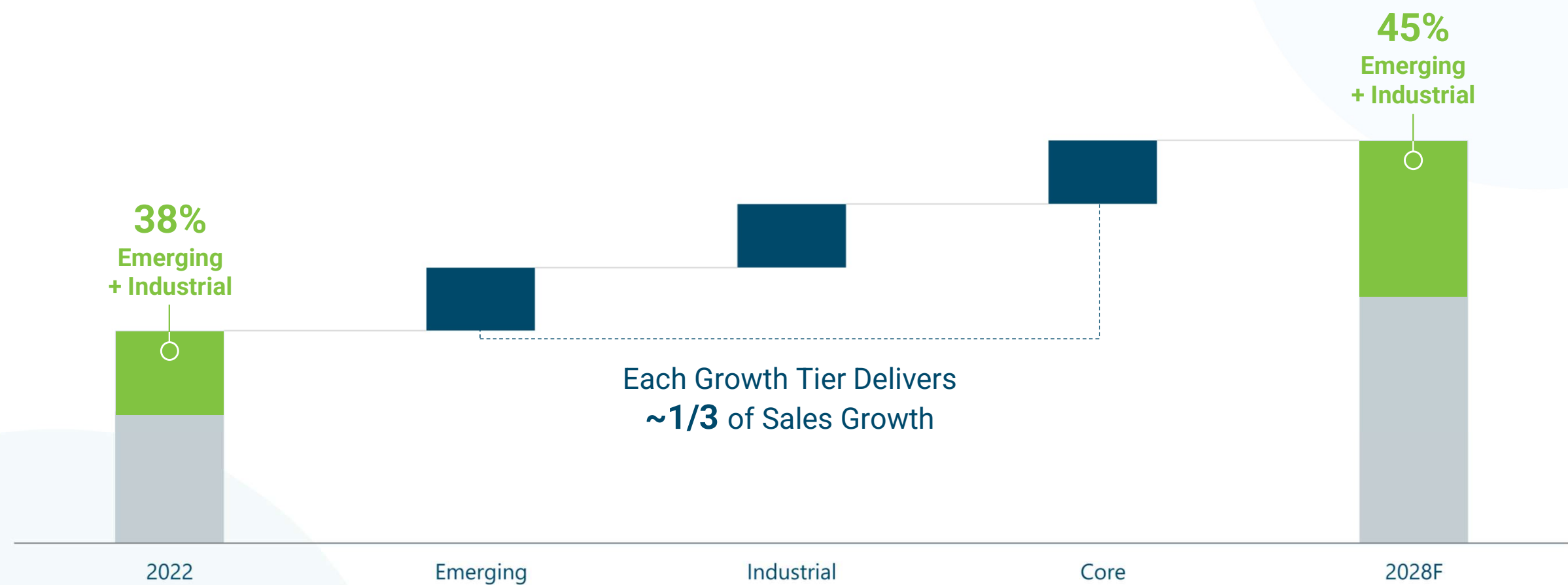


Well-Positioned to Capitalize on Global Demand

Fundamental Growth Drivers Expected to Remain Favorable

	Industry Trend	Key Ecovyst Exposure	Ecovyst Growth Projection
Core	Clean Fuels	Regeneration, Hydrocracking	GDP+
Industrial	Green Infrastructure/EVs — Global Firm and Packaging	Virgin Acid — Advanced Silicas	GDP++
Emerging	Renewable Fuels and Sustainable Aviation Fuel — Plastics Circularity — Bio & Green Chemistry — Carbon Capture/Clean Water	Zeolites — Functionalized Silica for Immobilized Enzymes — Silica for Adsorbents	GDP+++

Balanced Growth from Emerging and Leadership Segments



Attractive Organic Growth, Best-in-Class Margins, Strong Cash Generation



Compounding Shareholder Returns

Ecoservices



\$603 Million
September 2023
TTM Sales¹



\$206 Million
September 2023 TTM
Segment Adjusted
EBITDA¹



Regeneration Services

Regeneration services for
refinery alkylation



Virgin Sulfuric Acid

Oleum
—
High strength for mining minerals
and metals production
—
Electrolyte grades (for water treatment,
semiconductors, and lead acid batteries)



Catalyst Activation

Hydro-processing
—
Renewable fuel production



Treatment Services

Hazardous and non-
hazardous waste

Applications



1. See Appendix for Reconciliation of non-GAAP measures



Ecoservices Growth Drivers

Driven by a Changing and Charging World

Favorable Industry Structure	Regeneration Services	Favorable alkylate demand for high-octane fuels — High industry utilization	Gasoline Exports ¹ : +800 KBPD +1300 KBPD by 2040 Refinery Utilization ¹ : 92%
	Virgin Sulfuric Acid	Electrification and growing needs for industrial applications (mining, nylon)	Copper Production ² : +3%
	Catalyst Activation	Growing demand for ex-situ activation in both traditional and renewable fuels	Activation ³ : +17%
	Treatment Services	Debottlenecking providing for further growth opportunities	\$19B : North American Chemical Expansions by 2025 ⁴

1. 2023 EIA Annual Energy Outlook. KBPD = thousands of barrels per day.
2. Bloomberg, Refined Copper Demand from traditional versus energy transition sectors
3. Management Estimate
4. American Chemistry Council - Chemistry Outlook June 2023

Advanced Materials & Catalysts



\$242 Million

September 2023
TTM Sales^{1,2}



\$75 Million

September 2023 TTM
Segment Adjusted
EBITDA²



Advanced Silicas (100% Ownership)

HDPE and LLDPE production

Chemical Catalysts

Functionalized Silicas

Carbon Capture



Zeolyst International (50% Ownership)

Hydrocracking

Renewable Fuels

Emission Control Technologies

Advanced Plastics Recycling

1. Includes 50% share of sales from the Zeolyst Joint Venture
2. See Appendix for Reconciliation of non-GAAP measures

Advanced Materials and Catalysts Growth Drivers

Global Sustainability Initiatives Boosting Growth

Expected CAGR 2022-2028

Advanced
Silicas

Polyethylene Strengthening and Light Weighting of Materials

Bio-Catalysts and Green Chemistry

Carbon Capture

Polyethylene¹
+3%

CO₂ Capture²
+25%

Renewable Diesel and
SAF Production³
+27%

Plastics Circularity⁴
+25%

Zeolyst
International

Decarbonization of Heavy Duty and Air Transport

Advanced Plastics Recycling



1. Chemical Market Analysis by OPS April 23
2. Bloomberg NEF, Global Carbon Capture to Rise Six Fold
3. Bloomberg Renewable Fuels Announced Capacity Database Oct 23
4. Bloomberg NEF and Management Estimates

Vision for Long-Term Sustainable Growth



Sustainability-Driven Innovation

Materials science expertise enables sustainable solutions

Leverage development and rapid commercialization capabilities



Share Gain Opportunities

Asymmetric win rate with leading producers

Deliver attractive margins via value-based pricing



Capital-Efficient Expansion

Capacity expansions and debottlenecking

Technology-enabled reliability and efficiency gains



Opportunistic Inorganic Growth

Adjacent and sensible bolt-on opportunities

Increase scale and technical capabilities

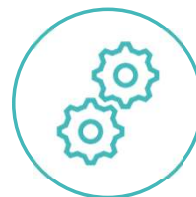
Culture of Purpose is Driving Success



Flat operational hierarchy with strong focus on **developing lasting customer relationships**



Empowered employees are driven to execute with **speed** and **efficiency**



High number of customer touchpoints leading to **meaningful partnerships** and **innovative solutions**

Committed to Implementing the Ecovyst Strategy and Creating Value for Shareholders



Kurt Bitting
Chief Executive Officer
25 Years of Experience



Mike Feehan
Chief Financial Officer
25 Years of Experience



George L. Vann
President, Ecoservices
30+ Years of Experience



Paul Whittleston
President, Advanced
Materials & Catalysts
30 Years of Experience



Sean Dineen
Vice President, Strategy
and Business Development
25+ Years of Experience



Colleen Donofrio
Vice President, Environment
& Sustainability
35+ Years of Experience



Joseph S. Koscinski
Chief Administrative Officer, Vice
President, Secretary & General
Counsel
25+ Years of Experience

ALSO IN ATTENDANCE:

Board Chair
Kevin Fogarty

Board Members
David Bradley
Anna Catalano

Attractive Investment Case Driven by Profitable Growth

1

Products and technology already capitalizing on **global sustainability trends**

2

Industry leadership positions provide durable **competitive advantages**

3

Attractive and **stable margins**

4

Strong free cash flow generation

5

Ability to reinvest earnings into business, funding **strong organic growth opportunities**

6

Balanced capital allocation strategy

Sustainability

Colleen Grace Donofrio

VP, Environment & Sustainability



Focusing on Sustainability Internally & Externally Through our Operations and Products

ECOSERVICES

Spent Sulfuric Acid Regeneration

- Recycles **1.5M** tons of spent acid each year
- Provides steam to reduce carbon footprint
- Processes for heat, steam, and electricity generation could power **~11,000 homes per year**

Treatment Services (TS)

- Accepts customers high heat value waste

Virgin Acid Production

- Supports electrification end uses

Catalyst Activation

- Supports renewable diesel production



R&D Investment in Sustainability
2015: 60% **2022: 83%**

Advanced Silicas & Supports – Alpha™

- Adsorb contaminants in produced water from oil and gas production
- Carbon capture
- Immobilize enzymes for bio-catalysis
- Capture and recover metals from waste streams

Zeolites – Opal™

- Decrease energy intensity of plastics recycling
- Support sustainable aviation fuel (SAF) production
- Foster NOx emissions abatement for diesel vehicles

Internal Sustainability through Operations

2021-2022 Furnace Optimization Project



Inaugural **Ecovyst Environmental Initiative Award** for the Most Impactful Climate Change Reduction Project



2021-2022 Baton Rouge furnace optimization project: Addition of temperature and oxygen controls to **reduce natural gas consumption**



Automation driven optimizations in natural gas usage exceeded our target by **over 20%** in the first year



Deployed at another **Baton Rouge furnace** and the **Dominguez furnace**



Plans for the remaining Ecoservices acid plants by **2028**

External Sustainability through Products: R&D Collaborations & Innovative Products Drive Sustainability

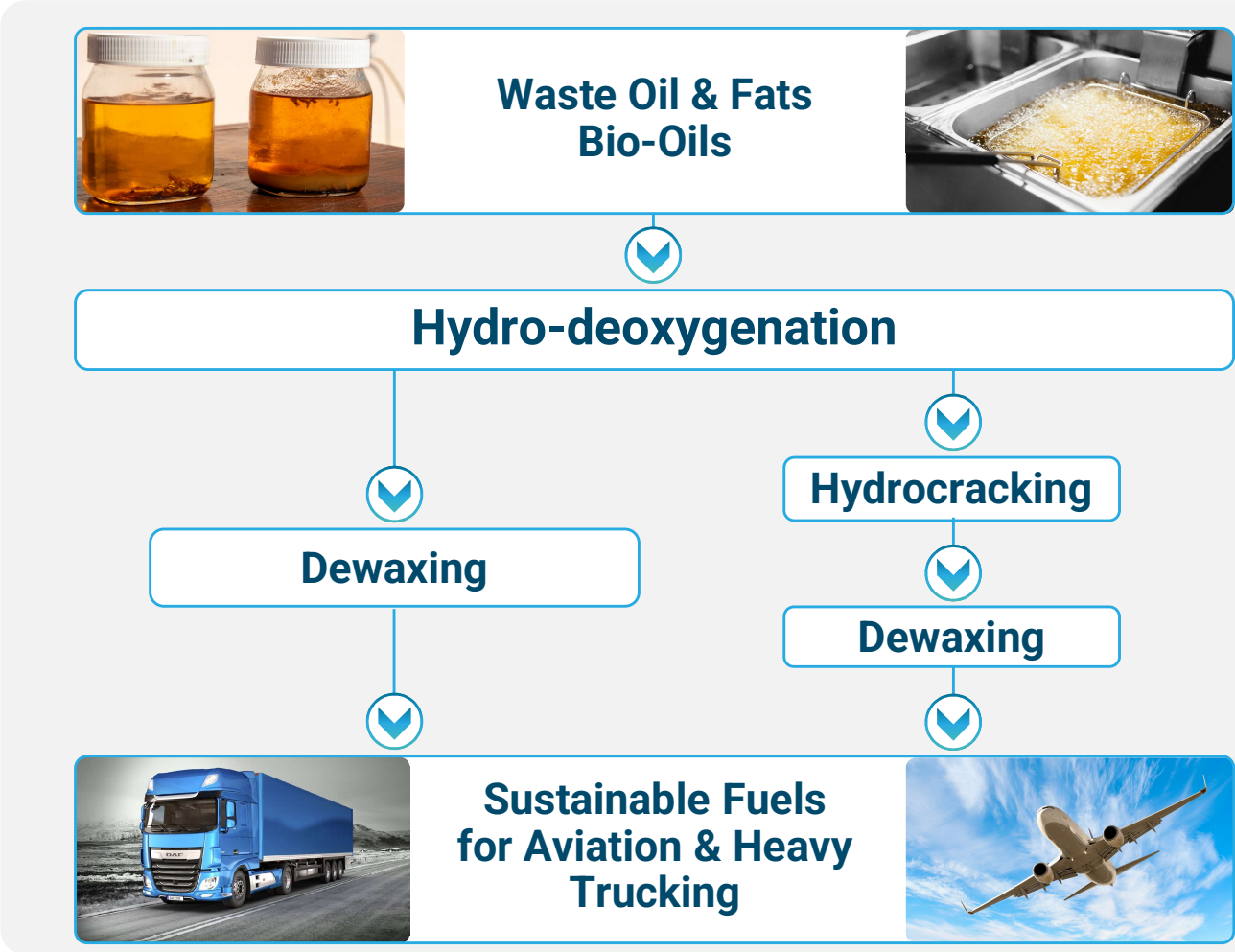
Demand Stemming from Customers and the Environment

- Decarbonization requires transitioning to cleaner fuels

Zeolites Meet the Demand

- Improve fuel properties to meet regulatorily-set fuel specifications
- Contribute to meeting US challenges and proposed EU mandates

Our Zeolites and Catalysts for SAF and Renewable Diesel production are used at **over 15 customer locations** with **more than 30 additional customer projects** in the pipeline



