



Albemarle 2021 Investor Day

Making the World Safe & Sustainable

September 10, 2021



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Forward-Looking Statements

Some of the information presented in this presentation, the investor day remarks, and discussions that follow, including, without limitation, statements with respect to product development, market trends, price, expected growth and earnings, demand for our products, capital projects, tax rates, stock repurchases, dividends, cash flow generation, economic trends, outlook (including 2024 and 2026 targets), guidance, and all other information relating to matters that are not historical facts may constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Actual results could differ materially from the views expressed.

Factors that could cause actual results to differ materially from the outlook expressed or implied in any forward-looking statement include, without limitation: changes in economic and business conditions; changes in financial and operating performance of our major customers and industries and markets served by us; the timing of orders received from customers; the gain or loss of significant customers; competition from other manufacturers; changes in the demand for our products or the end-user markets in which our products are sold; limitations or prohibitions on the manufacture and sale of our products; availability of raw materials; increases in the cost of raw materials and energy, and our ability to pass through such increases to our customers; changes in our markets in general; fluctuations in foreign currencies; changes in laws and government regulation impacting our operations or our products; the occurrence of regulatory actions, proceedings, claims or litigation; the occurrence of cyber-security breaches, terrorist attacks, industrial accidents, natural disasters or climate change; hazards associated with chemicals manufacturing; the inability to maintain current levels of product or premises liability insurance or the denial of such coverage; political unrest affecting the global economy, including adverse effects from terrorism or hostilities; political instability affecting our manufacturing operations or joint ventures; changes in accounting standards; the inability to achieve results from our global manufacturing cost reduction initiatives as well as our ongoing continuous improvement and rationalization programs; changes in the jurisdictional mix of our earnings and changes in tax laws and rates; changes in monetary policies, inflation or interest rates that may impact our ability to raise capital or increase our cost of funds, impact the performance of our pension fund investments and increase our pension expense and funding obligations; volatility and uncertainties in the debt and equity markets; technology or intellectual property infringement, including cyber-security breaches, and other innovation risks; decisions we may make in the future; the ability to successfully execute, operate and integrate acquisitions and divestitures; uncertainties as to the duration and impact of the coronavirus (COVID-19) pandemic; and the other factors detailed from time to time in the reports we file with the SEC, including those described under “Risk Factors” in our most recent Annual Report on Form 10-K and any subsequently filed Quarterly Reports on Form 10-Q. These forward-looking statements speak only as of the date of this presentation. We assume no obligation to provide any revisions to any forward-looking statements should circumstances change, except as otherwise required by securities and other applicable laws.

Non-GAAP Financial Measures

It should be noted that adjusted net income attributable to Albemarle Corporation (“adjusted earnings”), adjusted diluted earnings per share attributable to Albemarle Corporation, adjusted effective income tax rates, segment operating profit, segment income, pro-forma net sales, net sales excluding the impact of foreign exchange translation (“ex FX”), EBITDA, adjusted EBITDA, adjusted EBITDA by operating segment, EBITDA margin, adjusted EBITDA margin, pro-forma adjusted EBITDA, pro-forma adjusted EBITDA margin, adjusted EBITDA ex FX, adjusted EBITDA margin ex FX, net debt to adjusted EBITDA, and gross debt to adjusted EBITDA are financial measures that are not required by, or presented in accordance with, accounting principles generally accepted in the United States, or GAAP. These measures are presented here to provide additional useful measurements to review our operations, provide transparency to investors and enable period-to-period comparability of financial performance. The Company’s chief operating decision makers use these measures to assess the ongoing performance of the Company and its segments, as well as for business and enterprise planning purposes.

A description of these and other non-GAAP financial measures that we use to evaluate our operations and financial performance, and reconciliation of these non-GAAP financial measures to the most directly comparable financial measures calculated and reported in accordance with GAAP, can be found in the Appendix to this presentation. The Company does not provide a reconciliation of forward-looking non-GAAP financial measures to the most directly comparable financial measures calculated and reported in accordance with GAAP, as the Company is unable to estimate significant non-recurring or unusual items without unreasonable effort. The amounts and timing of these items are uncertain and could be material to the Company's results calculated in accordance with GAAP.

Agenda

8:30am-
12:30pm

08:30 am	Welcome & Opening Remarks	Meredith Bandy VP, Investor Relations & Sustainability
08:35 am	Strategic Update & the Albemarle Way of Excellence	Kent Masters Chief Executive Officer
	Bromine: <i>Providing Critical Materials for Electrification and Digitization</i>	Netha Johnson President, Bromine
	Catalysts: <i>Pivoting for Long-Term Sustainable Growth</i>	Raphael Crawford President, Catalysts
	Q&A Session I	Masters, Johnson, Crawford, Tozier
10:20 am	BREAK	
10:30 am	Lithium: <i>Enabling the EV Revolution</i>	Eric Norris President, Lithium
	Sustainable Lithium Production	Ellen Lenny-Pessagno VP, Lithium Sustainability
	Capital Projects & Capability to Deliver Growth	Jac Fourie Chief Capital Projects Officer
	Financial Flexibility to Accelerate Growth	Scott Tozier Chief Financial Officer
	Q&A Session II	All
12:25 pm	Closing Remarks	Kent Masters CEO



Strategic Update & the Albemarle Way of Excellence

Kent Masters
Chairman & CEO



Accelerating Growth to Meet Increasing Customer Demand



A global market leader with durable competitive advantages

Track record of **strong financial and operational performance**

Significant growth expected by 2026: ~\$6-7B in revenue (>2x 2021); ~\$2-3B in adj. EBITDA (>3x 2021); ~\$2B in net cash from operations (>3x 2021)

Clear strategy to **accelerate profitable growth and advance sustainability**

Enhance strategy execution and create long-term stakeholder value with focused operating model – **Albemarle Way of Excellence (AWE)**

Key CEO Observations: Building on a Strong Foundation

Foundational Strengths

- »» Industry leading resources, technology, and scale
- »» Culture of continuous improvement and strong talent
- »» Strong track record of creating value for customers
- »» Values-driven culture with focus on health, safety, and well-being of our people

Focus Areas

- »» **Safety:** Champion safety and our “Journey to Zero”
- »» **Sustainability:** Lead our industry in integrating sustainability with profitability
- »» **Measurability:** Establish clear key performance indicators and goals to incentivize profitable growth
- »» **Execution Excellence:** Enhance operational discipline and project execution
- »» **Globalization:** Expand footprint in growing markets

