



Ecoservices Overview

Kurt Bitting
President, Ecoservices

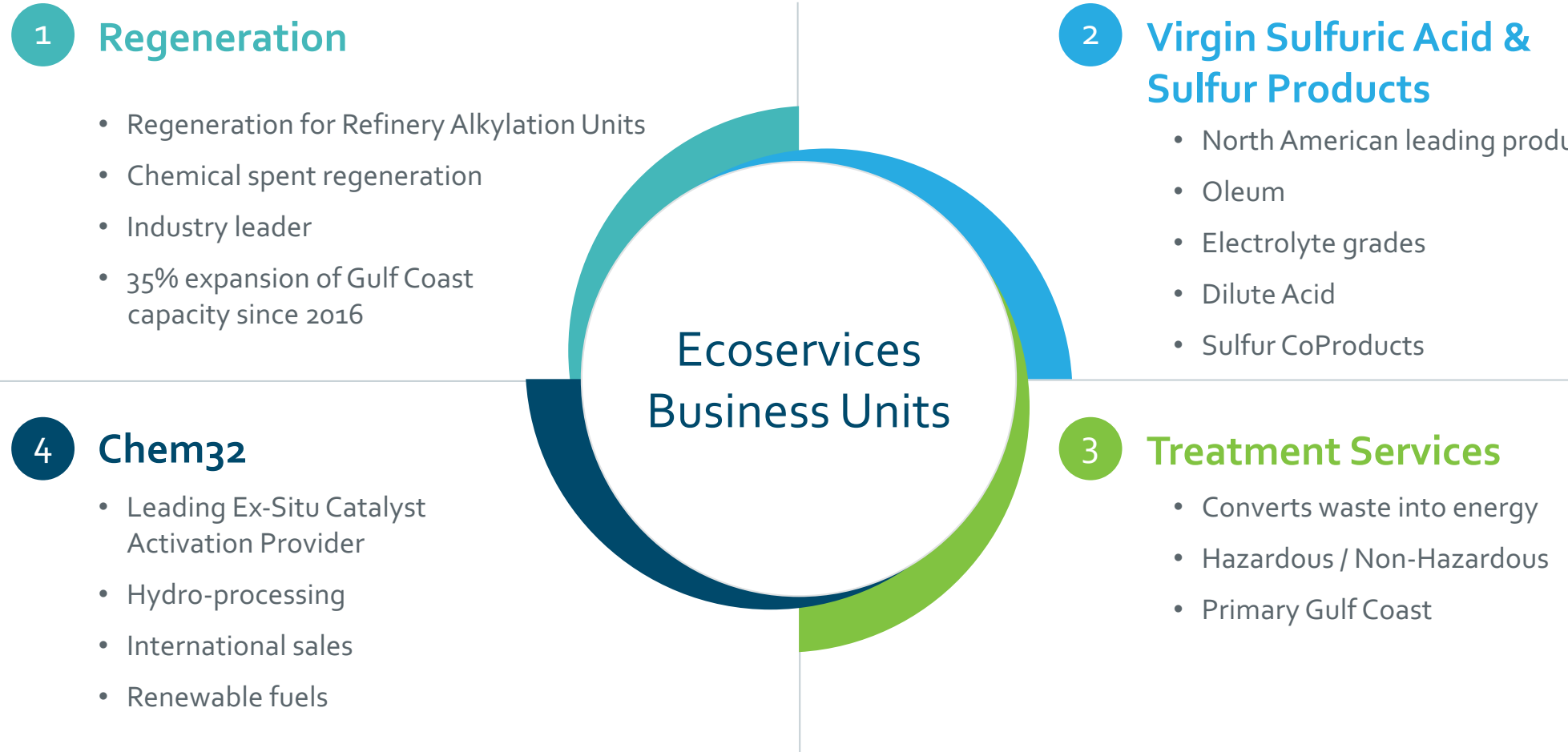
Key Takeaways

We have the ability to deliver