Award-Winning Sustainability Program



2022 EcoVadis Gold Sustainability Rating

Achievements in environmental, labor & human rights, ethics and sustainable procurement

2022 Gold Rating
Top 3% in our peer group



2022 American Chemistry Council Certificates of Excellence & Achievement

Recognition of safety, culture, and results

Excellence 7 U.S. Sites
Achievement 2 U.S. Sites



2022-2023 Transportation Product Stewardship & Safe Handling

Daily commitment to safety beyond our facility borders & a testament to Ecovyst's safety culture

BNSF Product Stewardship
Canadian National Safe Handling
Union Pacific Pinnacle Safety Award
9,222 Incident-free Shipments in 2022
>99.9%

Our Sustainable Program Aligns With Recognized Standards

Sustainability Accounting Standards Board (SASB)

Global Reporting Initiative (GRI) Standards

UN Sustainable Development Goals (SDGs)

Innovating for a Sustainable Future

Sustainability Goals

2025

2030

FUEL USAGE



Implement a **network-wide** natural gas optimization plan

Achieve **~10% reduction** in natural gas usage or obtain equivalent offsets

POWER USAGE



Achieve **65-70%** of electricity usage from on-site generation and/or renewable energy by EOY

Achieve **75-80%** of electricity usage from on-site generation and/or renewable energy

HEALTH, SAFETY & ENVIRONMENT



Achieve Perfect Days within each business segment of **≥ 92%**

Achieve Perfect Days within each business segment of **≥ 95%**

COMMUNITY ENGAGEMENT



Standardize tracking of all community engagement activities & permit all employees to take up to **8 hrs/yr** paid volunteer leave

Target **1,800 hours** of volunteer time per year

Reduction of
~66,000 mt CO₂

Emissions
Equivalent of
~16,000 Cars

Ecoservices Overview

George L. Vann, Jr

President, Ecoservices

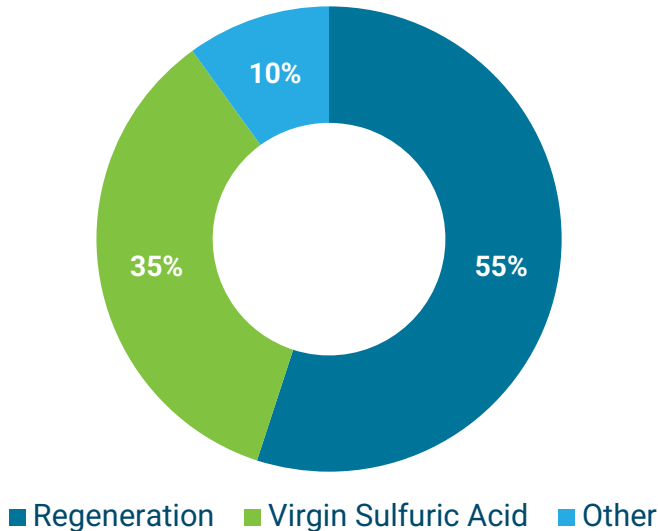


Established Leadership Position in Essential and Growing End Uses

#1 Supplier of **Regen** and **Virgin Acid**

Serving
6 of 10
Largest NA Refineries

Q3 2023 TTM Sales



Competitive Advantages



Long-term viability of US refining customer base and demand growth for alkylate



High barriers-to-entry



High switching costs



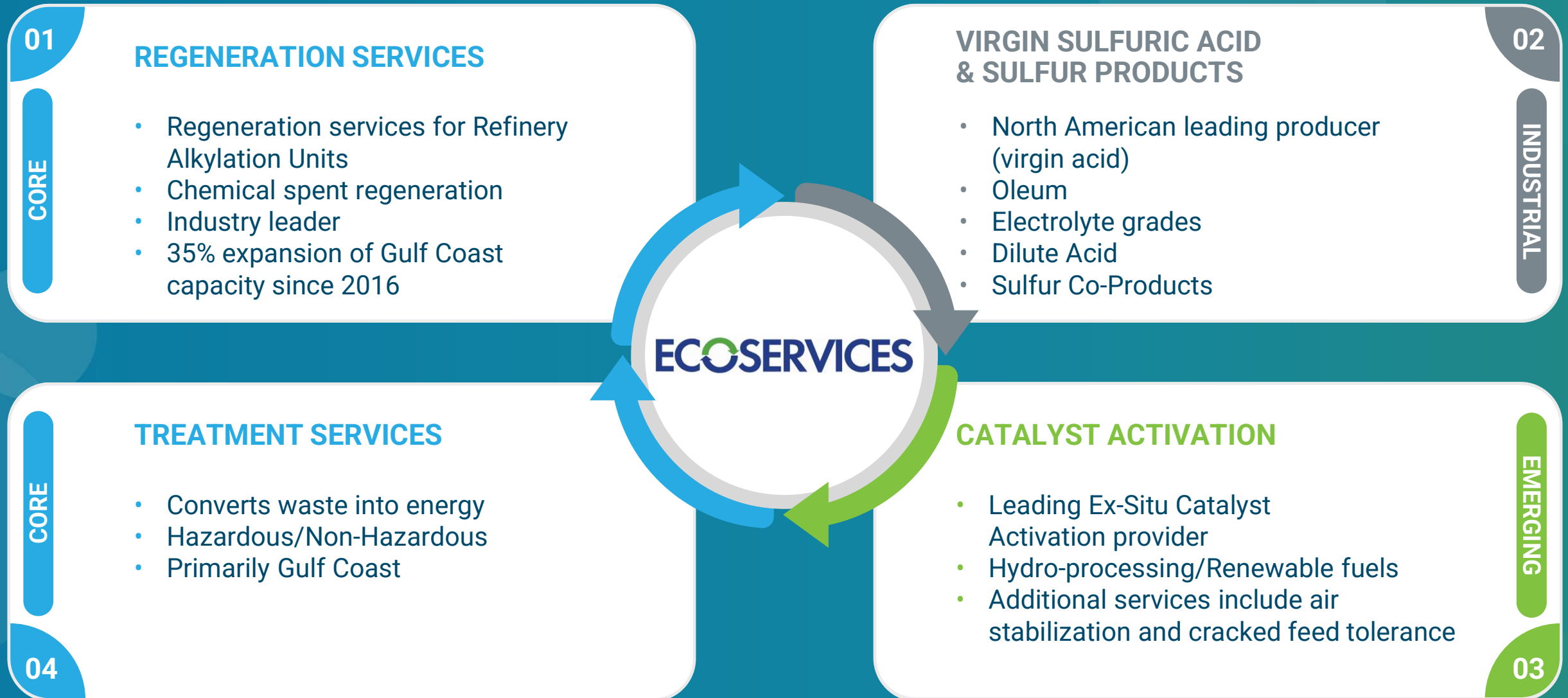
Strategic geographic positioning



State-of-the-art facilities



Diverse, Industry-Leading Business Units



Network Agility Provides Competitive Advantage

Service provider model designed to drive higher margins



BARGE
26%



TRUCK
30%



RAIL
24%



PIPELINE
20%



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 pass-through

Typically, majority share of supply for customers

Take-or-pay and capacity reservation fees



Strategic Initiatives for Organic Growth



Operational Excellence and Enhanced Reliability

Expected to increase Operational
Efficiency >10% by 2028



Automation of Sites to Improve Operating Efficiency

Expected capacity increase >70kt by 2028,
with improved on-stream time



Expansion of Catalyst Activation Production Capability


Expected to double catalyst activation
capacity by 2027

Tightening Regulations Driving Global Alkylate Demand

Regular Gasoline — 12-13% alkylate content p/g gasoline | **Premium Gasoline** — 40-45% alkylate content p/g gasoline

7.5%³

Increase in smaller engines (4-cylinder/turbo charged) which require premium gasoline

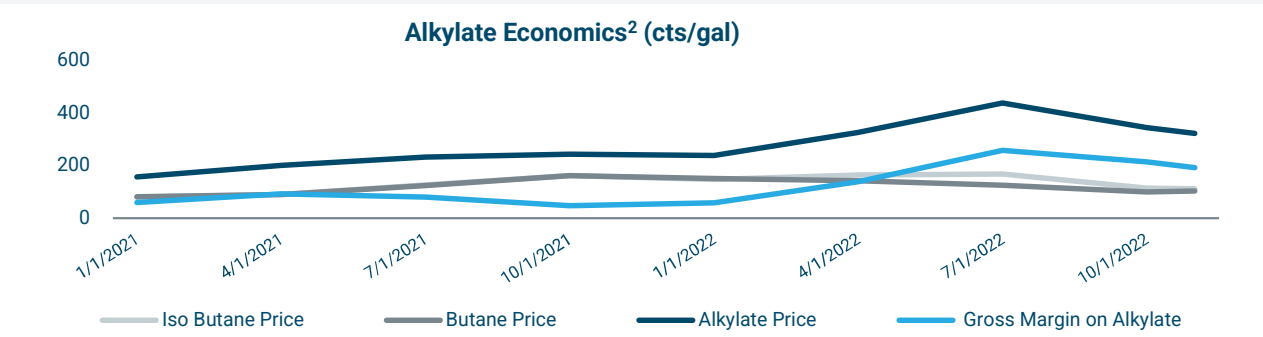
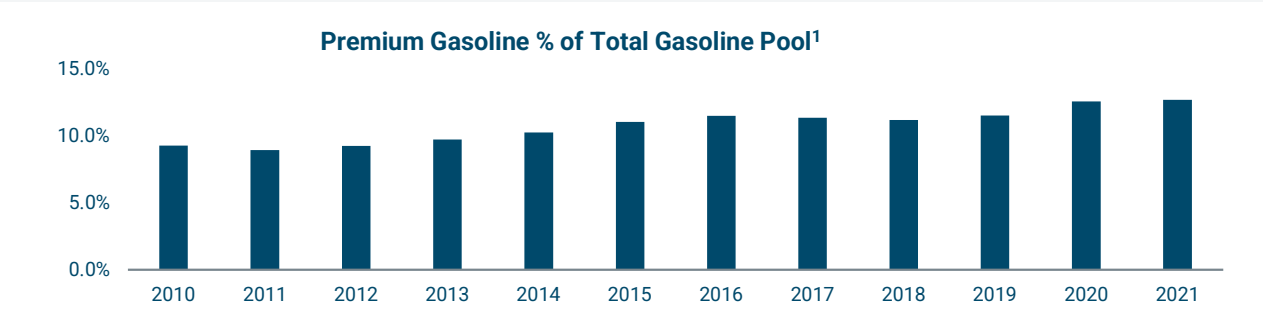
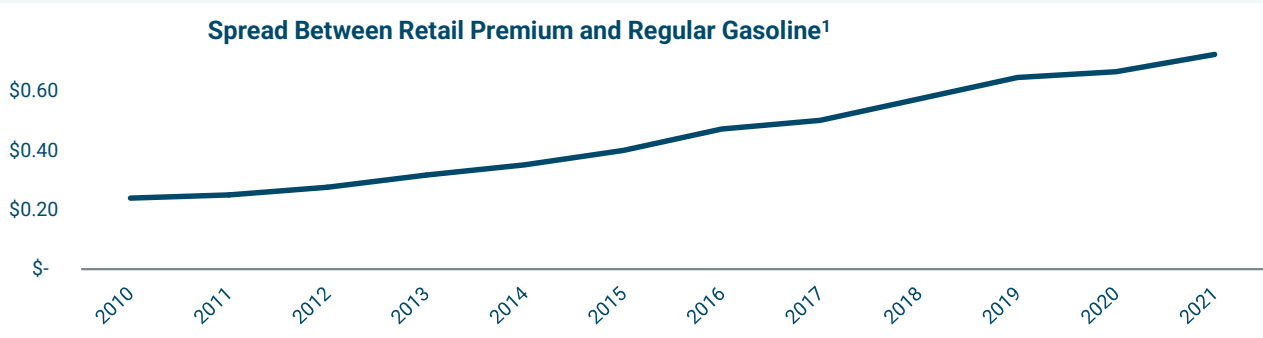


Expanding and strengthening supply chain operations to maintain logistics advantage

10.5% CAGR
2010-2020
US Exports of Finished Motor Gasoline

Alkylate is the most desirable blending component because it **increases octane** while keeping other clean fuel parameters in specification

	Alkylate	FCC/Coker Naphtha	Butane/Butene	Reformate	Naphtha Isomerate	Ethanol
Olefins	✓	✗	--	✓	✓	✓
Aromatics	✓	✗	✓	✗	✓	✓
RON/MON	✓	✗	✓	✗	✓	✗
Octane	✓	--	✓	✓	--	✓
Sulfur	✓	--	✗	✓	✓	✓
Vapor Pressure	✓	✗	✗	✓	✗	✗

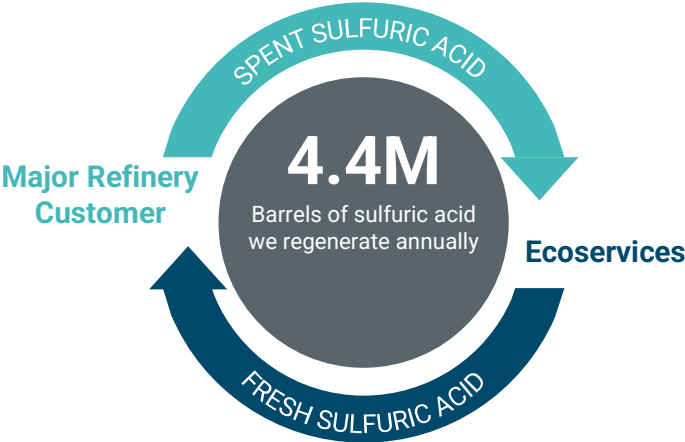


1. EIA
2. Bloomberg
3. LMC

Regeneration Services Mirrors Industrial Gas Business Model

Sulfuric Acid

A catalyst used in the production of Alkylate, a high-value, gasoline-blending component



How We Win

Reliability improves on-stream time delivering **>10% volume increase**

Expansion of logistics capability enable **capture of customer's additional volume**

Capital plan to upgrade major equipment, **increasing operational efficiency**

Growth Drivers

Pricing increases

Opportunities for spot business based on constrained assets at other suppliers

Additional volume based on customers' expansions

Strategic Initiatives Impact



Operational Excellence and Enhanced Reliability



Automation




Growth Through



Price & Customer Expansions

Virgin Sulfuric Acid Serves Growing, Diverse Industries



Sulfuric Acid Product		
Electrolyte	High Strength	Oleum
Industries		
Industrial	Mining	Nylon Intermediates
End Use		
 <ul style="list-style-type: none">• Pet Chem and Chemical• Lead Acid Batteries• Water Treatment• Semiconductors	 <ul style="list-style-type: none">• Electrification• Construction / Infrastructure• Personal Devices	 <ul style="list-style-type: none">• Vehicle lightweighting• Construction• Coatings and Packaging
Ecoservices Advantages		
High purity acid is used for Lead Acid Batteries, water treatment, and other growing industrial segments including pet chem and semiconductors	High strength acid is used in mining applications for copper leaching and borate production (electric vehicles, tech devices, and construction)	Largest producer of Oleum, a super saturated sulfuric acid primarily used for Nylon production

Virgin Sulfuric Acid Business Grows with Industrial End Use



How We Win

Additional volume with increased on-stream time

Better operational efficiency with reliability and automation initiatives

Expand logistics capacity and infrastructure
Loading Racks | Tanks | Etc.