Diverse Portfolio Generating Significant Cash

Global Employees¹ ~5,900

Countries¹ ~75

Dividend Increases **27th consecutive year**

Financial Highlights²

Net Sales **\$3.2B**

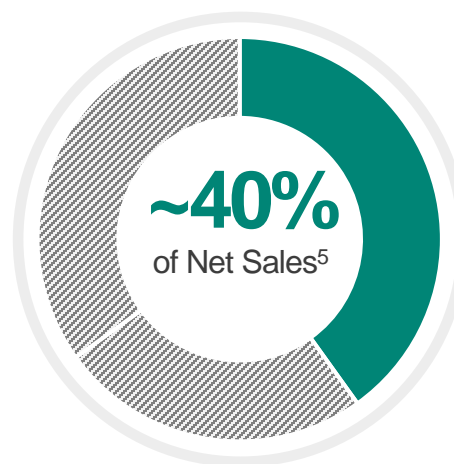
Net Income³ **\$703M**

Adj. EBITDA⁴ **\$862M**

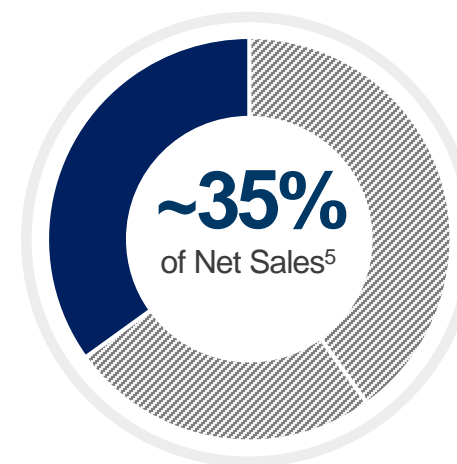
Adj. EBITDA Margin⁴ **27%**

Business Overview

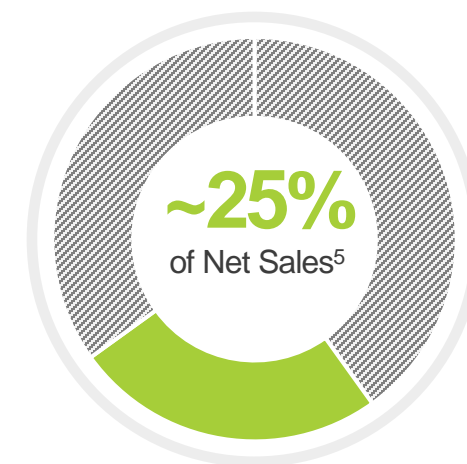
Lithium



Bromine Specialties



Catalysts



Growth opportunities across all businesses

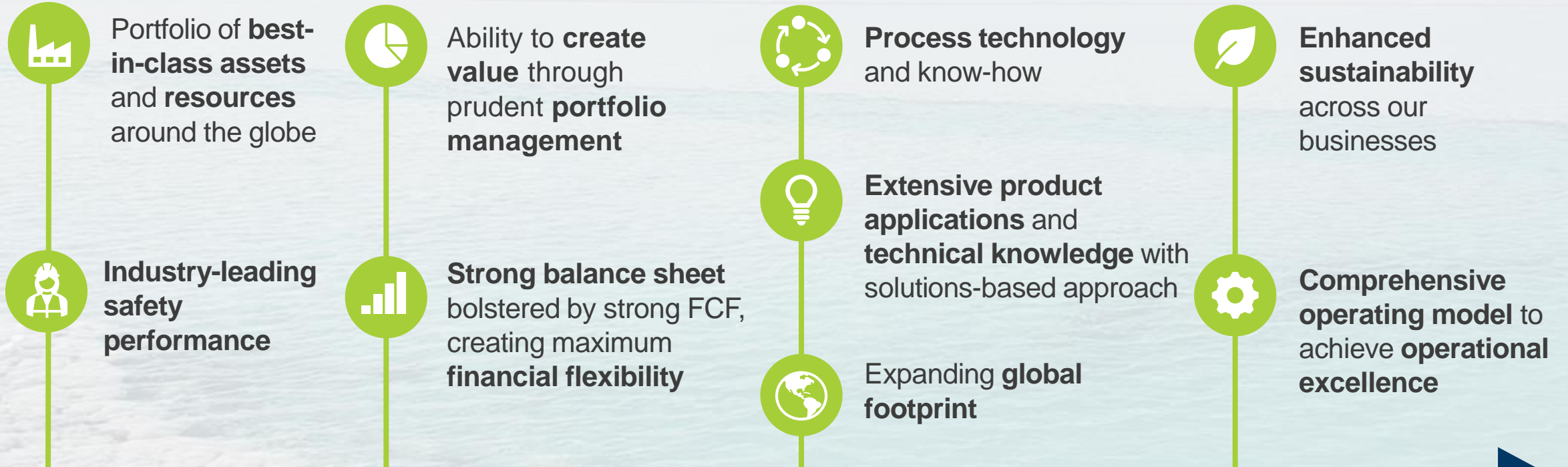
Diversity of portfolio creates stability through market cycles

Substantial operating cash generation capability supports growth

Synergies provide **cost-savings and streamline operations**

¹ As of December 31, 2020. ² Trailing twelve months ended June 30, 2021. ³ Attributable to Albemarle Corporation. Includes an after-tax gain of \$332M related to the sale of the FCS business. ⁴ Non-GAAP measure. See Appendix for definition and reconciliations of historical measures to most directly comparable GAAP measure. ⁵ Total net sales used to calculate percentage excludes divested FCS business.

Continuing to Build Our Sustainable Competitive Advantages



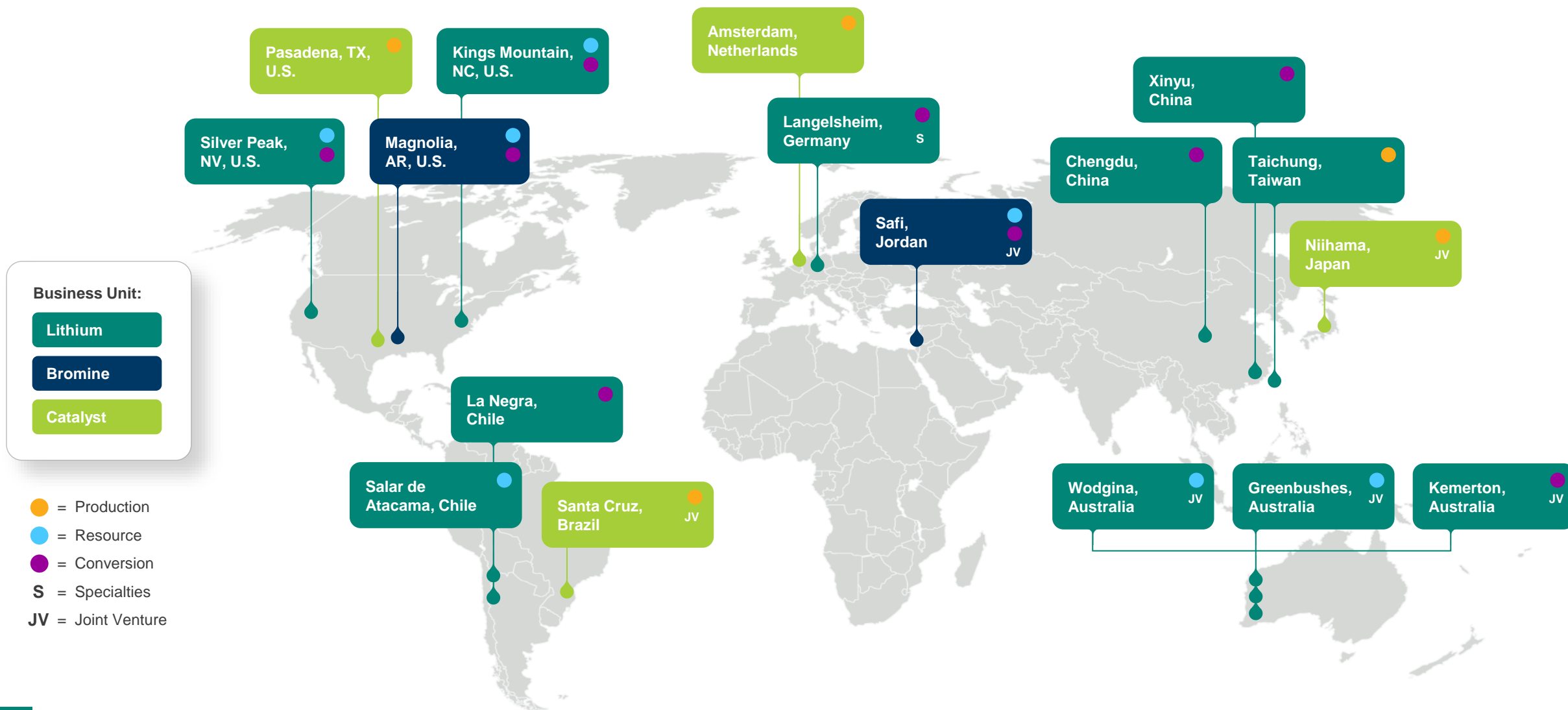
DEEPLY EMBEDDED

Maturity of our competitive advantages

DEVELOPING

Further differentiating Albemarle as an industry leader

Global Footprint – Strong Presence in Major Markets



Diverse and Dedicated Leadership Team Focused on Delivering Shareholder Value



Kent Masters

Chairman & CEO
Experience: 30+ years



Scott Tozier

CFO
Experience: 30+ years



Karen Narwold

CAO & General Counsel
Experience: 30+ years



Melissa Anderson

CHRO
Experience: 30+ years



Jac Fourie

Chief Capital Projects Officer
Experience: 20+ years



Netha Johnson

President, Bromine
Experience: 25+ years



Raphael Crawford

President, Catalysts
Experience: 20+ years



Eric Norris

President, Lithium
Experience: 25+ years

Engaged, Diverse, and Accountable Board of Directors



Laurie Brlas
Former EVP & CFO,
Newmont Mining



Kent Masters
Chairman & CEO,
Albemarle



Glenda Minor
Former SVP & CFO,
Evraz North America



Jim O'Brien
Former Chairman & CEO,
Ashland



Diarmuid O'Connell
Former VP, Corp &
Business Development,
Tesla Motors



Dean Seavers
Former President,
National Grid U.S.