profitable growth across diverse end uses

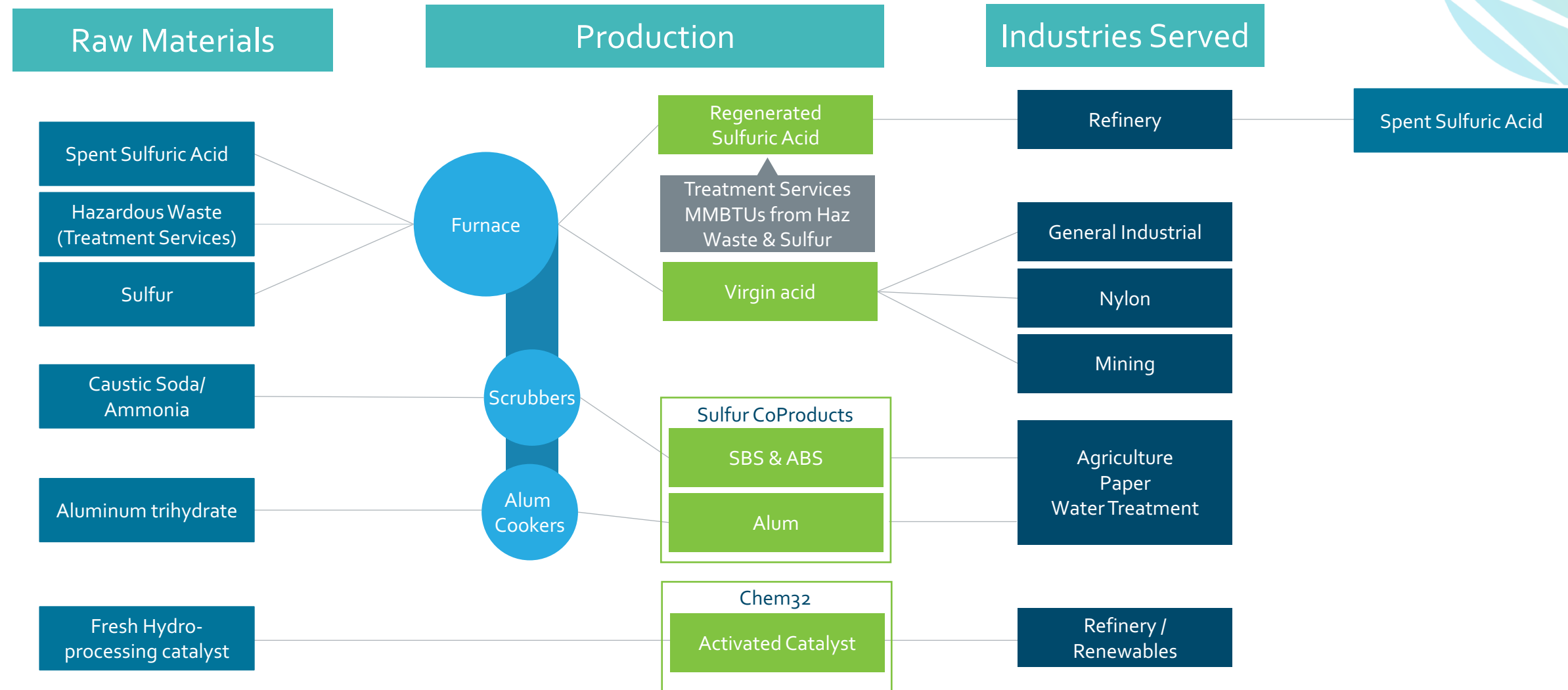
We have superior process technology and logistics capabilities