Growth Drivers

Demand growth for copper, borates and lithium

GDP growth in other segments
Nylon | Chlor-alkali | Water Treatment | Ethanol | Batteries

GDP growth in petrochemical/chemical segments

Strategic Initiatives Impact



Operational Excellence and Enhanced Reliability



Automation

Growth Through



Volume & Price

Catalyst Activation Serves Growing Renewable Segment

Benefits

International

Renewable Fuels

Leverage Our Refining Relationships and Sulfur Knowhow

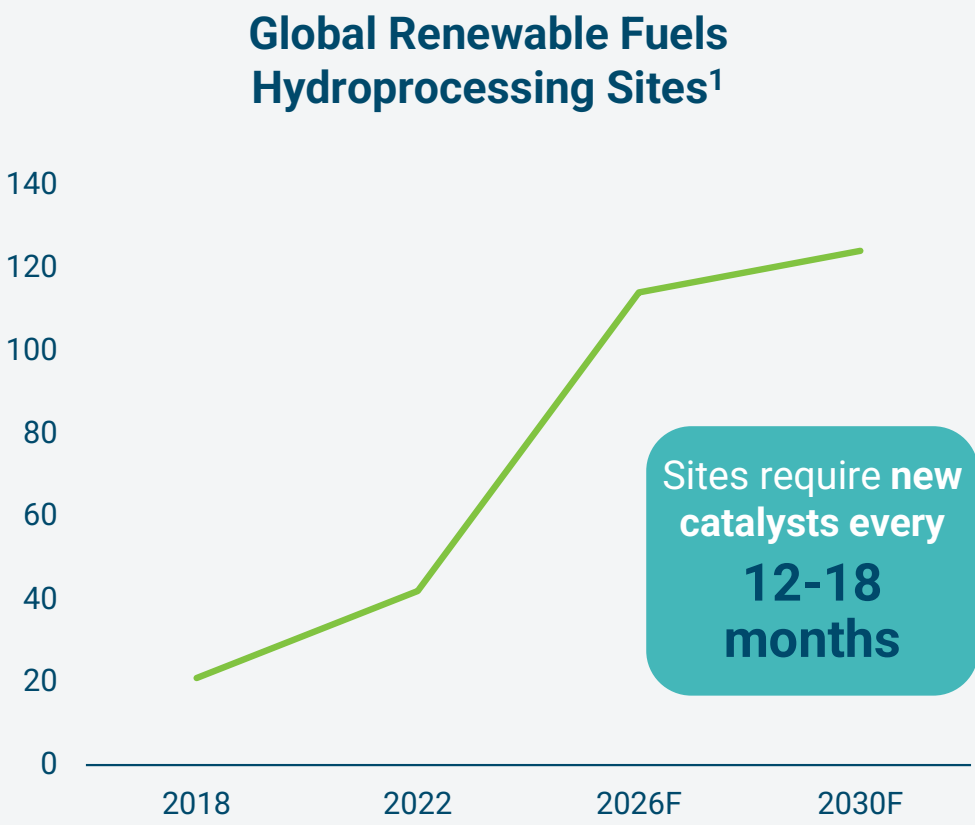
Demand Drivers

Enables Refineries to Outsource Difficult Task of Sulfiding

Quicker Reactor Startups

Growth in Renewables

Cleaner Fuels - Hydroprocessing



Catalyst Activation Expanding in High-Growth Segment Fuels Performance

How We Win

Expansion of reactor capacity to meet customer demand

Reliability improves on-stream time delivering **>10%** increased volume on existing assets

Gain new business as more refineries look to outsource catalyst activation

Growth Drivers

Increasing demand for catalysts for renewable fuels

Continued outsourcing of catalyst activation

Expand customer base to end users and gain new customers

Strategic Initiatives Impact



Operational Excellence and Enhanced Reliability



Automation



Expansion

Growth Through



Volume & Price

Treatment Services is the Go-To Solution for Chemical Waste Management

Benefits



- 1 Leader in the treatment of unique chemical waste
- 2 Capability to dispose of hard-to-handle materials
- 3 Repurposes hazardous waste that otherwise could go to deep well injection



Revenue growth of **>50%** last several years



Forecasted growth continues of more than **10%** over next five years

Demand Drivers

Consumer spending
Housing | Construction
Packaging | Hygiene

Preferable to other waste treatment drivers

Growth Opportunities

Only permitted NA producer that processes hazardous wastes, providing for additional opportunities

Growing chemical production in Gulf Coast will increase waste generated

Strategic Initiatives Impact



Operational Excellence and Enhanced Reliability



Automation

Growth Through

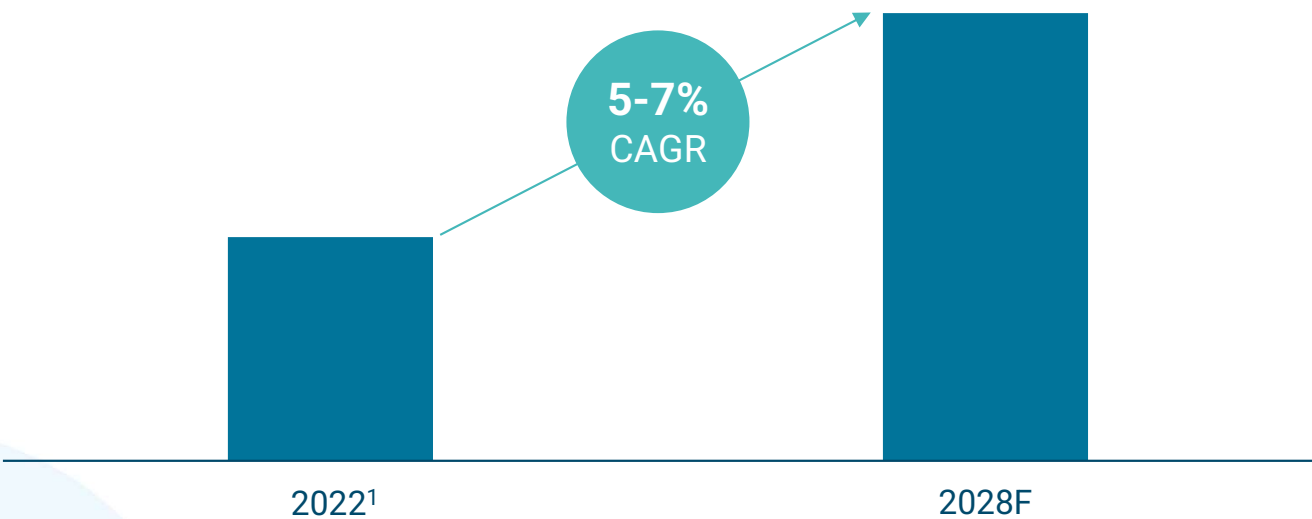


Volume & Price

Primed to Deliver Attractive Growth

Margin expansion driven by price and volume increases

Projected Adjusted EBITDA Growth



1. See Appendix for Reconciliations of non-GAAP measures



Sales Growth

accelerate volume growth through increased on-stream time and additional logistics capability



Operating Leverage

maintain strategic pricing and contract structure, leveraging operational excellence initiative



Strong Visibility

into necessary capital requirements to capitalize on growth opportunities

Key Takeaways



Strong Performance Across
Business Segments



Continued Growth
in Markets Served



Strategic Initiatives
Enable Our Growth Plan



10 MINUTE BREAK

Advanced Materials & Catalysts

Paul Whittleston

President, Advanced Materials & Catalysts



Ecovyst Advanced Materials & Catalysts – Leveraging The Unique Properties Of Zeolites & Silicas



40+ Year Legacy
In Silica Chemistry

Advanced Silicas



Expertise in development and synthesis of Silica-based supports & catalysts and commercial management

Silica Feedstock Produced by Ecovyst	Polyethylene Catalysts	Chemical Catalysts
	Polyethylene Supports	Sustainable Catalysts
	Antiblocks	Functional Silicas

- Research, development & scale up

- Manufacturing at Kansas City and across global network of contract manufacturers

- Commercial responsibility



35+ Year 50-50 Partnership

Expertise in catalysts for refinery & petrochemical



Shell Catalysts & Technologies



Expertise in development and synthesis of Zeolite structures & catalysts, and commercial management outside of HCC and Specialty

Zeolite Feedstock Produced by Zeolyst	Hydro Cracking Catalysts	Advanced Recycling	Renewable Fuels
	Specialty Catalysts	Merchant Y Powder	Custom Zeolites & Catalysts
	Emission Control		

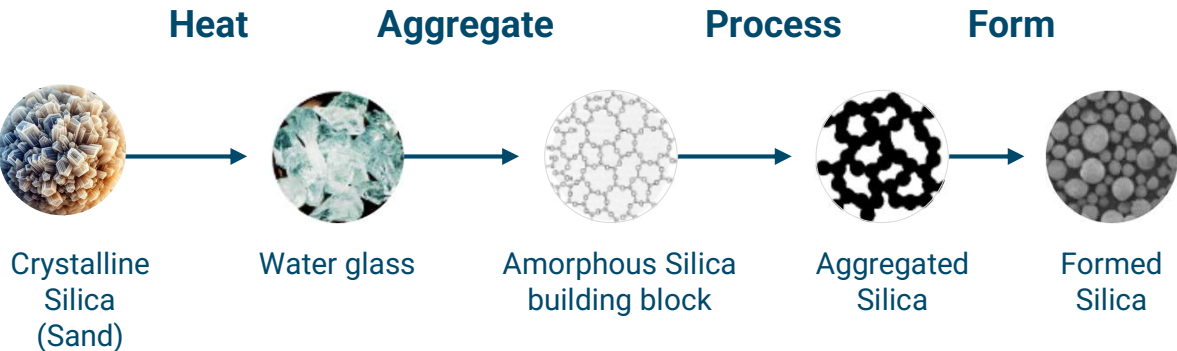
- R&D activities
- Trolled catalyst production
- Sales within Shell & to 3rd parties

- R&D activities including Y Powders & scale up
- Manufacturing at Delfzijl, NL & Kansas City, USA
- Sales to Hydrocracking co-producers
- Commercial responsibility

Deep Materials Science & Complex Manufacturing Process Know-How

Advanced Silica

Simple Materials, High Complexity Processes

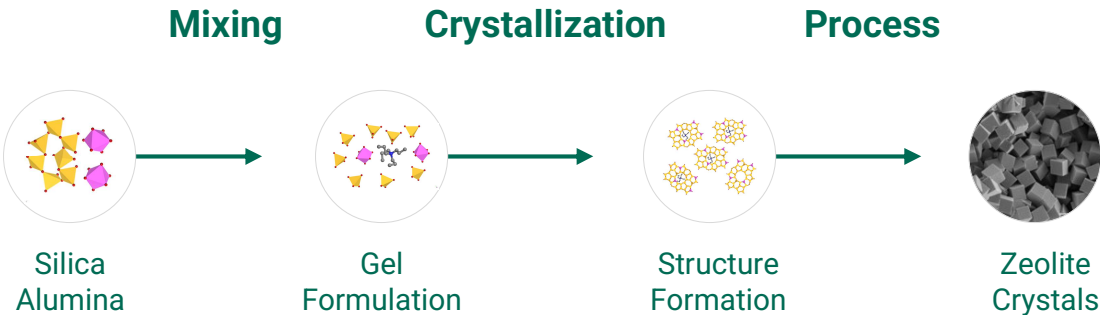


Many Different Forms of Silicas From Ecovyst

Types	ES	EP	MS	Granular	Beads	Extrudates
Shape						

Zeolyst

Porous Materials, High Complexity Processes



Many Different Types of Zeolites From Ecovyst

Types	FAU Y Powder	BEA Beta	MOR Mordenite	MFI ZSM-5	FER Ferrierite
Pores					

New Name Reflects Our Competencies, Heritage And Future

Our Core Competencies

Deep R&D expertise in Silica
and Zeolite materials

Analytical processing technologies

Rapidly develop and
and scale new technologies

Our **core ability** to
modify materials using science to
create products with significantly
different functionality & **higher**
value is differentiating

Our Legacy & Heart

35-year+ partnership for Zeolite-
based catalysts

40+ years Silica
catalysts & additives
for Polyethylene

Flexible manufacturing assets

We **create value** for our customers
through the development and sale
of catalysts and supports **that**
enable catalyzed reactions

Our Competency & Future



Our Legacy & Heart



**Advanced Materials
& Catalysts**

Launching New Product Branding Alongside New Name

Business Unit	Advanced Materials & Catalysts	
Sub-Business Unit	Advanced Silicas	Zeolyst International®
Brand	<div>Alpha™</div> <div>Alpha™ carries the concept of leadership and being first</div>	<div>Opal™</div> <div>Opal™ carries the concepts of specialty products, purity and high value</div>
Application & Product Focus	<div>Alpha Pol Polyethylene Catalysts</div> <div>Alpha Pol Polyethylene Supports</div> <div>Alpha Bloc Anti-blocking Silicas</div> <div>Alpha Cat Chemical / Bio-Catalysts & Supports</div> <div>Alpha Select Functionalized Silicas</div>	<div>Opal Renew Sustainable Fuels</div> <div>Opal Infinity Advanced Recycling</div> <div>Opal Pure Emission Control</div> <div>Opal Blue Custom Zeolites</div> <div> Shell Catalysts & Technologies Hydrocracking & MACH</div> <div> Zeolyst Aromatics Your Performance Advantage Oparis™, Zataris™, & ATA</div>