Jerry Steiner
Former EVP, Sustainability
& Corporate Affairs,
Monsanto



Holly Van Deursen
Former Group Vice President,
Petrochemicals,
BP



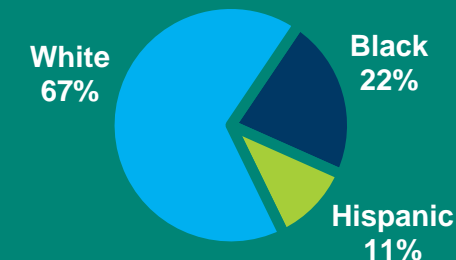
Alex Wolff
Former U.S.
Ambassador to Chile



- Audit & Finance Committee
- Executive Compensation Committee
- Nominating & Governance Committee
- Capital Investment Committee

- Health, Safety & Environment Committee
- Chairman of the Board
- Lead Independent
- Committee Chairperson

Racial Diversity



Gender Diversity



Average Tenure

~ 5 years

Progress to Achieve 2024 Targets; Accelerating Growth

behind in line ahead



Progress to Date

	2019 Investor Day ¹	Updated Commentary	
2024 Revenue	\$4.7B – \$5.3B (6% - 9% 5-yr CAGR)	Accelerating higher margin opportunities for Lithium and Bromine	
2024 Adj. EBITDA	\$1.5B - \$1.8B (32% - 36% Margin 5-yr avg)	Managing fixed costs and implementing productivity improvements	
Cost Savings Initiative	\$100M+ by YE 2021	Delivered FY 2020 savings of \$80M; expected run-rate of >\$120M by YE 2021	
2024 Net Cash from Ops	\$1.0B - \$1.2B	Operating cash flow on track; helps to fund growth investments	
2024 Free Cash Flow	\$0.8B - \$1.0B	Accelerating investment to take advantage of growth opportunities	
Target Net Debt / Adj. EBITDA	2.0x - 2.5x	Committed to maintaining financial flexibility & investment grade credit rating	
GBU Revenue 5-yr CAGR			
Lithium	12% - 17%	Secular growth on track	
Bromine	1.5% - 2.5%	Adding capacity to capitalize on improved secular growth trends	
Catalysts	3% - 5%	Shift in market forces due to COVID-19 impacts; accelerating energy transition	
Li Conversion Capacity	175kt by 2021 225kt by TBD	Accelerating growth	

Sustainability Is Core to Our Long-term Strategy

GROW PROFITABLY

- Pursue profitable growth; building capacity for strategic customer growth
- Build capabilities to accelerate lower capital intensity, higher-return projects

MAXIMIZE PRODUCTIVITY

- Optimize earnings, cash flow, and cost structure across all our businesses
- Drive productivity through operational discipline
- Deploy operating model to build a strong platform for growth

INVEST WITH DISCIPLINE





- Allocate capital to highest-return opportunities
- Generate shareholder value through continued assessment of portfolio
- Maintain Investment Grade credit rating and support our dividend

ADVANCE SUSTAINABILITY

New in 2020

- Enable our customers' sustainability ambitions
- Continue to implement and improve ESG performance across all our businesses

Track Record of Portfolio Management Driving Value Creation for Shareholders

	Rockwood Holdings	Chemetall Surface Treatment	Polyolefin Catalysts Business	Wodgina Hard Rock Lithium Mine	Fine Chemistry Services
Year	2015	2016	2018	2019	2021
Price (USD)	\$5.7B	\$3.2B	\$416M	\$1.3B	\$570M
Transaction Type	Acquisition	Divestiture	Divestiture	Joint Venture	Divestiture
Buyer / Seller					
Strategic Rationale	Creation of Premier Specialty Chemicals Company; Entrance into Lithium	Monetization of Non-core, Lower-growth Asset	Monetization of Non-core, Lower-growth Asset	Access to World Class Lithium Resource	Monetization of Non-core, Lower-growth Asset

\$4.1B+

Total Gross Proceeds from Divestitures
2016 – 2021 YTD

\$2.0B+

Lithium Capital Expenditures
2017 – 2020

\$2.4B+

Net Debt Reduction
2016 – 2021 YTD

Initiating strategic review of our Catalysts business to position for value creation

Financial Flexibility to Execute Growth Strategy

Strategic Requirements

Buy or build assets to strengthen portfolio

Specialized, next-gen technology and/or materials

Longer-term: Continue to build world-class resource base

Partnerships to complement portfolio and expertise

Financial Criteria

>2x WACC at mid-cycle pricing

Minimum of >1x WACC at trough pricing

Reduce capital intensity

Pursue inorganic opportunities to accelerate growth

Strategic Execution and the Albemarle Way of Excellence (AWE)

Purpose

Making the world safe and sustainable by **powering potential**

Values

Care • Curiosity • Courage • Collaboration
Humility • Integrity • Transparency

Strategy

Grow • Maximize • Invest • Sustain

Operating Model:
How We Execute & Accelerate Our Strategy



Implementing Our Execution Principles & Goals

High-Performance Culture

HSE Excellence

- Strive toward an interdependent safety culture with a zero-incident rate
- Be strong environmental stewards to protect the well-being of our communities and ecosystem

Purpose & Values

- Instill deep-seated meaning to our work to inspire employees to achieve their full potential every day

Agile & Engaged Organization

- Enable a highly flexible and productive global workforce
- Cultivate personal commitment

Competitive Capabilities

Talent

- Build the best global workforce by hiring, developing, and retaining diverse and highly skilled people

Resources & Technology

- Secure and develop best-in-class resources to provide a low-cost position, future expansion options, and security of supply to our customers
- Leverage process technology, R&D and strategic partnerships to differentiate and lead

Information Technology

- Drive technology solutions and disciplined processes that deliver the information, collaboration, and security to deliver growth

Operational Discipline

Business Excellence

- Meet or exceed customer expectations by delivering exceptional value and service
- Enable a Lean and optimized supply chain and back office that efficiently respond to business needs

Manufacturing Excellence

- Drive best-in-class direct and indirect cost discipline and cost reduction
- Embrace Lean principles, continuous improvement
- Focus on quality & time

Capital Projects Excellence

- Build the structure, capabilities, discipline, and design approach that enable faster capacity growth at lower capital intensity

Sustainable Approach

Sustainable Shareholder Value

- Foster the conditions that create sustainable value for shareholders

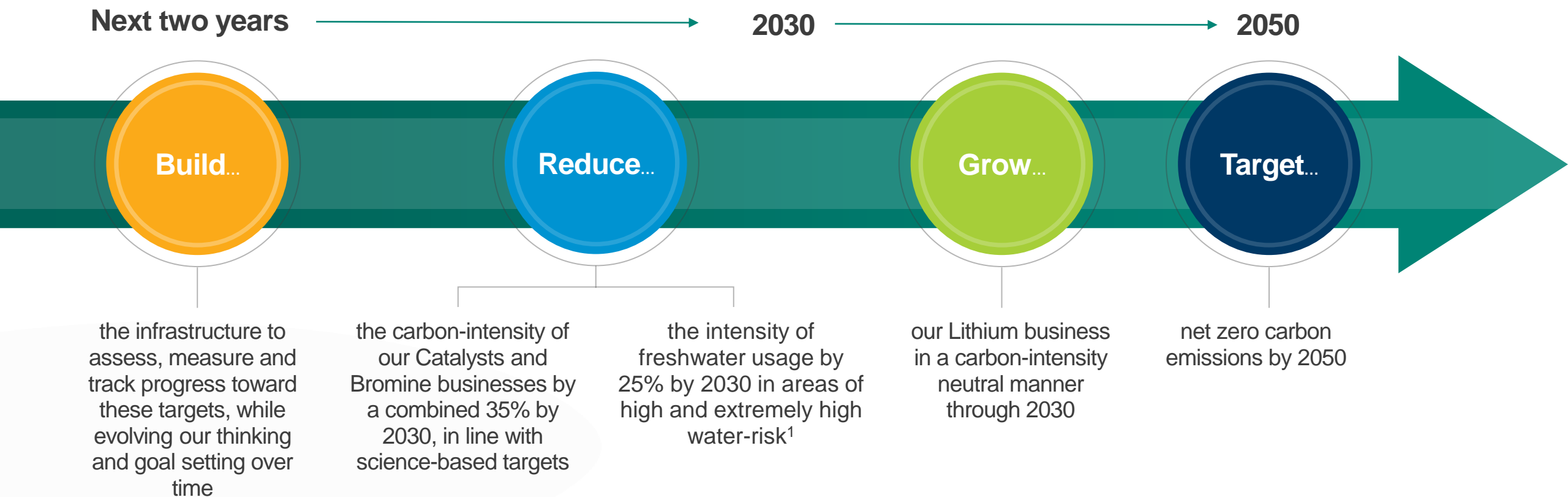
Natural Resource Management

- Responsibly manage our use of resources and materials

People, Workplace, & Community

- Build an inclusive and diverse workplace focused on safety, mutual respect, development and well-being
- Actively collaborate and engage in communities where we work and live