We are enabling sustainable solutions

Ecoservices Product Lines



Where Do We Play? Markets and End Uses Served



Business Snapshot

Refining Services

Leader

in providing sulfuric acid recycling for North American Alkylate production

Leader

in North American producer of merchant virgin sulfuric acid

Key Products

Regeneration for Fuel Catalyst Recycling

~53%

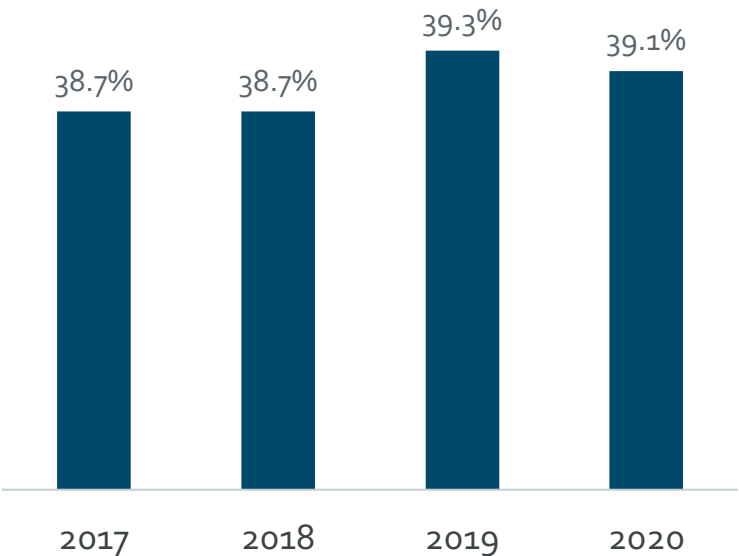
Of 2020 total sales

Virgin Sulfuric Acid for Automotive, Electronics & Industrial

~30%

Of 2020 total sales

Sustainable Adjusted EBITDA Margins



Key Stats¹

50-55%
supplier of US regeneration demand

~90%
cost pass-through on quarterly basis

~95%
of supply under 5-10 year take-or-pay contracts

~58%
Chem 32 sales international²

1. 2020
2. Closed on Chem 32 in March 2021

ecovyst Advantages

✓
Deep expertise

✓
Growing customer demand

✓
Focused innovation on sustainability

✓
Secure revenue streams

Where We Operate

Ecoservices:

Supply Infrastructure

Leading supplier with key competitive positions in the Gulf and California

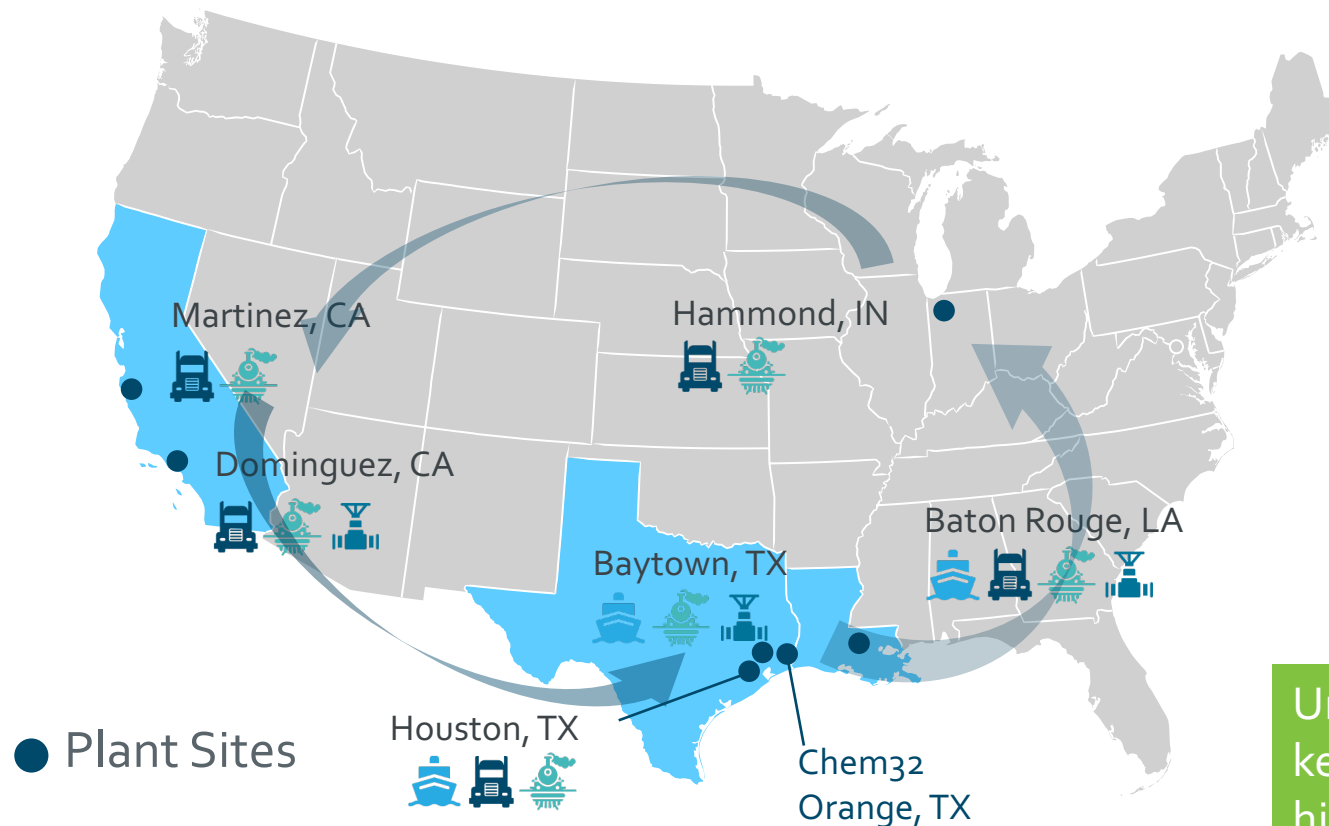
~40

Refineries using Sulfuric Acid Alkylation

>65%

Of alky capacity located in West Coast and Gulf Coast regions

Source: 2020 AFPM



Supply Chain & Customer Inventories Managed by Ecoservices

BARGE



33%

TRUCK



27%

RAIL



20%

PIPELINE



20%

Unrivalled production redundancy in key refining locations enables the highest degree of reliability

Virgin Sulfuric Acid Sources



Metals Smelting



- Only one strength and lowest quality
- Primarily rail shipments
- Long distance from consumers

Captive – Fertilizer



- No merchant sales
- Sulfur Derived
- Only one strength and quality
- Consume merchant Sulfuric Acid