Customized Solutions From Lab To Commercial With Speed & Quality

Customer Need

Ecovyst and customer team define problem & potential solution

Laboratory Scale (Grams)

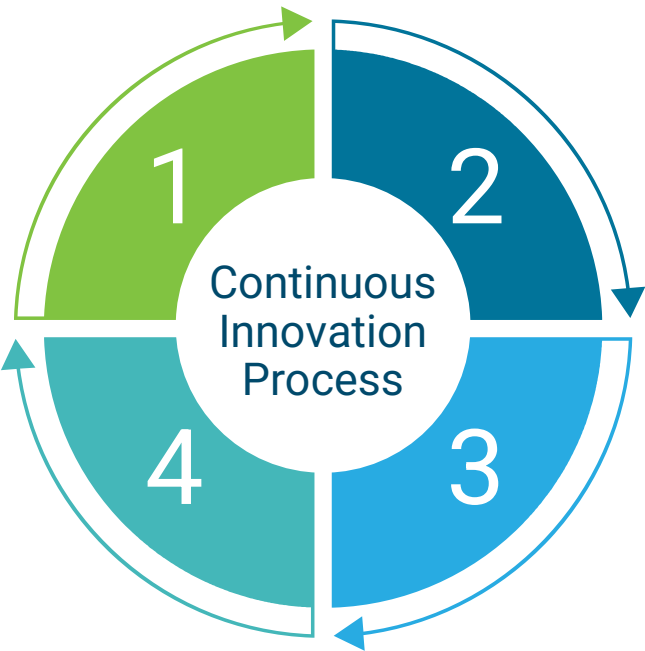
Bench scale equipment used to develop concept and prepare first solutions

Pilot Plant (Kilograms)

Stage Gate review confirms business case before rapidly introducing pilot scale production

Commercialization (Tons)

Commercialization plants mirror pilot assets, ensuring consistent quality and rapid scalability



Depth in Advanced
Material Science
capabilities



Same team develops,
scales, and technically
supports launch



Global collaboration
between R&D
centers



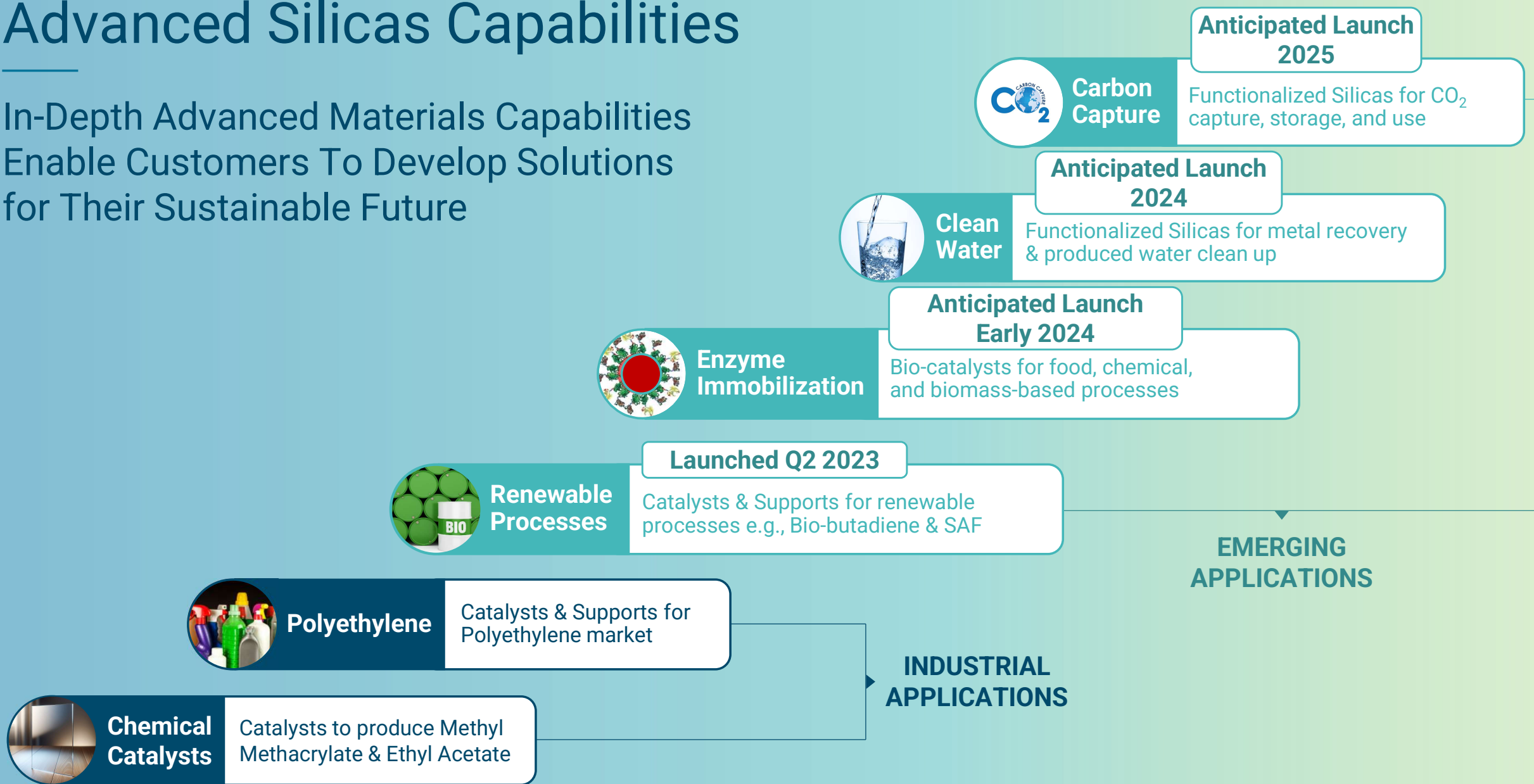
Highly experienced &
qualified team, with 11 PhD,
9 MS & 14 BSc, averaging
16 years with Ecovyst



Pilot facilities co-
located with R&D
team enabling rapid
scale up

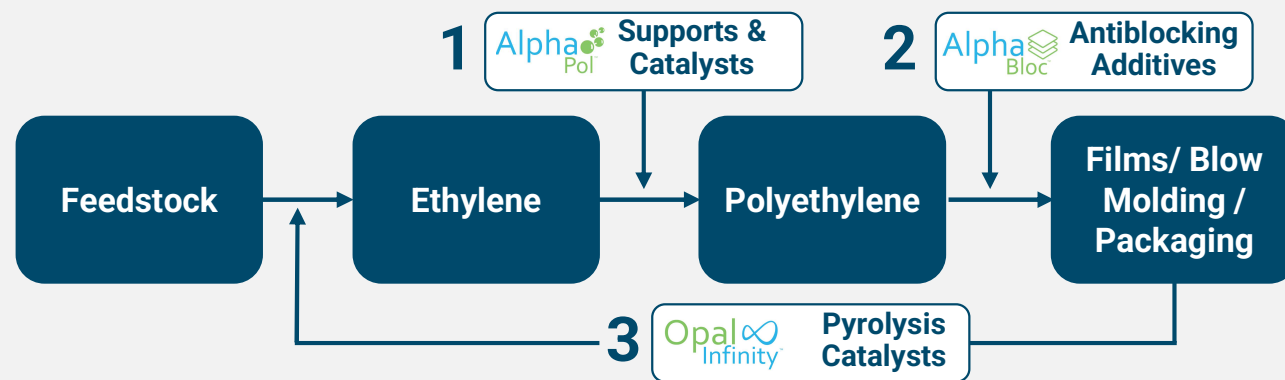
Advanced Silicas Capabilities

In-Depth Advanced Materials Capabilities
Enable Customers To Develop Solutions
for Their Sustainable Future



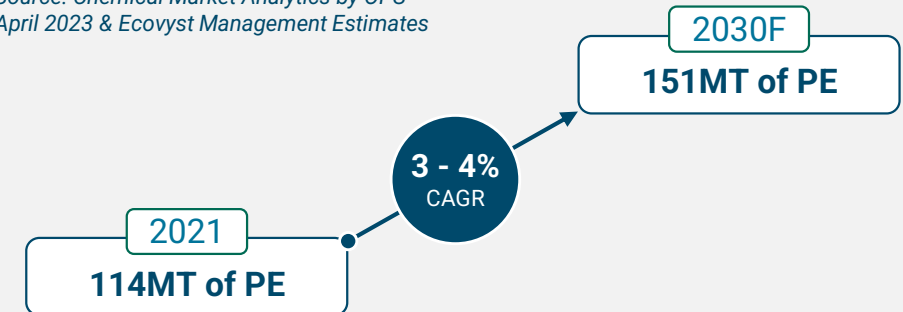
Customized Solutions Addressing Polyethylene Market Needs, Targeting 2-3x Market Growth Rate

Where We Play



Polyethylene (PE) Potential Demand

Source: Chemical Market Analytics by OPS
April 2023 & Ecovyst Management Estimates



Positioned to deliver 2 – 3x industry growth

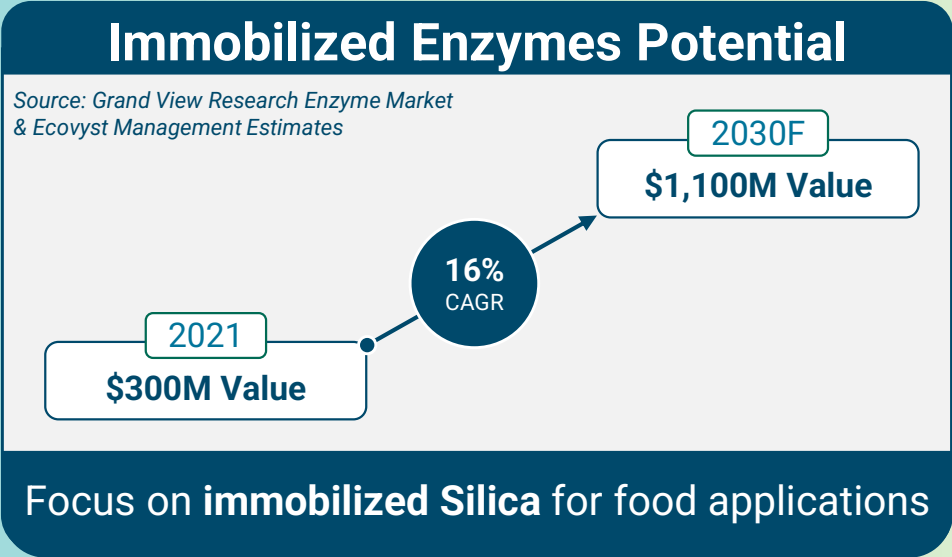
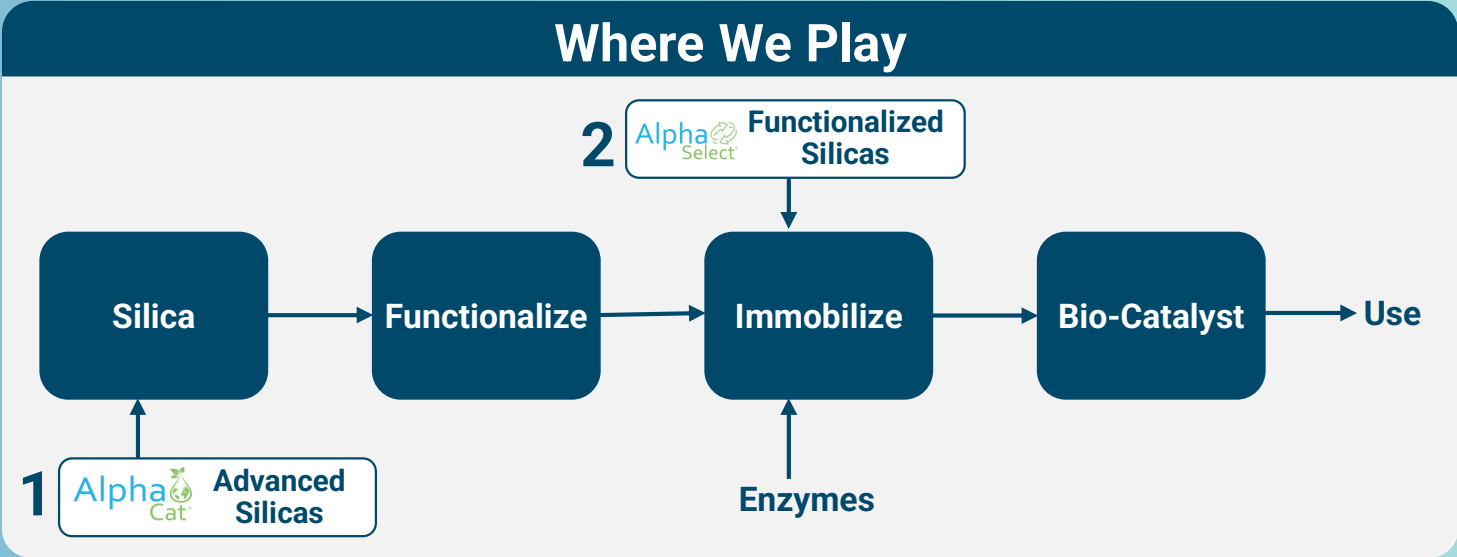
Key Drivers

- Increasing global use of Polyethylene
- Food storage & preservation needs
- Light weighting of materials

How We Win

- Partner with key technology licensors & producers
- Develop new products in partnership with customers
- Reliable, quality, and cost-effective supply

Advanced Silicas Are Enabling Enzyme Immobilization Technology To Rapidly Commercialize