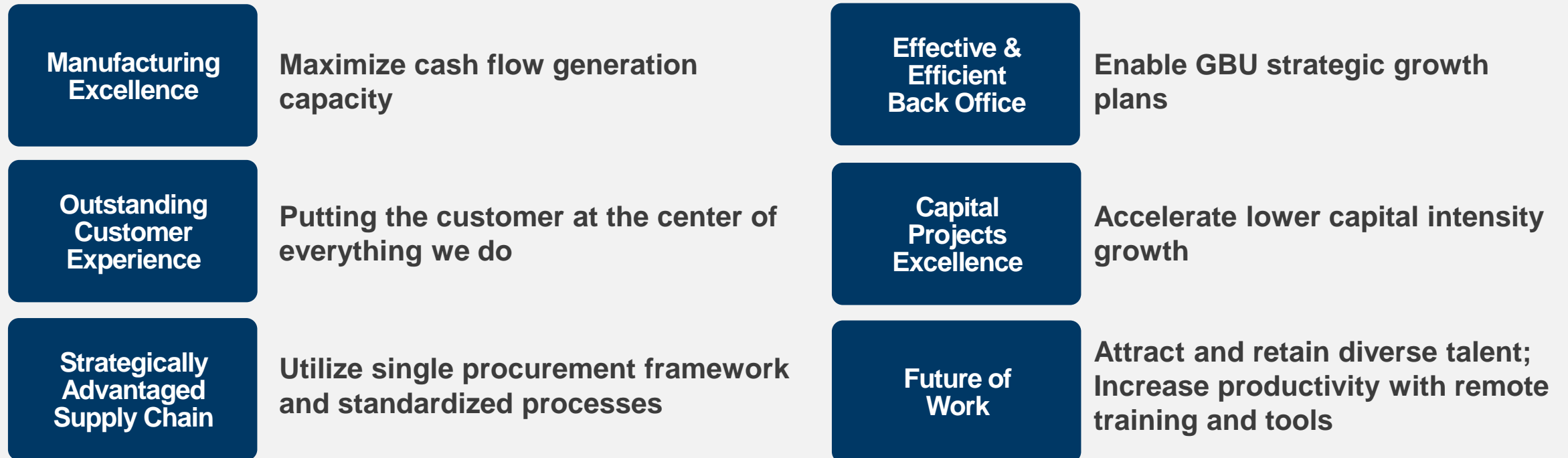
Execute Portfolio of Projects to Achieve Sustainability Ambitions



Initial targets for GHG emissions and freshwater use; additional metrics to follow

AWE in Action: Journey to Excellence (J2E) Initiative

- Initial focus on Operational Discipline and Core Competencies
- Fast-cycle initiative focused on six critical areas for step change in execution and performance



Building a strong base from which to grow



Bromine Specialties: Providing Critical Materials for Electrification and Digitization

Netha Johnson
President, Bromine Specialties



A Global Market Leader with Value Added Services and Growing Customer Base



Leveraging scale and **world-class resources** for growth investments

Expanding end markets and new applications drive a **growth rate higher than GDP**

Executing projects to **expand share and generate returns** as market grows

Powering innovation and new applications with a portfolio supported by **deep technical know-how**

Improving sustainability and **next-generation operational performance** with the Albemarle Way of Excellence (AWE)

A Leader Across Diverse End-Use Markets

TTM Q2 2021

\$1.1B

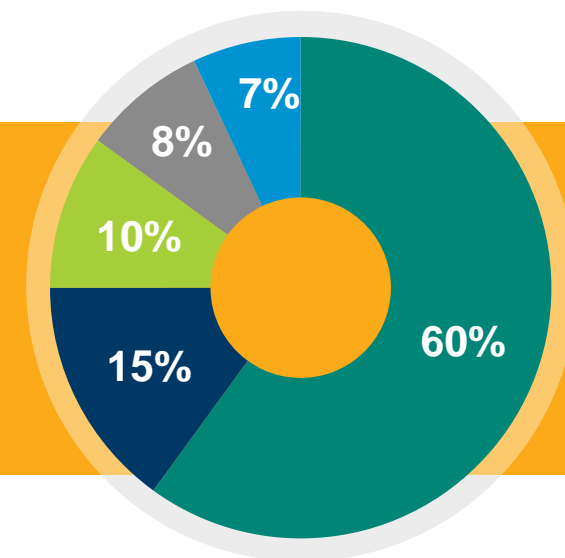
Net Sales

\$355M

Adj. EBITDA¹

33%

Adj. EBITDA Margin¹



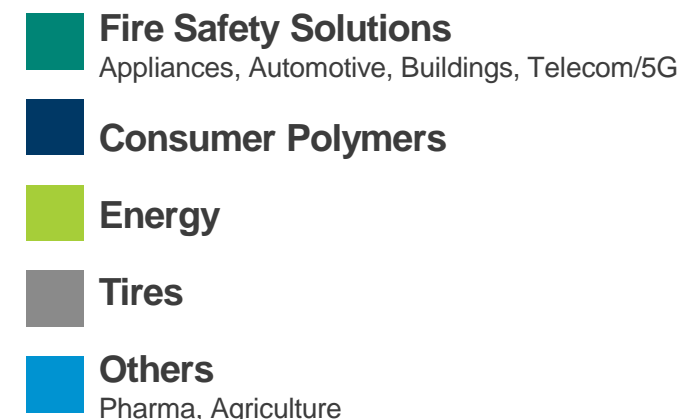
GBU Characteristics

- Access to world-class natural resources with low-cost position on global cost curve
- Integrated plants able to make >16 products
- Sustainable next-generation product portfolio
- Consistent and sustainable margin and cash flow
- Deep technical expertise
- Focused capital spend on projects that drive improvements in safety, GHG, air emissions, water, and waste

Business Environment

- Diversified and growing end-market applications
- Fire safety solutions supported by macro trends:
 - Digitization and “Internet of Things” (IoT)
 - Electrification of transportation
 - Increased health & safety
 - Environmental remediation
 - Work from Home and hybrid work
- Environmental regulatory changes in China support growth

Net Sales by Applications²



On Track to Meet or Exceed 2024 Targets

behind in line ahead



Low-Cost Operational Excellence

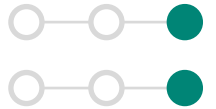
2019 Investor Day

- 1% OEE improvements will generate >\$1.6M additional EBITDA in 2020
- \$54M annualized productivity and cost avoidance by 2023

Updated Commentary

- 1% OEE improvements generated >\$2-3M additional EBITDA in 2020
- More than \$54M annualized productivity and cost avoidance by 2023

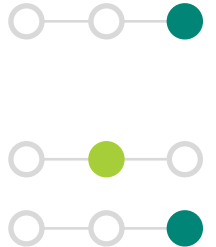
STATUS



Market Outlook

- Diversified flame retardant markets drive stable demand
- Continued offshore investment growth
- Textile and packaging market driving PET demand

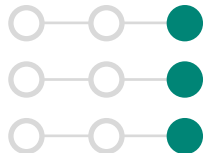
- Existing markets continue to be healthy and new growth vectors (i.e., EVs, 5G, personal health, IoT, etc.) present new opportunities
- Continued offshore investment growth
- Textile and packaging market driving PET demand



Improving GBU Outlook (2019-2024)

- GDP-type growth (1.5-2.5%)
- Sustainable margins (28-32%)
- Strong cash flow yield

- Better than GDP-type growth (5-6%)
- Sustainable margins (29-33%)
- Strong cash flow yield



Access to Highly Concentrated Bromine is a Low-Cost Advantage

Albemarle Operates from Two World-Class Bromine Resources:

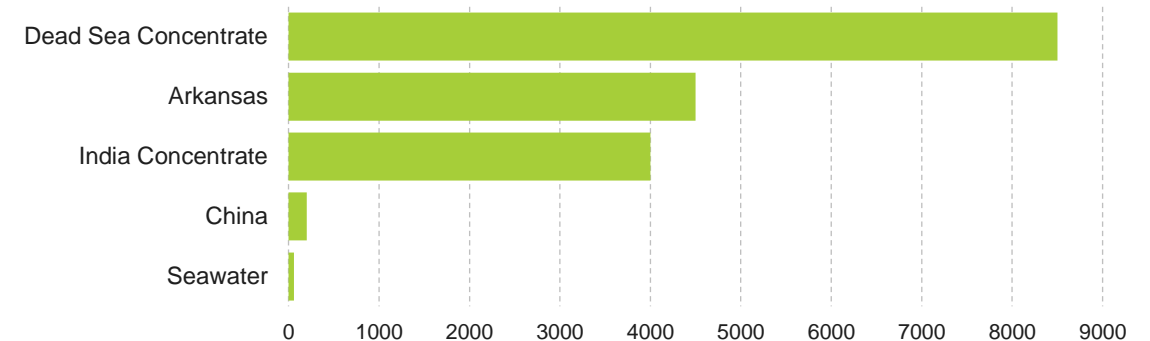
Dead Sea, Jordan

Jordan Bromine Company¹ (JBC) - operated and marketed by Albemarle

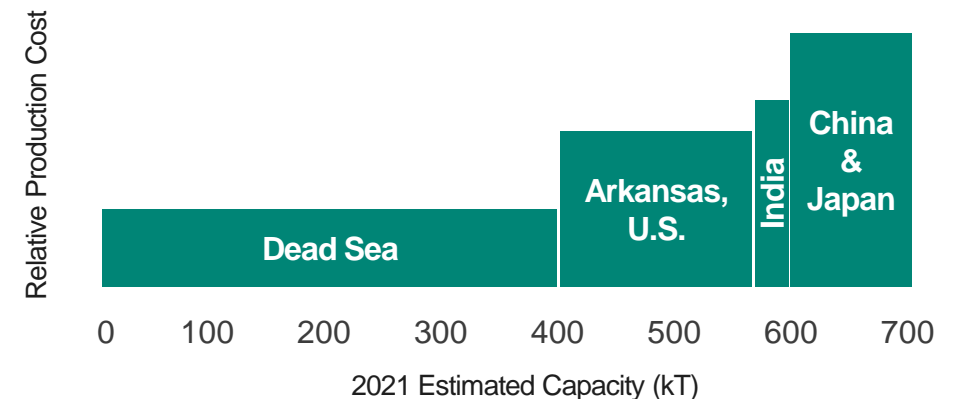
Arkansas, U.S.

Highly integrated and specialty focused - drives product flexibility and profitability

Bromine Concentration²
(ppm)



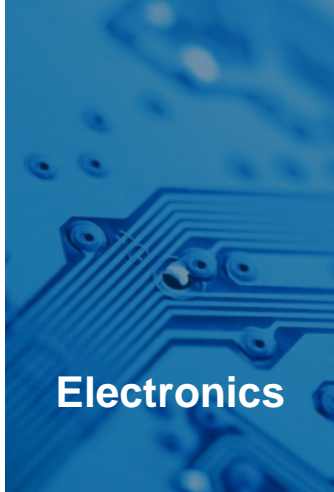

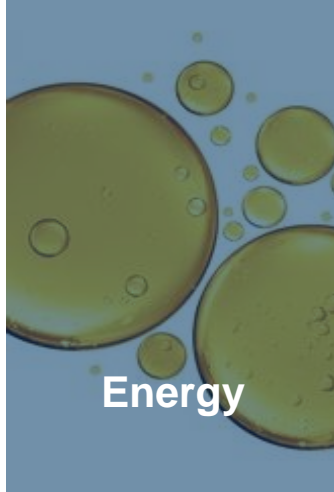
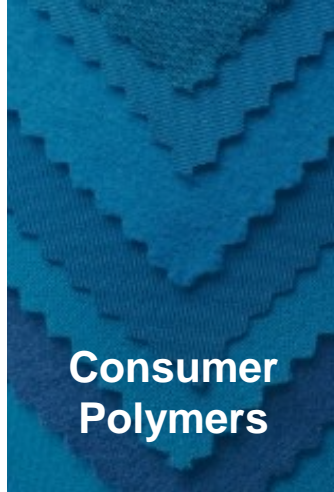



Industrial Cost Curve for Elemental Bromine²



Expanding Markets in Core and New Businesses to Accelerate Growth

BROMINE IN OUR WORLD

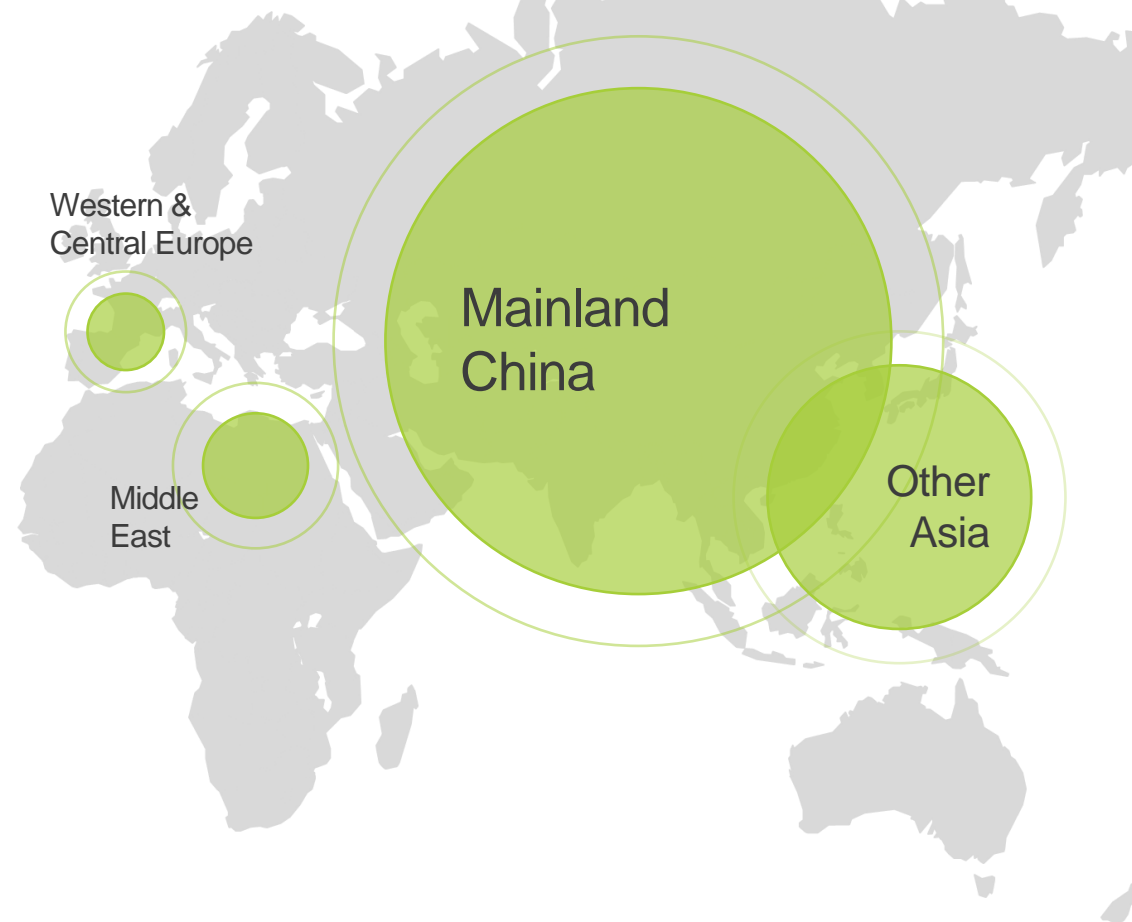
	 Telecom	 Buildings	 Electronics	 Automotive	 Energy	 Consumer Polymers	 Ag / Pharma
	Wiring Connectors Circuit Boards	Insulation Wiring Connectors	Circuit Boards Enclosures Wiring	Tires Seats Wiring	Oilfield Completion Fluids	PET Textiles Packaging	Disinfectants Pharmaceuticals
Total Addressable Market	\$2.2B	\$1B	\$800M	\$500M	\$400M	\$375M	\$300M
5yr Industry Growth	3.5%	4%	5%	4%	3%	5%	2.5%