Ecoservices

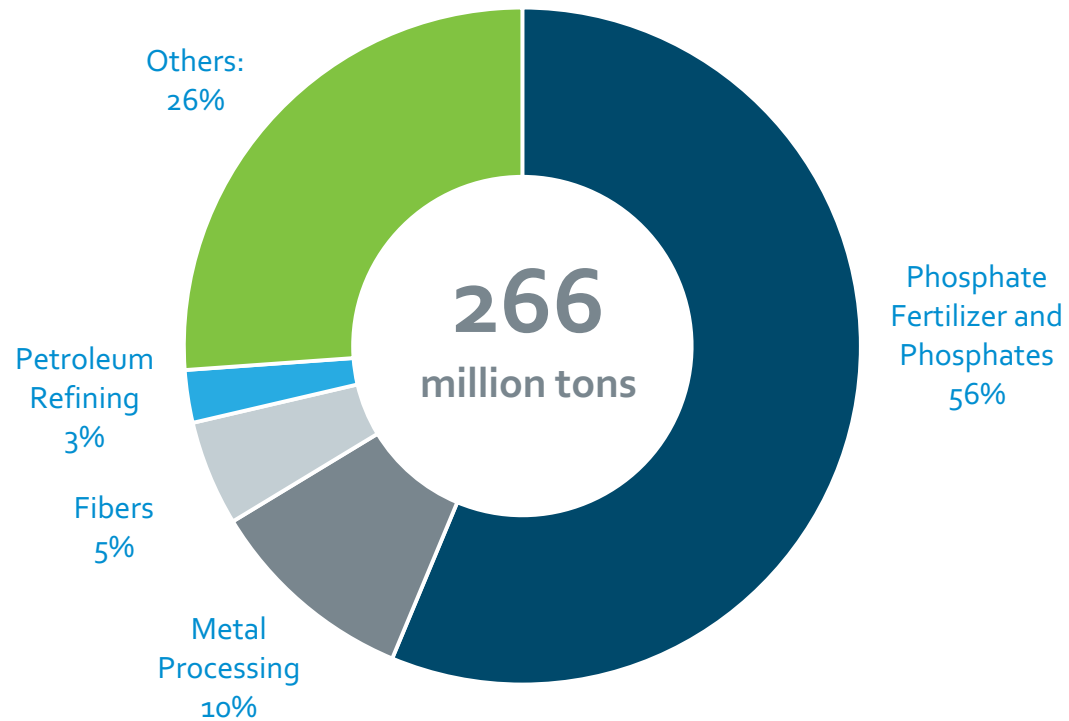
Merchant Sulfur Produced



- Numerous grades
- High quality
- Most reliable

We Play in a Large Market That Supports an Important Service Across the Globe

Global Sulfuric by End Use



Differentiated Service/Advantages



Sulfuric Acid is the most widely used commodity chemical in the world



Ecoservices focuses on servicing the refinery, other metals, and fibers industries



These segments require a high degree of service, quality, and reliability



Plant locations are also ideal for serving these sectors

Sources: 2017 CRU; 2018 Essential Chemistry Market Projections

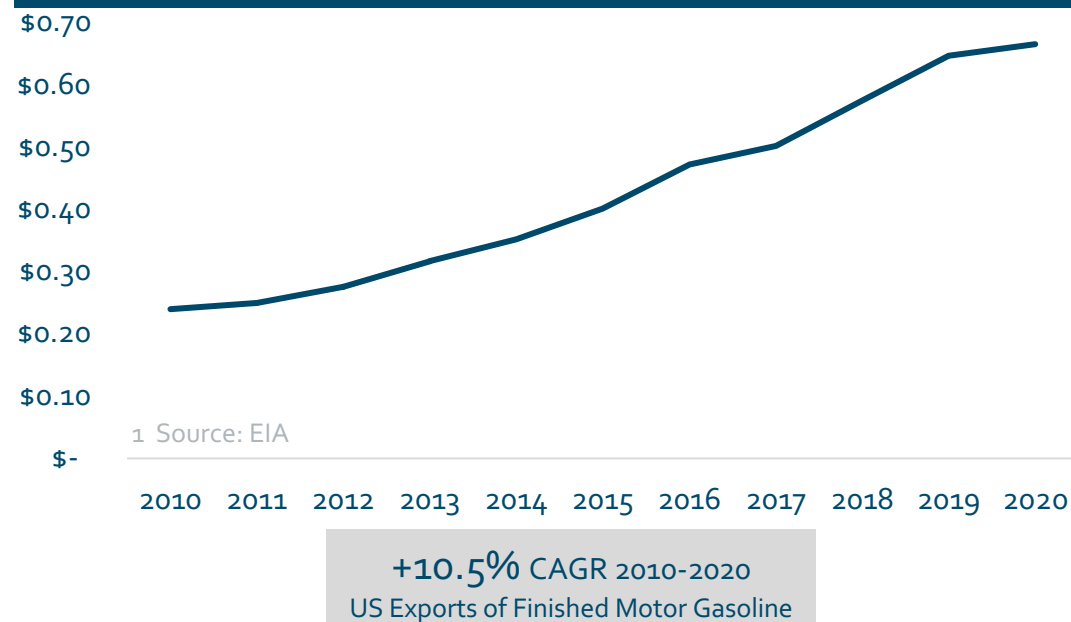
Macro Environment – What’s Going to Drive Future Trends

Tighter fuel economy and emissions regulations driving robust growth for high octanes and other transportation fuels

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	✓	✓	✗	✓	✗	✗

Spread Between Retail Premium and Regular Gasoline¹



Sulfuric Acid Alkylation continues to rise due to:



Tightening gasoline regulations

- Sulfur Standards
- Vapor Pressure



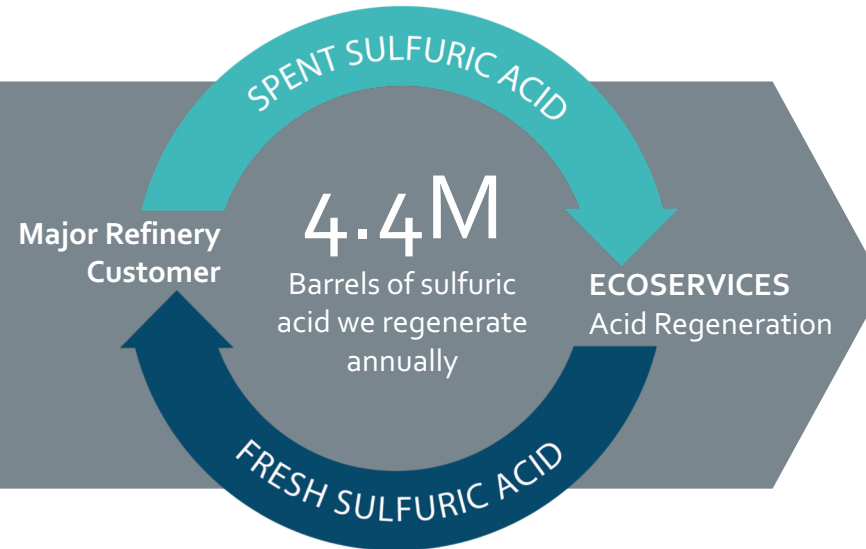
Increasing number of turbo charged engines for fuel economy



Growing Gulf Coast gasoline exports encouraging more alkylate production

Regeneration

Sulfuric Acid is a catalyst used in the production of Alkylate, a high-value, gasoline-blending component



Contract Advantages

- 100% of customer requirements
- Long-term
- Cost pass-through
- Take-or-pay and capacity reservation fees

ecovyst Advantages

- Acid regeneration industry operates at >90% utilization, incentivizing customers to contract with Ecoservices for long-term reliable service
- Debottlenecked our Gulf Coast plants regeneration capacity by 35% since 2016, meeting increasing demand
- Currently installing a logistics expansion in Houston to service a new refining customer in late 2021
- Our expansions and partnership with key refineries enable us to grow faster than the market

Virgin Acid – Differentiated by Strength, Quality and Reliability

Sulfuric Acid Product

Oleum

High Strength

Electrolyte

Segment

Nylon

Mining

Industrial

End Use

- Vehicle lightweighting
- Construction
- Coatings and Packaging



- Electrification
- Construction/Infrastructure
- Personal Devices



- Pet Chem and Chemical
- Lead Acid Batteries
- Water Treatment
- Semiconductors



ecovyst Advantages

Largest producer of Oleum, a super saturated sulfuric acid primarily used for Nylon production

High strength acid is used in mining applications for copper leaching and Borate production (electric vehicles, tech devices, and construction)

High purity acid is used for Lead Acid Batteries, water treatment, and other growing industrial segments including pet chem and semiconductors

Treatment Services – Safely Converting Hazardous Waste to Energy

Benefits

- Regional niche waste incineration
- Highly complementary to the regeneration business.
 - Provides fuel and sulfur



Demand Drivers

- Preferable to other waste treatment methods
 - Landfill
 - Deep well

Growth Opportunities

- Only NA producer that processes RCRA hazardous wastes, providing for additional opportunities
- Growing chemical production in Gulf Coast will increase waste generated

Chem32: Pre-Activation Services

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

Growth Opportunities

- Strong existing relationships with producers



How We Support Our Customers Through Sustainability

Regeneration

- Recover 99% of Sulfuric Acid in the regeneration process
- Efficient transportation
 - Back Haul
 - Barge / Pipeline
- Alkylation promotes cleaner fuels