Key Drivers

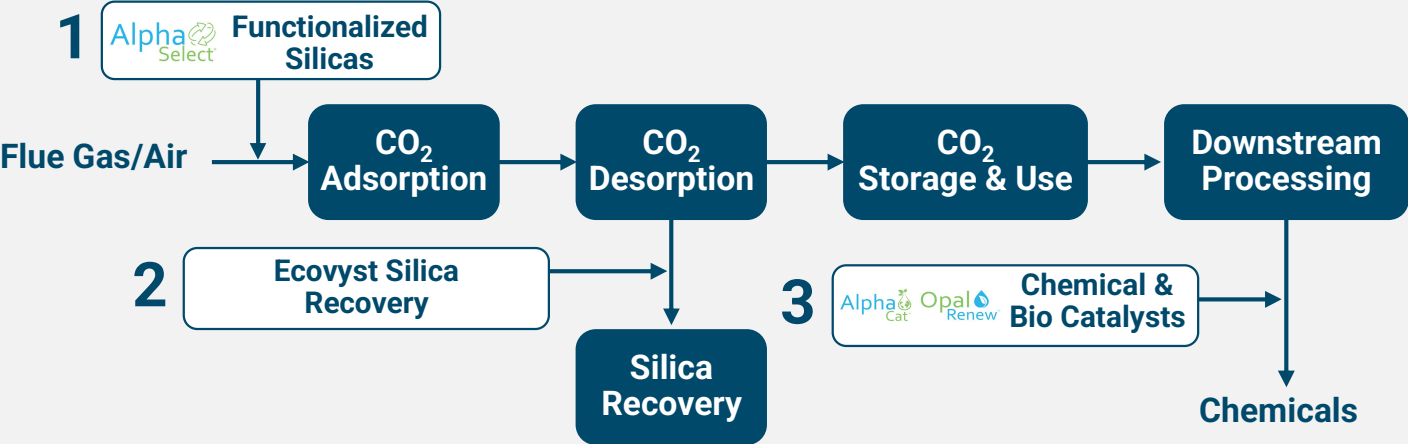
- Increasing demand for cost-effective food
- Emerging technology to modify & test enzymes
- Energy intensity, HSE profile & ease-of-use

How We Win

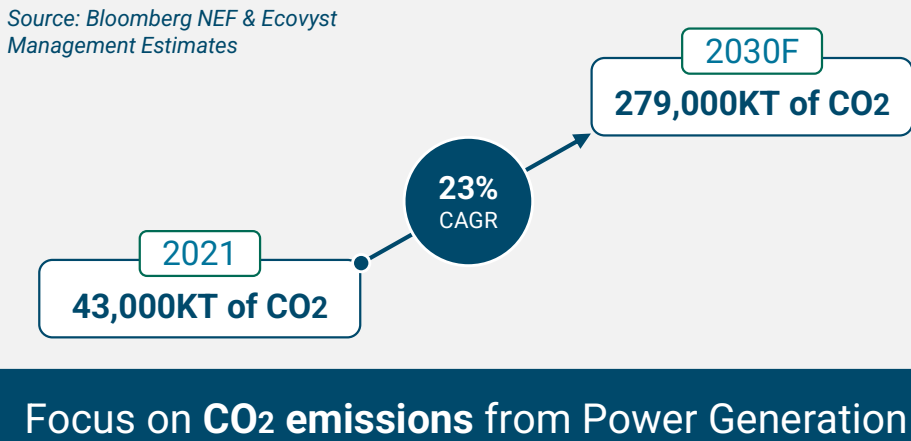
- Execute current project pipeline, then broaden
- Rapid R&D & qualification meeting customer needs
- Scale commercial & technical expertise

Advanced Silicas Are Enabling Efficient Capture Of CO₂ Produced From Power Generation

Where We Play



Carbon Capture Potential



Key Drivers

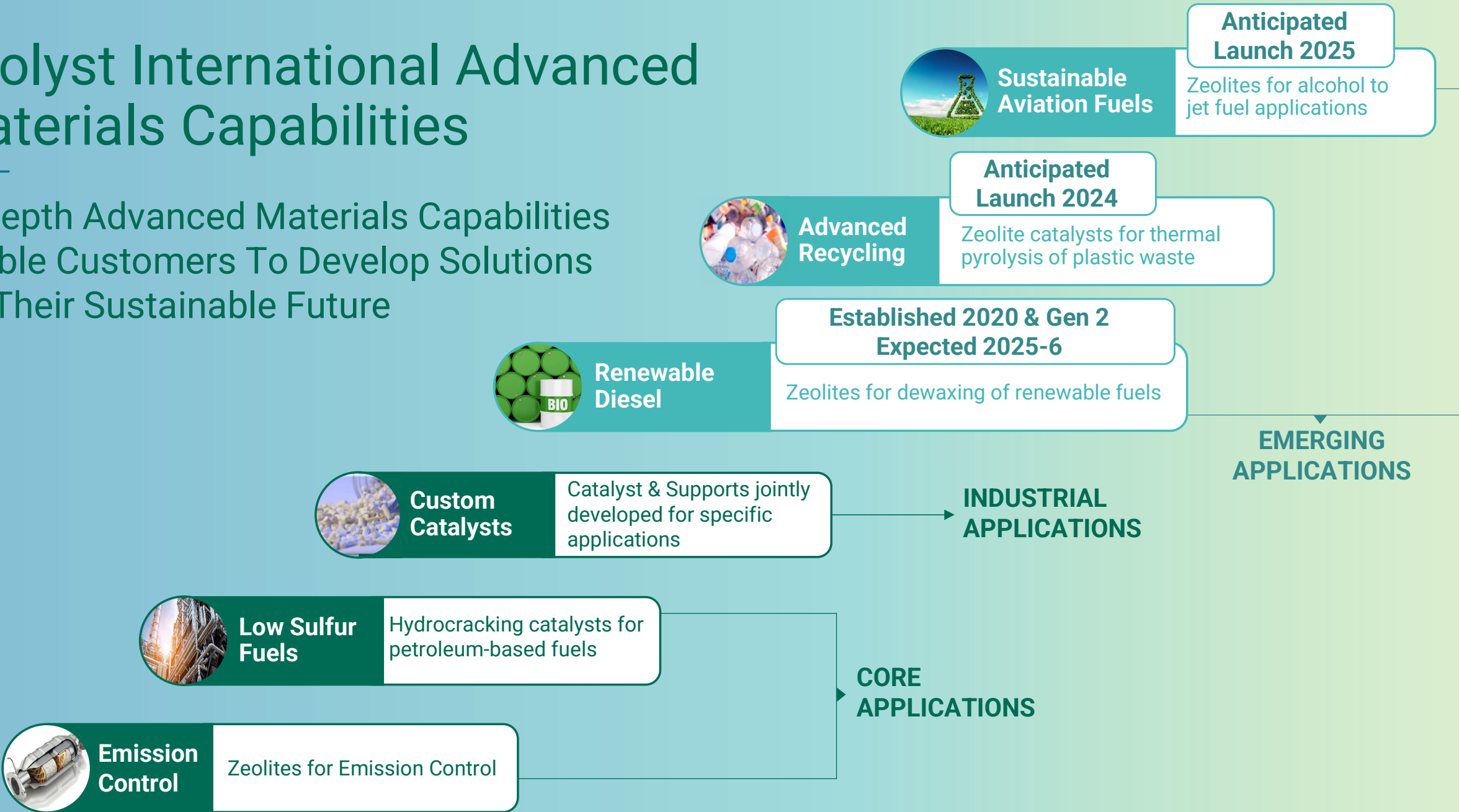
- Global regulatory and social initiatives to lower CO₂
- High value of CO₂ credits
- Recovered CO₂ for downstream chemical production

How We Win

- Execute current project pipeline, then broaden
- Identify technology leaders and develop new systems
- Scale commercial & technical team

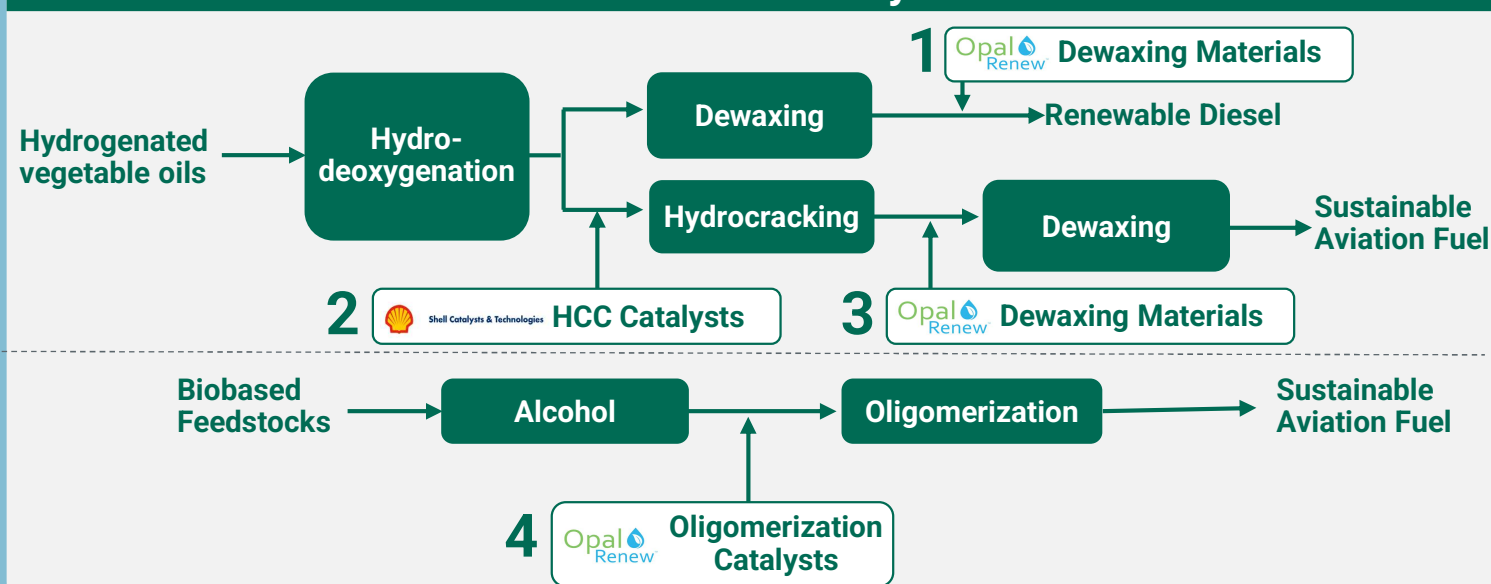
Zeolyst International Advanced Materials Capabilities

In-Depth Advanced Materials Capabilities Enable Customers To Develop Solutions for Their Sustainable Future



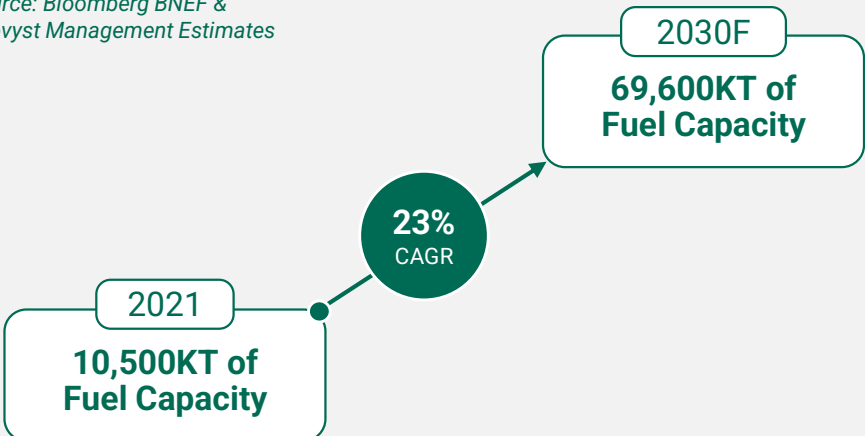
Zeolyst Advanced Material Science Is A Key Enabler For Global Decarbonization Efforts

Where We Play



Renewable Diesel & Sustainable Aviation Fuels

Source: Bloomberg BNEF & Ecovyst Management Estimates



Focus on **growing** with current & new licensors

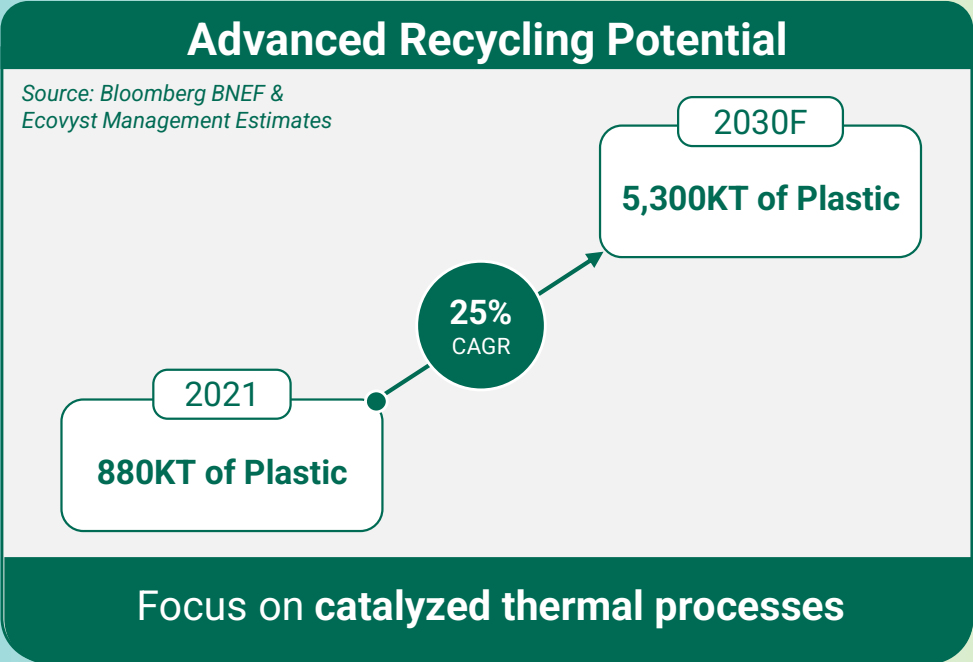
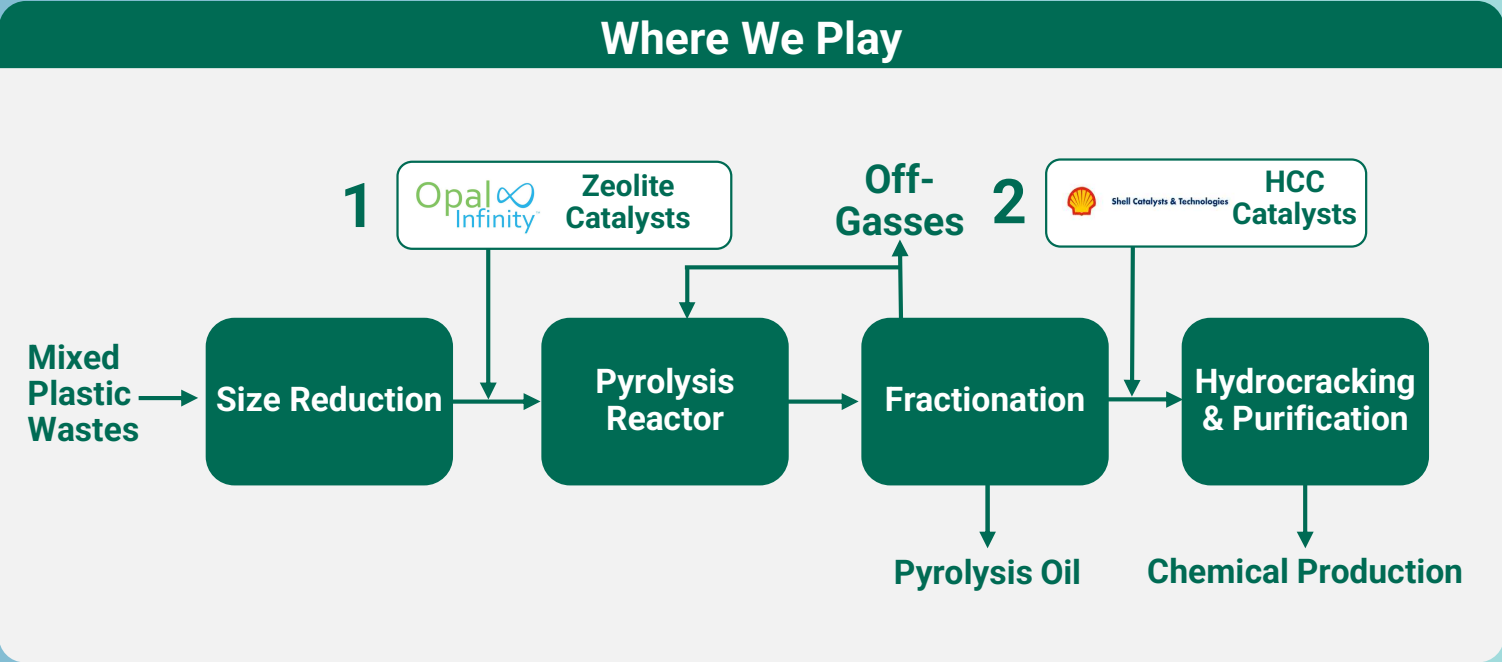
Key Drivers