Large and Growing Consumer Polymers Market

- Polyethylene Terephthalate (PET) is the most widely used polymer in the world with expanding use in emerging economies
- Applications include textiles fibers and consumer packaging
- A strong, lightweight, flexible, non-toxic material that can be easily recycled



World Consumption of PET Polymer (2019)



A leading global supplier of bromides that are essential for PET polymer production

5G Drives Expanding Telecom Use

- Large and growing existing market with upside from new applications
- Flame retardant products are integral to wire and cable, connectors, and circuit boards

IoT Devices

Laptops,
Smartphones,
Wearables

Autonomous
Vehicles

Smart Home
& City

Medical
Devices

Cloud &
Data Centers

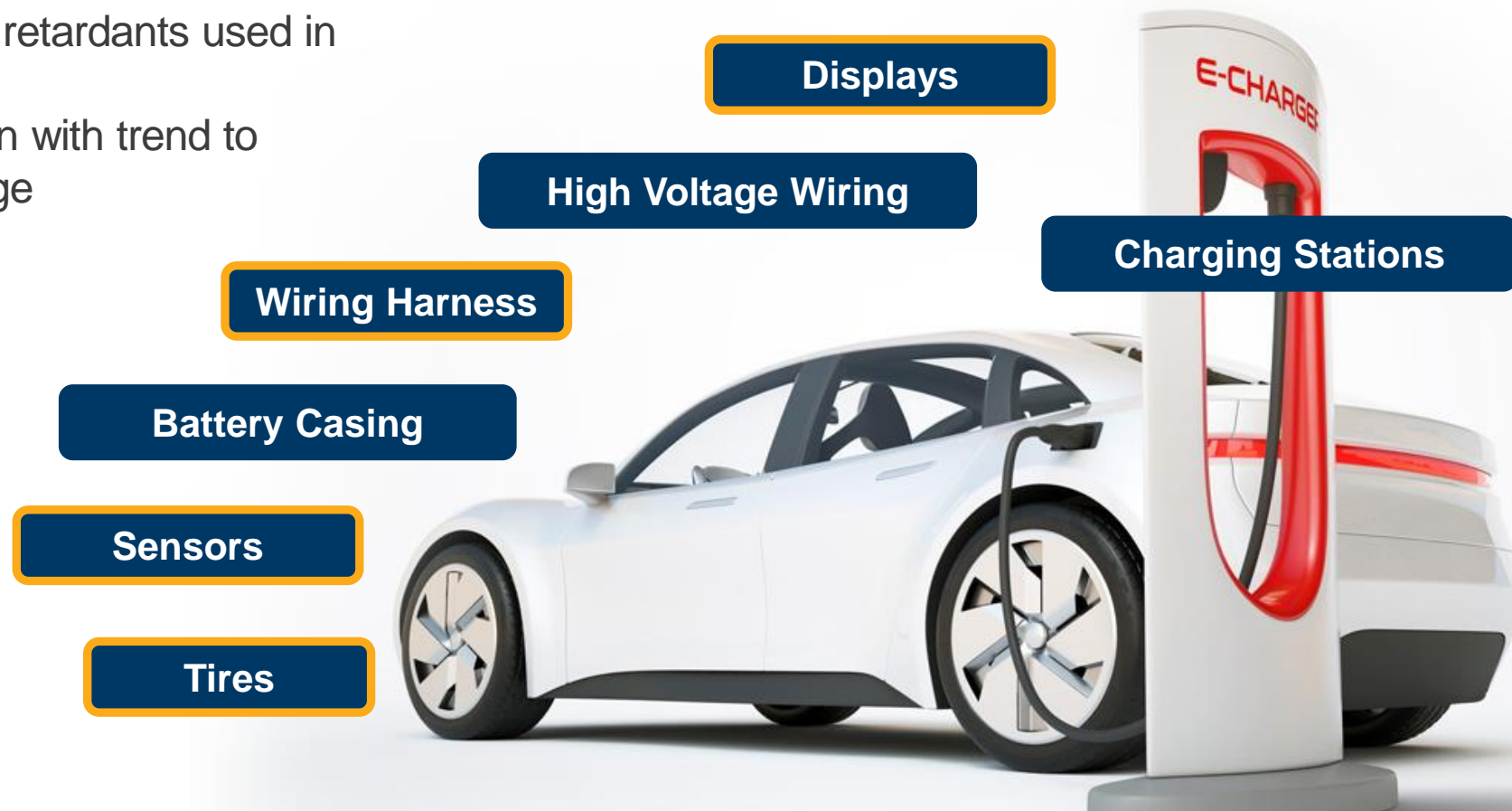
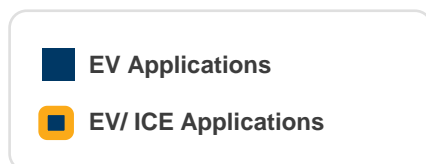
Utilities &
Infrastructure

AR/VR
Experiences

Albemarle is experiencing surging demand in array of 5G related product lines

Automotive Use is Accelerating with Trend to EVs

- Solid existing market for flame retardants used in ICE vehicles
- New and accelerating utilization with trend to EVs and growing sensors usage



Expansive product portfolio is well aligned and capable of serving a variety of automotive market needs

Strategy to Maximize EBITDA through Growth and Productivity

GROW PROFITABLY

- Capitalize on growth in existing, new, and expanding applications
- Execute customer-focused product innovation

MAXIMIZE PRODUCTIVITY

- Structurally reduce costs through asset efficiency and productivity
- Maximize value pricing; emphasis on quality and stability

INVEST WITH DISCIPLINE

- Focus investment capital on highest-return, short payback opportunities

ADVANCE SUSTAINABILITY

- Drive material improvements in safety, GHG, air emissions, water, and waste by focused capital spending on sustainability projects
- Reduce water use where it matters most

Competitive Capabilities: Research & Technology

New Product Innovation

- Market research driven
- Strong IP positions
- World class collaborators
- Platform approach
- Expanded applications capabilities in targeted areas

Diverse and Healthy New Product Pipeline

SAYTEX ALERO™

- Polymeric flame retardant (stable, large molecule)
- Favorable mechanical properties
- Superior environmental profile

Broad, growing target end markets including Electronics, Appliances, Automotive
Customer qualification ongoing to support commercial launch in 2022

MercLok™

- Remediate mercury in contaminated soils and sediments
- Large market opportunity

Potential platform for additional environmental remediation products

Lab work and field pilots ongoing to support commercialization in late 2022

Operational Discipline: Manufacturing Excellence & Capital Project Execution

- Improvement in manufacturing excellence (higher volumes, lower cost) requires focus on continuous improvement, maintenance, and reliability
- Allocating capital to highest return opportunities in sustainability and productivity
- Track record of delivering projects on time and within budget

Track Record of Delivering Expansions

2021 New Well in Magnolia

- On-budget and early start-up
- Highest bromide concentration well in our brine field by 20%

2021 JBC TBBPA (Tetrabrom) Debottleneck

- On-budget and on-time start-up
- At design production rates within weeks of start-up

Magnolia well completion – July 2021

Sustainable Approach: Natural Resources Management

Material reduction targets by 2025

(on an intensity basis, per mt Br₂)

Jordan Bromine Company:



Magnolia:



Improving Productivity and Sustainability

Sustainability program examples:

Waste heat integration projects at JBC

Waste evaporation pond elimination at JBC

Recycle of water from artificial marsh outfall

- 20% reduction in aquifer loading

Process integration program converting waste stream containing significant water into a value-added feedstock

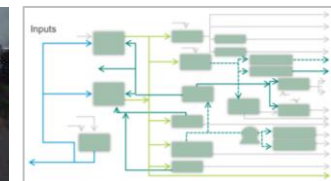
- 11% water intensity reduction
- 6 % energy intensity reduction



HBr Cleanup
and WTU



Membranes



Heat & By-Product
Integration
(e.g., Bromine Optimization
Project)



Marsh Water
Recovery



Grid Greening

Bromine Specialties Accelerating Growth Due to Expanding Markets and New Applications Such as Global Electrification and Digitization