Virgin Acid

- Virgin Acid production enables lower natural gas usage and GHG emissions
- Sulfuric Acid made from by product Sulfur
- 17MWh of electricity produced with process steam
- Sulfur co-products recycled for used in water treatment and agriculture

Treatment Services

- Treatment services provides fuel source
- Avoids Deep Wells / Land Fills

Chem 32

- Activated catalysts used to remove contaminants
 - Sulfur
 - Mercury
- Renewable Fuels catalysts
- Reduces on-site HSE risks

Strong Margins With Additional Room for Improvement

Optimization Initiatives

1

Increased steam capture for additional power sales

2

Additional sulfur processing and virgin acid logistics capacity

3

Expanded treatment services capacity

4

Water treatment and consumption optimization

5

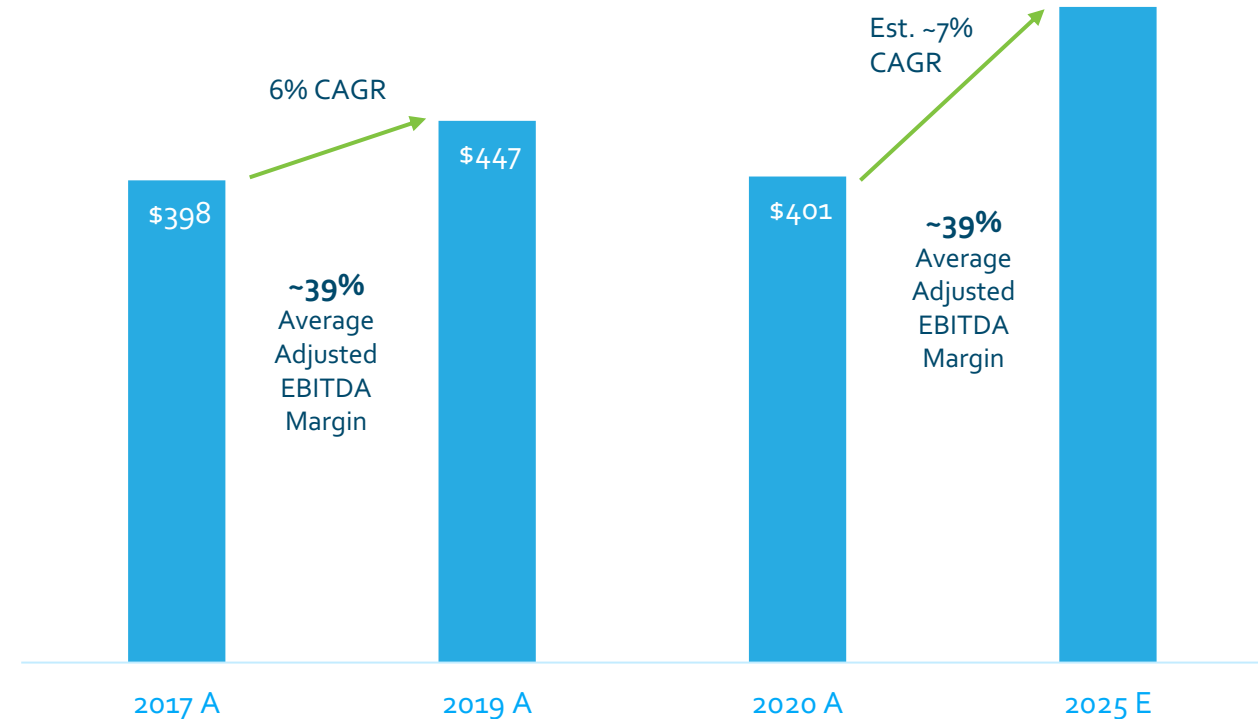
Continued improvement on variable cost consumption through asset optimization software

Organic Growth Projections

Growth Drivers

- 1 New major refinery customer 2021 (long-term contract)
- 2 Favorable alkylate fundamentals
- 3 Growing virgin acid end uses
- 4 Treatment Services debottlenecking
- 5 Chem32 growth from further outsourcing and rapidly growing renewable fuels

Organic Sales Growth Outlook



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