- Regulatory requirements promoting decarbonization
- Commitment of airlines to decarbonize fuels
- Food vs. fuel pressures enabling new technologies

How We Win

- Established partnerships with technology licensors
- Staying ahead through innovation
- Propriety manufacturing know-how

Zeolyst Technologies Are Improving The Cost-Effectiveness To Recycle Plastic Waste



Key Drivers

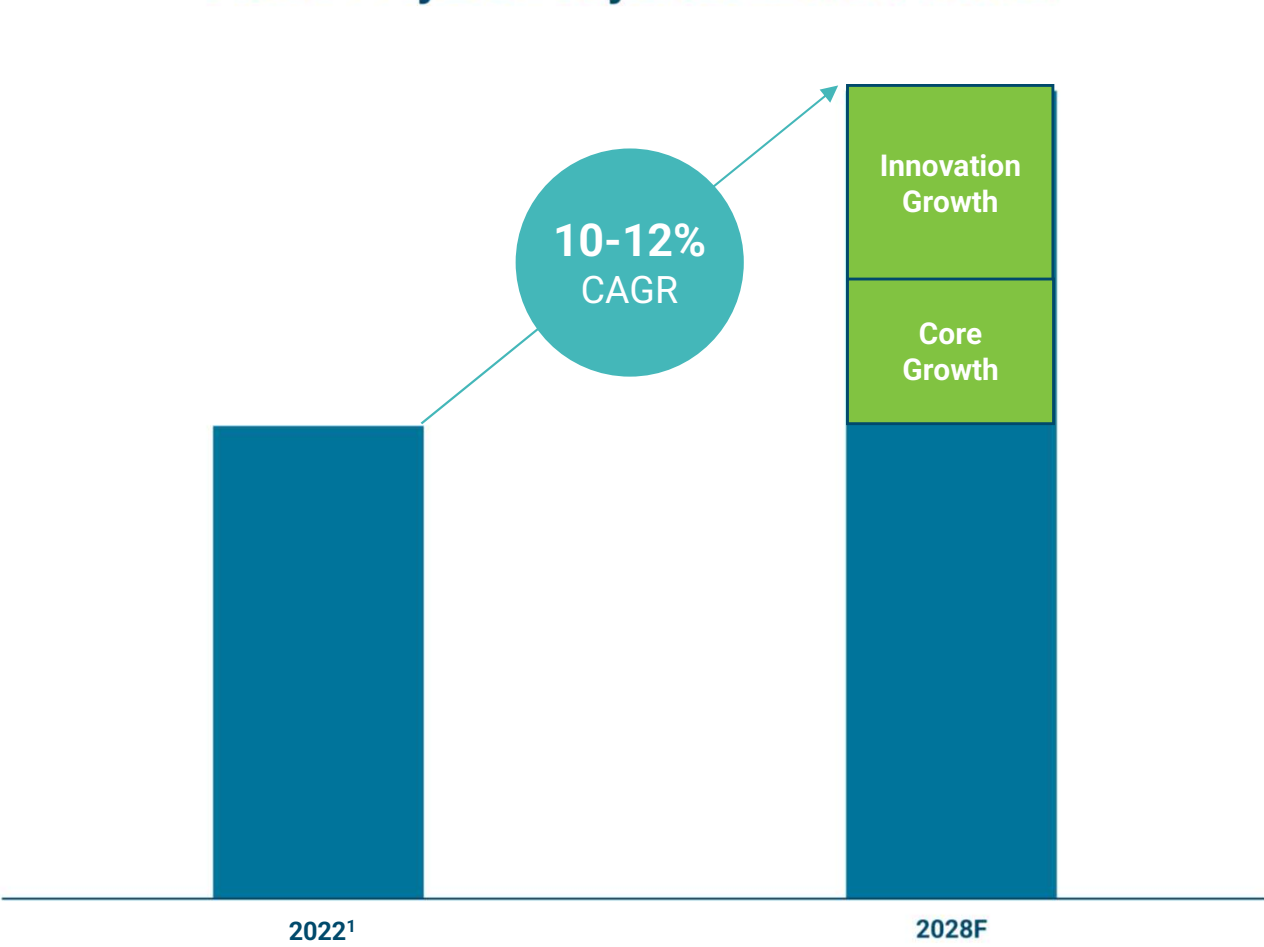
- Global regulatory and social initiatives
- Inefficiencies of existing processes
- Need & willingness of companies to innovate

How We Win



- Partner with processors with access to capital and plastic collection infrastructure
- Utilize existing technology and manufacturing footprint
- Scale commercial & technical teams

Strong Team Developed And Positive Momentum Built, With A Relentless Focus on Execution

AM&C Projected Adjusted EBITDA Growth



Key Takeaways

-  Organic growth in Polyethylene & Custom Catalysts continues to be robust
-  Our entry into renewable fuels is successful. We will profitably grow as capacity is added
-  Our deep Advanced Materials know-how enables expansion into emerging applications
 - Sustainable Aviation Fuel
 - Advanced Recycling
 - Carbon Capture
 - Enzyme Immobilization

Our innovation capabilities, close partnerships with customers & unique production capabilities are key differentiators that will enable our continued success

1. See Appendix for Reconciliations of non-GAAP measures

Financial Outlook

Mike Feehan

Chief Financial Officer



Premier Financial Profile



Strong business fundamentals

supported by global demand trends, leading supply positions, integrated supply network, favorable long-term contract structures, and innovative track record



High growth potential from favorable secular demand trends and compounding organic growth initiatives



Resilient financial profile with **mid-30%** average business segment margins from 2018-2022



Strong **cash flow** generation driven by healthy business profitability

2018-2022

6%

Adjusted EBITDA
CAGR^{1,4}

71%

Average Cash
Conversion^{1,2}

29%

Average Capital
Intensity^{1,3}

31%

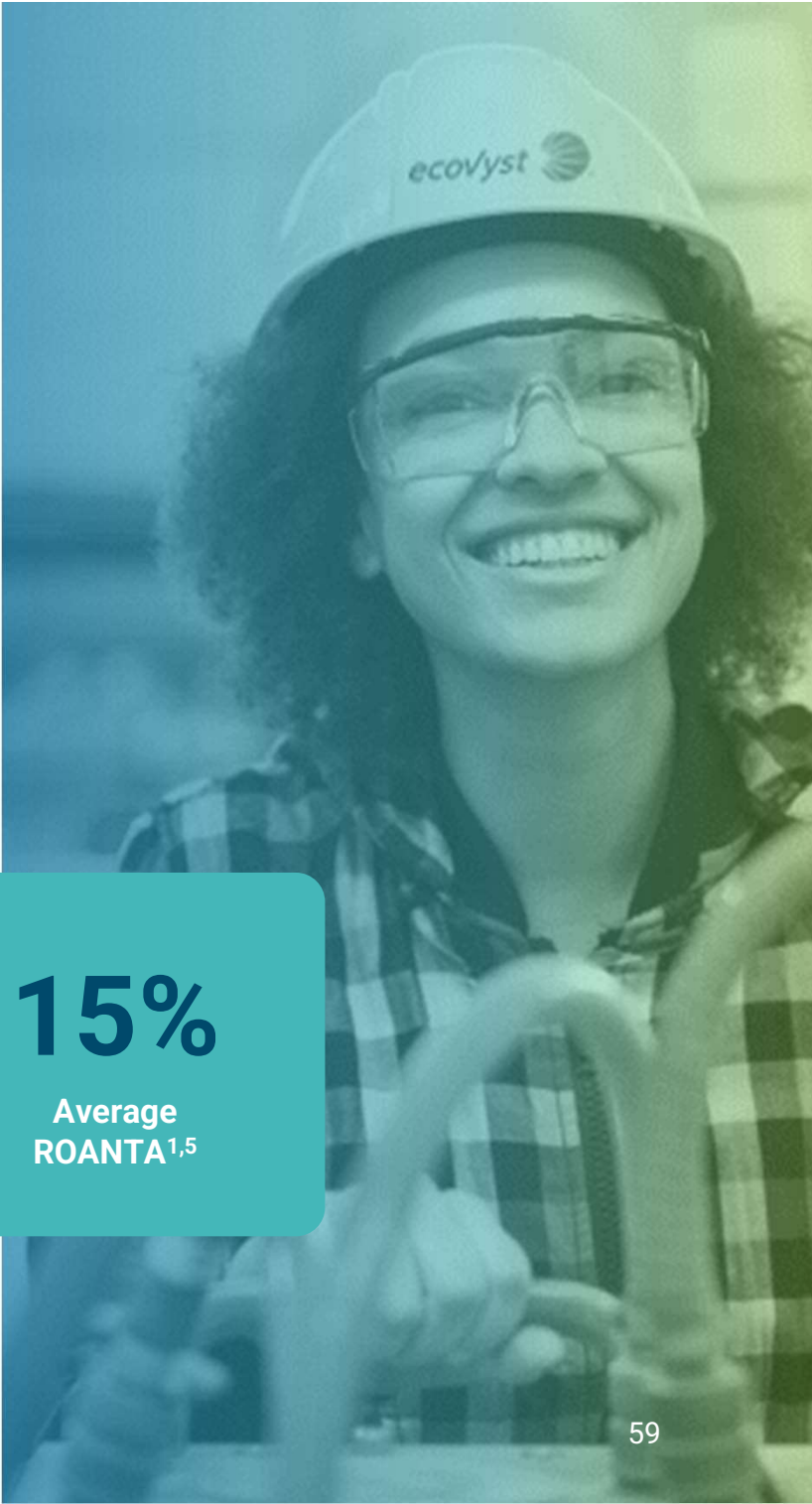
Average Adjusted
EBITDA Margin^{1,4}

15%

Average
ROANTA^{1,5}

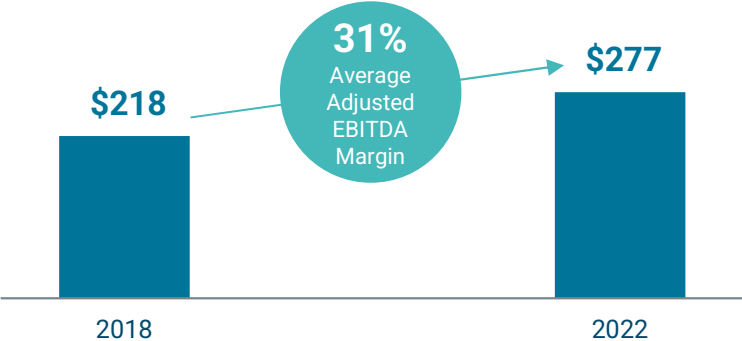


1. See Appendix for Reconciliations of non-GAAP measures
2. Cash Conversion % = (Adjusted EBITDA – Capex)/(Adjusted EBITDA)
3. Capital Intensity = Capital expenditures as percentage of Adjusted EBITDA
4. Adjusted EBITDA calculation includes proportionate 50% share of sales from the Zeolyst Joint Venture
5. ROANTA = Return on Average Net Tangible Assets

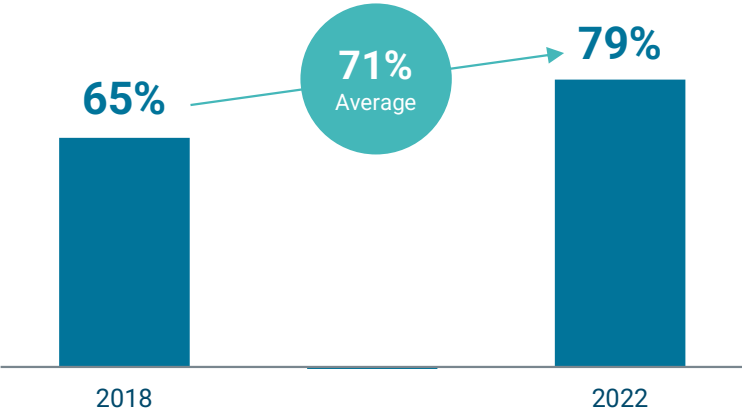


Strong Track Record of Performance vs. Peers

Ecovyst Adjusted EBITDA^{1,2} (\$M)