Net Sales

\$1B - \$1.1B
(2021E)

5%-6%

5yr CAGR
(2021E-2026E)

Adj. EBITDA Margin

32% - 33%
(2021E)

32%-36%
(2026E)

ASSUMPTIONS:

- Emerging and GDP plus-type growth economies
- Cost discipline and selective investment for growth

BUSINESS ENVIRONMENT:

- **Flame retardants**
 - Expect growth in core and new markets driven by positive macro trends in telecom, automotive, and electronics
- **Bromine and Derivatives**
 - Maintain a leading supply position for PET/PTA application
 - Expect to see incremental clear completion fluids demand growth as offshore drilling market expands
 - Selectively grow share in Agriculture, Pharma, and Bromobutyl Rubber (BBR)
- **Operational efficiencies / lean**
 - Continue to work on efficiencies to provide higher yield and lower cost processes that maintain a constant, superior product



Key Takeaways

A global market leader and world-class resources, diversified product portfolio

Growth business, with upside and attractive returns

Capitalizing on the growing market with a low-capital intensity growth plan

Deep understanding of elemental bromine and derivatives generates value and credibility with customers

Value-added solutions: high-quality products & highly skilled technical experts, with innovation & sustainability top of mind



Catalysts: Positioning to Execute on Long-term Opportunities

Raphael Crawford
President, Catalysts



Fundamentally Strong Business with New Growth Opportunities



Core competencies: strong customer focus, proprietary technologies, distinctive partnerships, and application knowledge

Access to **global network** through **strategic JV partnerships** – FCCSA, Nippon Ketjen, and Eurecat

Extensive product applications and **technical knowledge** to deliver customer-focused solutions

Comprehensive strategy to leverage core business and **pivot for continued growth** in developing geographies and renewable markets

A Leader in Refining and Petrochemical Catalysts

TTM Q2 2021

\$762M

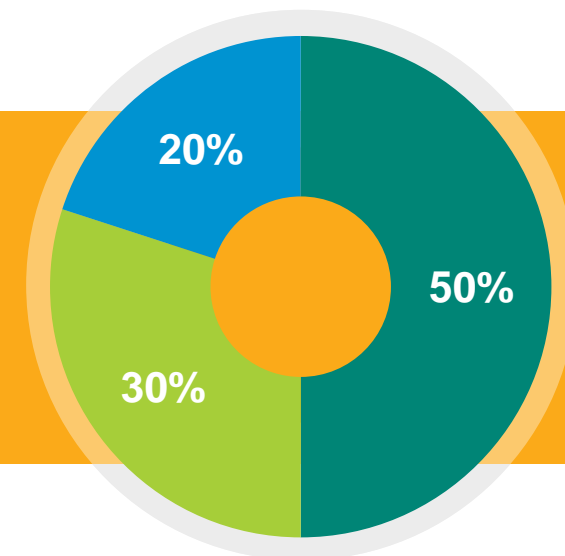
Net Sales

\$106M

Adj. EBITDA¹

14%

Adj. EBITDA Margin¹



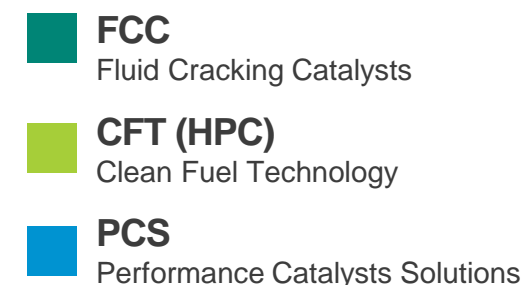
GBU Characteristics

- Portfolio of global best-in-class assets
- Extensive product application and technical know-how
- Sustainable solutions to improve resource efficiency (FCC) and reduce emissions (CFT)
- Strong, long-term relationships with customers, partners, and licensors

Business Environment

- **FCC:** Refinery output expected to shift from fuels to petrochemicals; FCC growth to be driven by units with light olefins production
- **CFT:** Market growth expected to recover by 2024; demand delayed as refiners push out turnarounds due to reduced utilization
- **PCS:** Demand for petrochemical products expected to continue to grow above GDP with positive outlook for organometallics and curatives

Net Sales by Application²



Tracking Our Progress Against What We Said in 2019

Core Strategy: Low-Cost Operational Excellence

2019 Investor Day

- Continuous improvement model
- Organization focus on FCF metrics
- Strict capital deployment and disciplined R&D investment

Updated Commentary

- Deploying operating model
- Focus on cash flow generation capacity
- Align capital deployment and R&D to align with long-term growth opportunities (e.g., renewables)

Market Outlook

- Crude prices expected \$70+/bbl
- ~2% growth expected in transportation fuels
- FCC demand growing low single-digits
- CFT (HPC) demand growing low single-digits through 2025

- Pricing outlook unchanged (\$70+/bbl)
- Transportation fuel demand expected to peak ~2030
- FCC demand growth unchanged (low single-digits)
- CFT (HPC) demand expected to be flat

GBU Outlook (2019-2024)

- Annual growth rate 3%-5%
- Sustainable margins (26%-28%)
- Strong cash flow yield

- 2019-2024 growth rate reduced due to pandemic and change in North America ordering pattern; 2022-2023 expect strong growth as markets rebound
- Expect margin recovery (low 20s) by 2023
- Stable cash flow through the pandemic

PCS

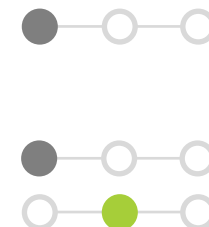
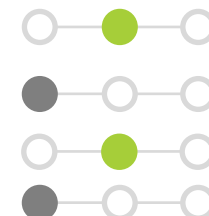
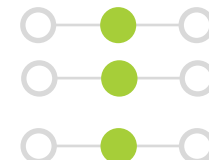
- Assessing strategic alternatives for the PCS business

- Discontinued efforts to sell the PCS business; PCS continues to perform above expectations

behind in line ahead



Progress to Date

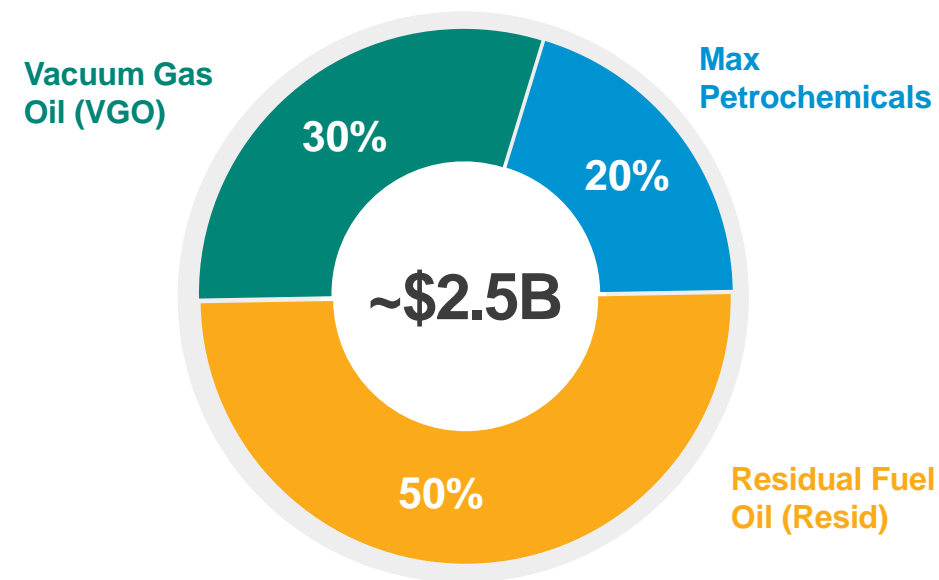


FCC Catalysts Improve Yields and Lower Costs for Refiners

Segment Characteristics

- FCC catalysts are used to crack oil feedstock into gasoline and chemicals; continuously fed into FCC units
- ~600 FCC units globally, each of which requires a constant supply of FCC catalysts
- Players differentiated by catalyst performance and technical service
- Customer base is moving towards processing renewable feedstock and producing higher-grade petrochemical outputs
- Albemarle is a leader in bottoms cracking (resid) and olefin output (max petrochemicals)

Estimated FCC Market Demand ¹



Market Drivers:

Transportation fuel: Growing global vehicle fleet, especially in emerging economies