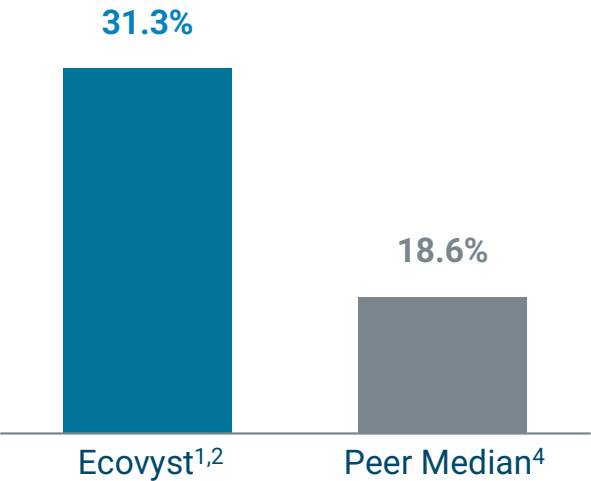


Ecovyst Cash Conversion^{1,3}

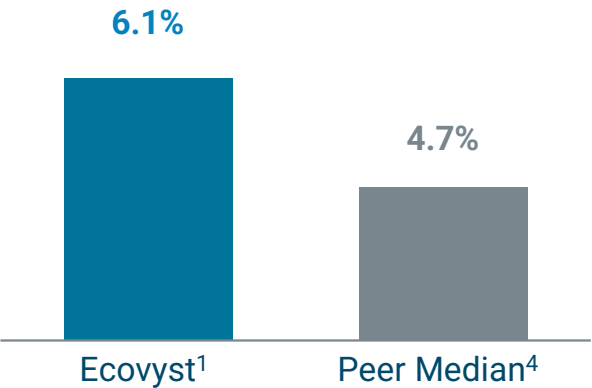


Ecovyst Peer Comparison

Adjusted EBITDA Margin
(2018 – 2022 Average)

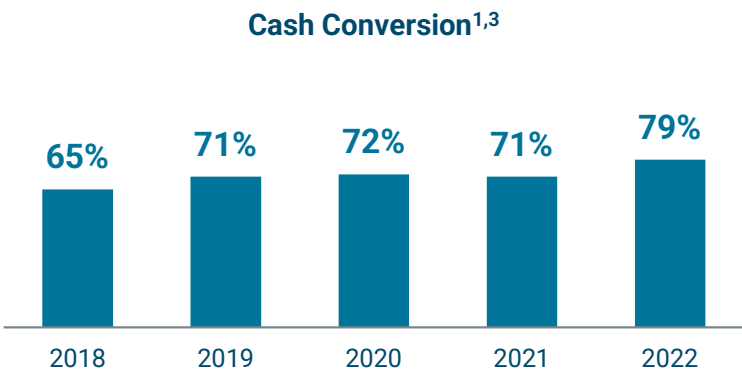


Adjusted EBITDA CAGR
(2018 – 2022)



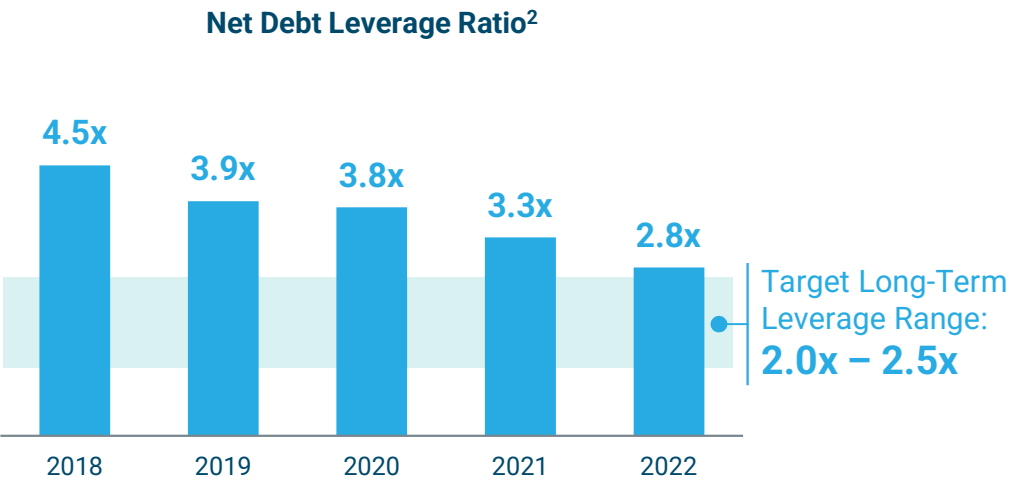
1. See Appendix for Reconciliations of non-GAAP measures
2. Adjusted EBITDA margin calculation includes 50% share of sales from the Zeolyst Joint Venture
3. Cash Conversion % = (Adjusted EBITDA-Capex)/(Adjusted EBITDA). See appendix for reconciliation of non-GAAP measures
4. Represents the median companies in the S&P 1500 Specialty Chemicals Index as reported by FactSet

Strong Cash Generation Driving Investment for Growth & Enhanced Shareholder Value



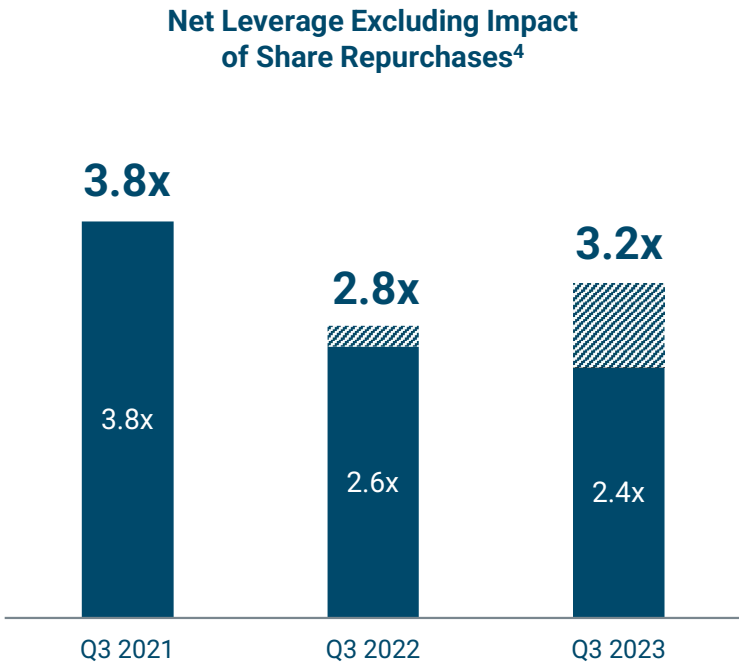
Cash Generation Driven By

- Growth in Adjusted EBITDA
- Historically modest capital spending



Deleveraging

- No significant debt maturities until 2028
- Interest rate caps limit rate exposure
- Current cost of debt ~5%



2028 Financial Goals



6-8%

Organic Adjusted
EBITDA Growth



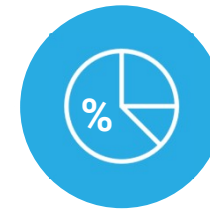
75%

Average Cash Conversion



2.0x-2.5x

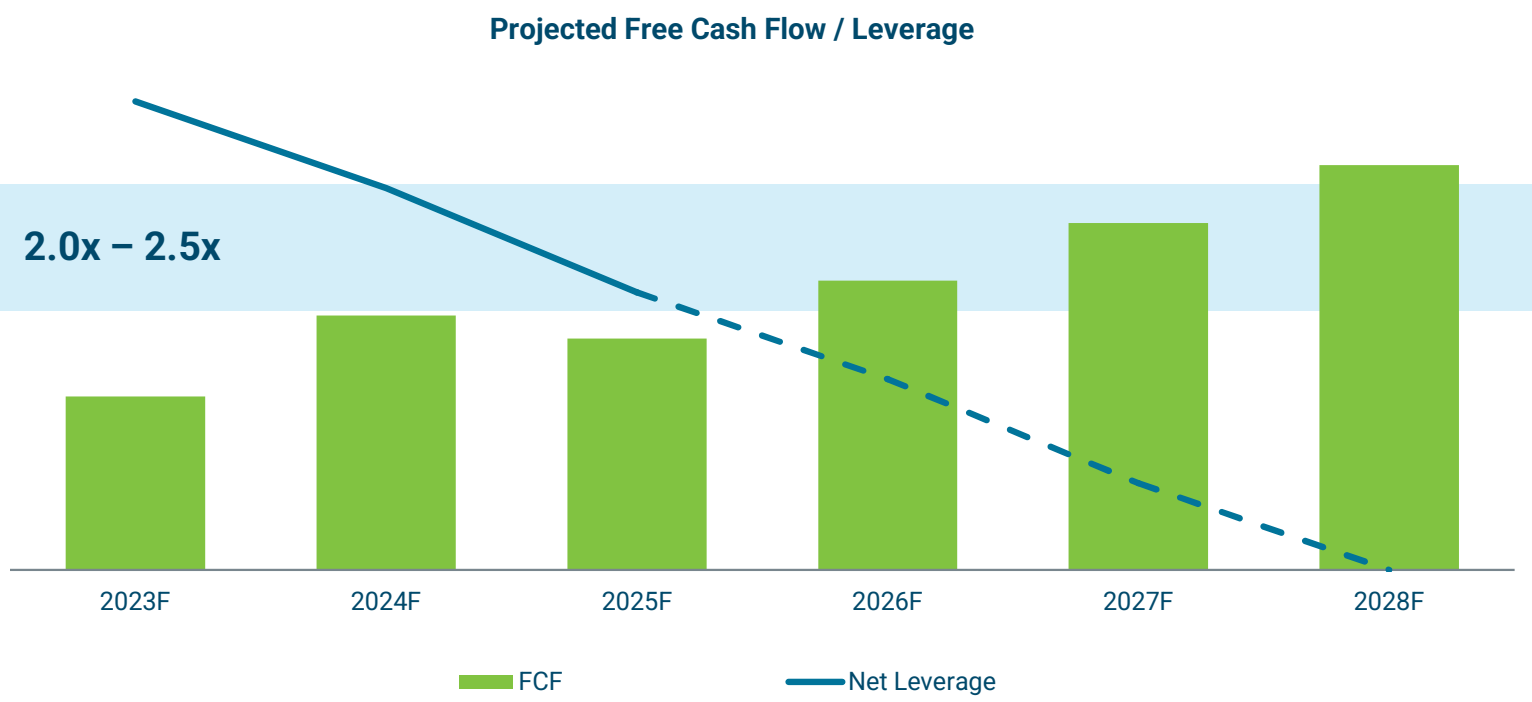
Net Debt Leverage Ratio



>20%

ROANTA Average

Capital Allocation Strategy Focused on Maximizing Shareholder Value



Adjusted EBITDA Growth and Cash Conversion to drive **Free Cash Flow Generation**

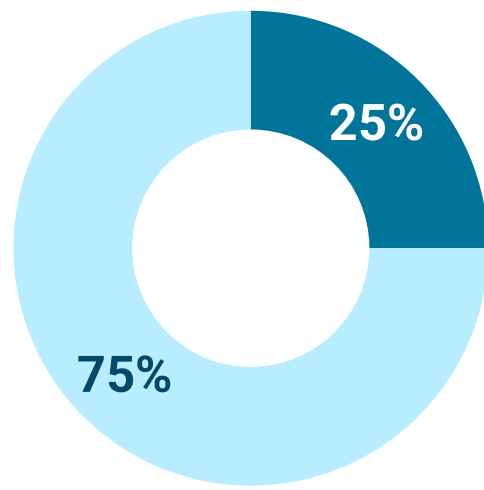
Target Net Leverage of **2.0x-2.5x** Early in Projection Period

Allows for **Flexible Capital Allocation** Strategy to Include Bolt-On Acquisitions and Share Repurchases



Focusing Capital Investments to Drive Growth

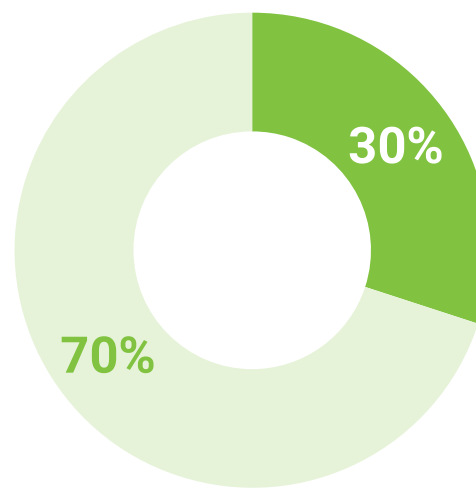
2018-2022 Average



■ Growth Capital
■ Maintenance Capital

29% Average Capital Intensity¹

2023 - 2028 Projected



■ Growth Capital
■ Maintenance Capital

25% Average Capital Intensity¹

- Increase focus on **growth capital**, while maintaining appropriate levels for maintenance capital
 - ~**50% increase** in average growth capital
 - ~**30% increase** in average maintenance capital
- Emphasize **high growth projects** in associated growth markets
- Favorable expected **financial investment returns**

Key Initiatives to Drive Organic Growth

Preferred technology and increasing sustainable product offerings projected to drive growth through 2028

ECOSERVICES

Expansion of catalyst activation for hydroprocessing and renewable fuel production

Debottlenecking virgin sulfuric acid production to meet demand in mining and industrials

Favorable pricing benefit from inflation through long-term contract structure

Advanced Materials & Catalysts

Grow at above market rates in polyethylene through know-how and customer partnerships

Continue growth of product offerings in renewable fuels driven by global decarbonization

Expand commercial technology of advanced recycling for plastic pyrolysis

Drive chemical catalyst growth in sustainable processes for new novel catalysts, such as enzyme development

Advance functionalized silicas to capture demand from electrification and carbon capture

Opportunistic Bolt-on M&A Strategy

Advanced Materials & Catalysts

New catalyst technology platforms for building on or adjacent to Zeolite and Silica capabilities

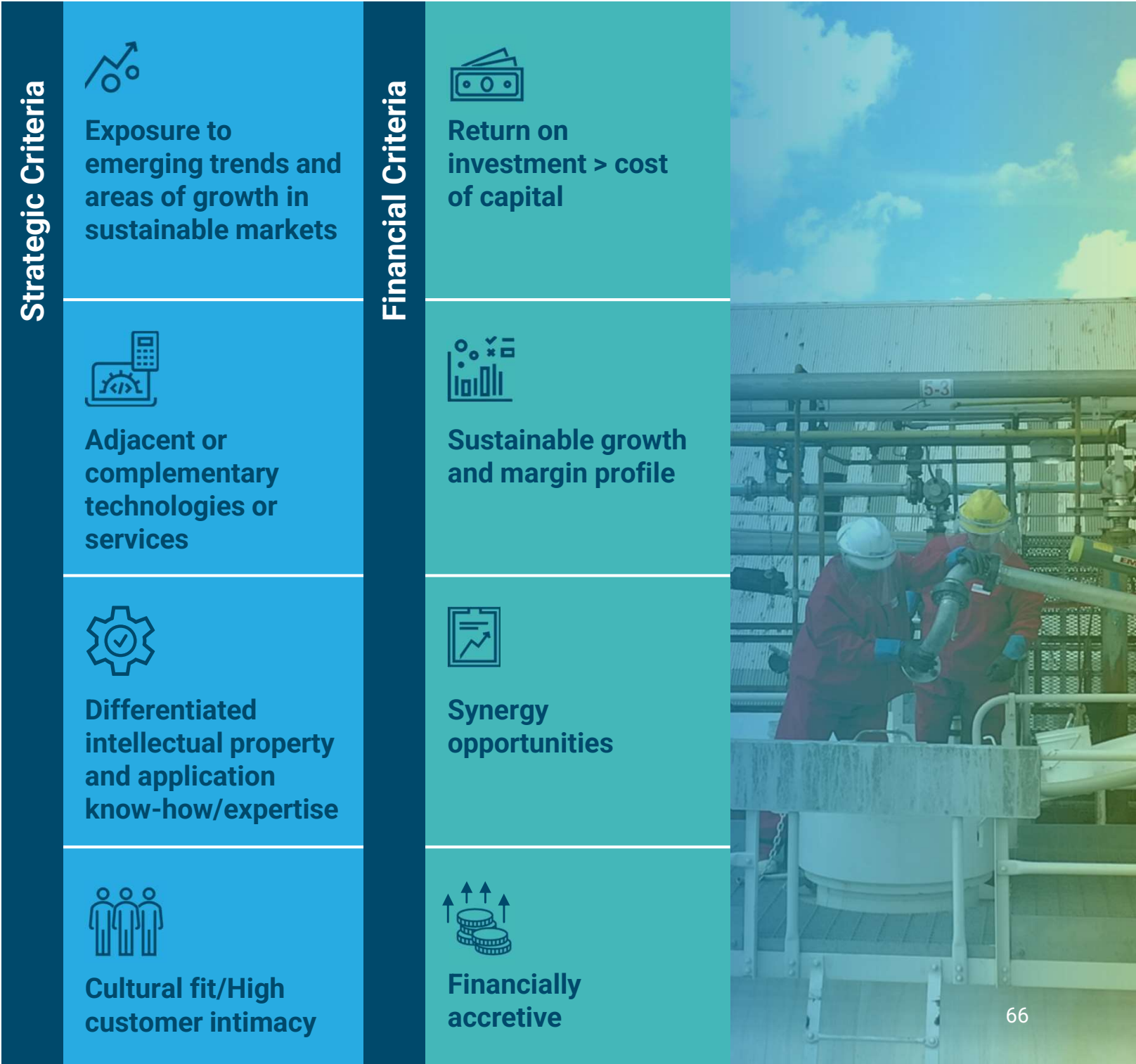
New services associated with efficient catalyst lifecycle

Ecoservices

Expansion of virgin acid capabilities

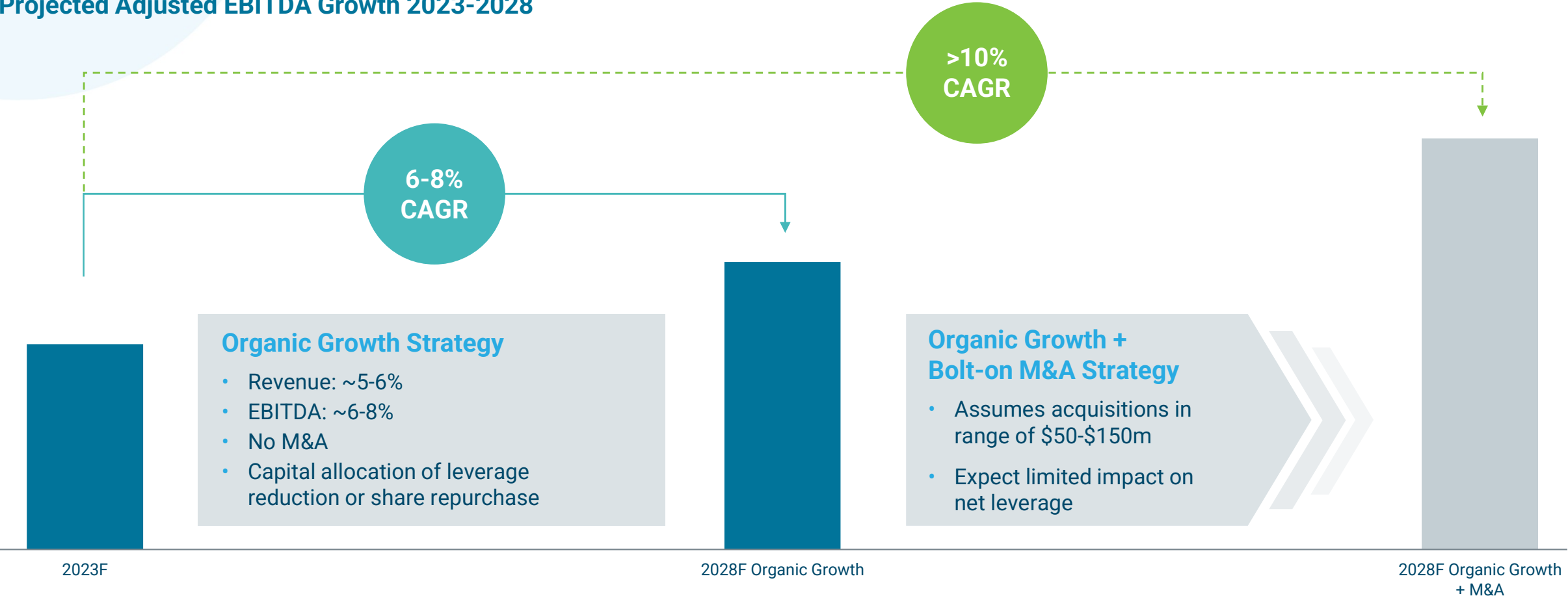
Geographic reach

Expansion into adjacent services and technologies



Measuring Our Success

Projected Adjusted EBITDA Growth 2023-2028



Creating Lasting Shareholder Value



Durable
Business
Model with
Differentiated
Competitive
Advantages



Favorable
Industry Trends
Driving Demand
for Products and
Services



Broad-Based
Growth Across
All Segments,
Building a More
Evolved
Business Mix



Strong Cash
Generation
Funding a
Balanced
Capital
Allocation
Strategy



Q&A



Appendix

Annual Segment Sales, Adjusted EBITDA and Margins

(\$ in millions, except %)	TTM	Year Ended December 31,				
	September 30, 2023	2022	2021	2020	2019	2018
Sales:						
Ecoservices	603.3	702.5	500.5	401.9	447.1	455.6
Advanced Silica	97.8	117.7	110.7	94.0	85.7	72.1
Total sales	701.1	820.2	611.2	495.9	532.8	527.7
Zeolyst Joint Venture sales	143.7	132.6	131.3	128.6	170.3	156.7
Adjusted EBITDA¹:						
Ecoservices	206.0	227.8	177.7	157.2	175.6	176.5
Advanced Materials & Catalysts	75.1	78.0	88.0	74.5	107.8	81.1
Unallocated corporate expenses	(21.8)	(29.0)	(38.1)	(39.1)	(43.3)	(39.4)
Total Adjusted EBITDA	259.3	276.8	227.6	192.6	240.1	218.2
Adjusted EBITDA Margin¹:						
Ecoservices	34.1%	32.4%	35.5%	39.1%	39.3%	38.7%
Advanced Materials & Catalysts ³	31.1%	31.2%	36.4%	33.5%	42.1%	35.4%
Total Adjusted EBITDA Margin^{1,2}	30.7%	29.0%	30.7%	30.8%	34.1%	31.9%

1. See Appendix for Reconciliations of non-GAAP measures

2. Totals include corporate costs

3. Adjusted EBITDA includes proportionate 50% share of sales from the Zeolyst Joint Venture

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

Reconciliation of Net Income to Adjusted EBITDA

(\$ in millions, except %)	TTM			Year Ended				
	September 30, 2023	September 30, 2022	September 30, 2021	December 31, 2022	December 31, 2021	December 31, 2020	December 31, 2019	December 31, 2018
Reconciliation of net income to Adjusted EBITDA								
Net income	62.7	56.2	40.0	69.8	1.8	54.3	31.1	5.3
Provision (benefit) for income taxes	20.5	29.0	(42.0)	24.9	12.1	(52.1)	12.3	8.0
Interest expense, net	41.2	35.7	37.7	37.2	37.0	50.4	66.9	72.3
Depreciation and amortization	82.9	78.4	80.5	79.2	79.7	76.9	74.8	72.2
EBITDA	207.3	199.3	116.2	211.1	130.6	129.5	185.1	157.8
Joint venture depreciation, amortization and interest ^(a)	14.1	16.2	15.0	16.0	15.6	14.7	14.7	12.6
Amortization of investment in affiliate step-up ^(b)	6.4	6.4	6.5	6.4	6.5	6.6	7.5	6.6
Debt extinguishment costs	—	—	35.4	—	26.9	25.0	3.4	7.8
Net loss on asset disposals ^(c)	5.7	2.4	8.1	3.6	5.7	4.7	4.6	10.4
Foreign currency exchange (gain) loss ^(d)	(1.1)	2.0	0.1	1.4	4.7	(5.3)	1.2	13.9
LIFO expense (benefit) ^(e)	2.3	0.1	(2.5)	(0.2)	(1.9)	(5.3)	6.5	0.8
Transaction and other related costs ^(f)	2.9	7.3	1.3	7.0	2.0	1.1	0.2	0.5
Equity-based compensation	15.8	26.4	26.7	20.6	31.8	17.2	13.3	16.9
Restructuring, integration and business optimization expenses ^(g)	6.0	8.6	3.1	11.6	3.0	2.0	2.6	6.8
Gain on contract termination ^(h)	—	—	—	—	—	—	—	(20.6)
Other ⁽ⁱ⁾	(0.1)	2.0	0.4	(0.7)	2.7	2.4	1.0	4.7
Adjusted EBITDA¹	259.3	270.7	210.3	276.8	227.6	192.6	240.1	218.2

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)

Descriptions for reconciliation of Non-GAAP financial measures

- a. We use Adjusted EBITDA as a performance measure to evaluate our financial results. Because our 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 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.
- 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 a non-cash gain on the write-off of the remaining liability under a contractual supply arrangement. As part of Eco Services LLC's acquisition of substantially all of the assets of Solvay USA Inc.'s sulfuric acid refining services business unit on December 1, 2014, we recognized a liability as part of business combination accounting related to our obligation to serve a customer under a pre-existing unfavorable supply agreement. In December 2018, the customer who was party to the agreement closed its facility, and as a result, we were relieved from our obligation to continue to supply the customer on the below market contract. Because the fair value of the unfavorable contract liability was recognized as part of the application of business combination accounting, and since the write-off of the remaining liability was non-cash in nature, we believe this gain is a special item that is not representative of our ongoing business operations.
- i. 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).

Cash Conversion & Net Debt Leverage Ratio

Cash Conversion

(\$ in millions, except %)	Year Ended December 31,				
	2022	2021	2020	2019	2018
Adjusted EBITDA	276.8	227.6	192.6	240.1	218.2
Less: Capex ¹	59.5	66.4	54.5	70.3	77.0
Cash Conversion	217.5	161.2	138.1	169.9	141.3
Cash Conversion %²	79%	71%	72%	71%	65%
Capital Intensity %³	21.5%	29.2%	28.3%	29.3%	35.3%

Net Debt Leverage Ratio

(\$ in millions, except %)	Year Ended December 31,					TTM		
	2022	2021	2020	2019	2018	Q3 2023	Q3 2022	Q3 2021
Total debt ⁴	886.4	895.5	1,426.4	1,932.1	2,148.4	879.8	888.8	897.7
Less: Cash and cash equivalents ⁴	110.9	140.9	137.2	73.9	59.8	38.3	121.4	104.8
Net debt	775.5	754.6	1,289.2	1,858.2	2,088.6	841.5	767.4	792.9
Adjusted EBITDA - Continuing Operations	276.8	227.6	192.6	240.1	218.2	259.3	270.7	210.3
Adjusted EBITDA - Discontinued Operations	—	—	142.4	231.0	243.4	—	—	—
Net Debt Leverage Ratio	2.8x	3.3x	3.8x	3.9x	4.5x	3.2x	2.8x	3.8x

1. Capex for cash conversion includes 50% of spend for the Zeolyst Joint Venture

2. Cash Conversion % = (Adjusted EBITDA-Capex)/(Adjusted EBITDA)

3. Capital Intensity % = (Capex/Adjusted EBITDA)

4. 2018-2020 Net Debt and Cash & Cash Equivalents includes discontinued operations

ROANTA

ROANTA¹

	Year Ended December 31,				
(\$ in millions, except %)	2022	2021	2020	2019	2018
Adjusted EBITDA	276.8	227.6	192.6	240.1	218.2
Less: Depreciation	74.7	74.6	73.4	69.5	66.7
EBITA	202.3	153.0	119.2	170.7	151.6
Tax Rate	25%	25%	25%	25%	25%
Numerator	151.7	114.8	89.4	128.0	113.7
Property, Plant & Equipment, Net	642.8	661.7	663.1	690.2	683.5
Working Capital					
Accounts Receivable	117.8	116.0	62.7	93.0	84.4
Inventory	113.5	112.1	101.9	114.8	84.2
Accounts Payable	55.3	67.3	51.3	51.0	48.8
Net Working Capital	176.0	160.8	113.3	156.8	119.8
Denominator	820.7	799.5	811.7	825.2	
ROANTA	18.5%	14.4%	11.0%	15.5%	

1. ROANTA is calculated on a two year average and amounts presented includes 50% share of the Zeolyst Joint Venture