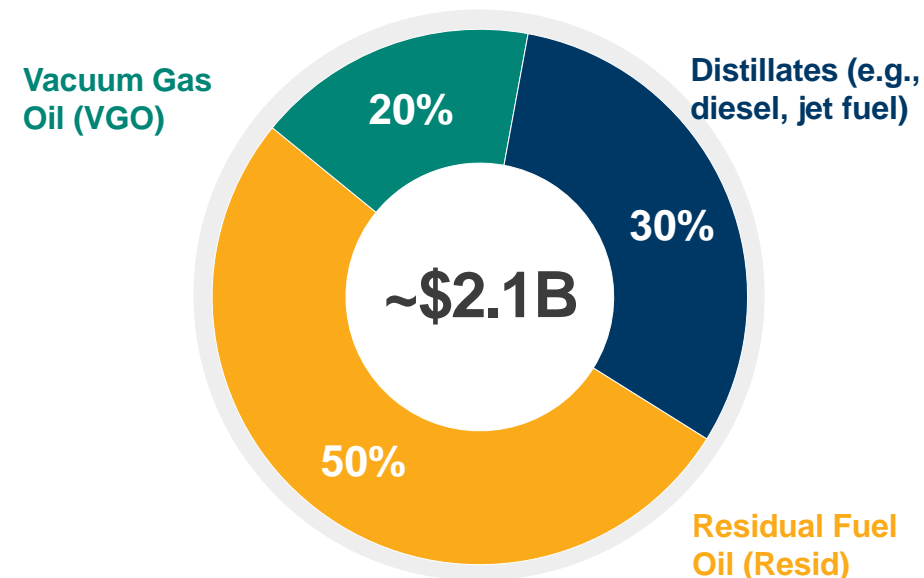
Petrochemicals: Demand for multi-use, durable plastics; continued growth, particularly in emerging economies

CFT Catalysts Remove Sulfur and Contaminants to Improve Sustainability

Segment Characteristics

- CFT includes primarily hydro processing catalysts (HPC)
- ~3,000 HPC units globally, each requires replacement HPC catalysts once every 1-4 years depending on application
- Create value for refiner by production of ultra-low sulfur transportation fuels
- Players differentiated by product performance characteristics and technical service
- Transitioning with our customers towards renewable diesel and plastic recycling
- Albemarle is a leader in middle distillates, bio-based oils, and pretreatment of hydrocrackers

Estimated CFT Market Demand¹



Market Drivers:

Transportation fuel demand: Increasingly complex refinery operations require better catalysts and services

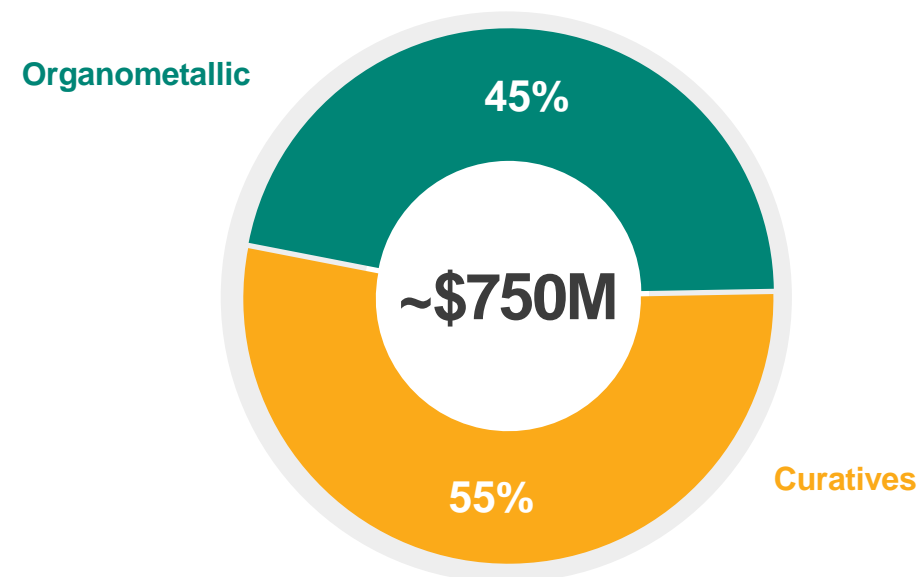
Regional sulfur specifications: Environmental legislation leading to stricter fuel impurity standards

PCS Catalysts Used in Growing End-use Applications

Segment Characteristics

- Organometallic (OM) co-catalysts used in the manufacture of alpha-olefins, polyolefins, and electronics
- Curatives include a range of curing agents used in polyurethanes, polyurea, and epoxy resins with applications in the auto and construction industries
- Our OMs create value for customers by allowing basic petrochemical manufacturers to supply packaging and other consumer goods
- Our curatives are used to produce polyurethanes and resin products to supply the increasing demand for consumer products
- Players differentiate on technical support for the safe and correct application as well as the reliability of supply

Estimated PCS Market Demand¹



Market Drivers:

Petrochemicals: Mainly driven by packaging

Construction: Projected to grow above GDP

Electronics: Driven by semiconductors demand

Aligning Growth Opportunities with Major Macrotrends



Refining capacity continues to expand in emerging markets like India and SE Asia

SE Asia & India Demand

(million bpd)

+5% CAGR
(2020-2025E)

■ Diesel
■ Jet fuel
■ Gasoline



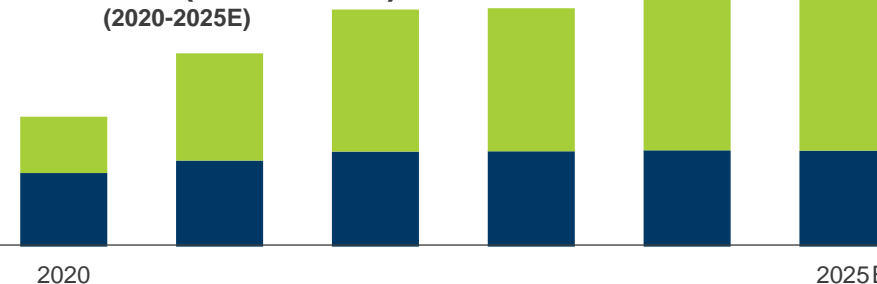
Demand for renewables and recycling applications is increasing, led by North America

Renewable Diesel Demand

(million MT)

+15% CAGR (N. America)
(2020-2025E)

■ North America
■ ROW



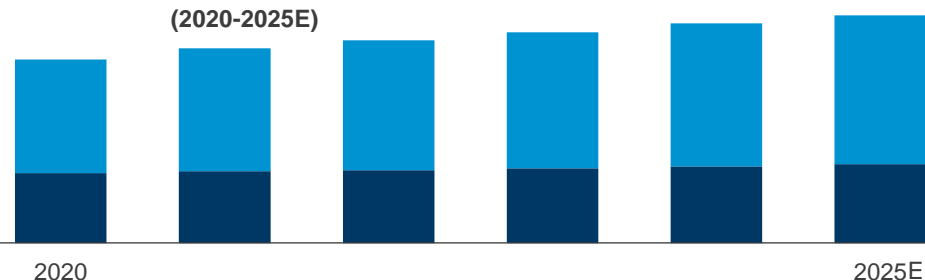
Crude-to-chemical demand driven by growth of middle class, primarily in Asia Pacific

Propylene Demand

(million MT)

+4% CAGR (Asia Pacific)
(2020-2025E)

■ Asia Pacific
■ ROW



Demand for polyurethane continues to grow for construction and automotive applications

Polyurethane Demand

(billions in USD)

+5% CAGR
(2020-2025E)



Pivoting to Long-term Sustainable Growth

GROW PROFITABLY

- Expand presence in growth areas: Southeast Asia/India, crude-to-chemicals, and renewables
- Accelerate regional sales through commercial outreach and local support

MAXIMIZE PRODUCTIVITY

- Balance cost structure with a declining core refining market and increasing energy transition market
- Deploy advanced analytics to improve quality, yield, and productivity

INVEST WITH DISCIPLINE

- Pursue JVs and partnerships to develop pre-commercial technologies
- Disciplined capacity actions to align with market; manage asset utilization

ADVANCE SUSTAINABILITY

- Win in energy transition
- Expand presence in renewable fuels through enhanced commercial partnerships
- Build in-house pyrolysis oil hydrotreating capacity through partnerships

Leveraging Our Core Skills in Growth Markets

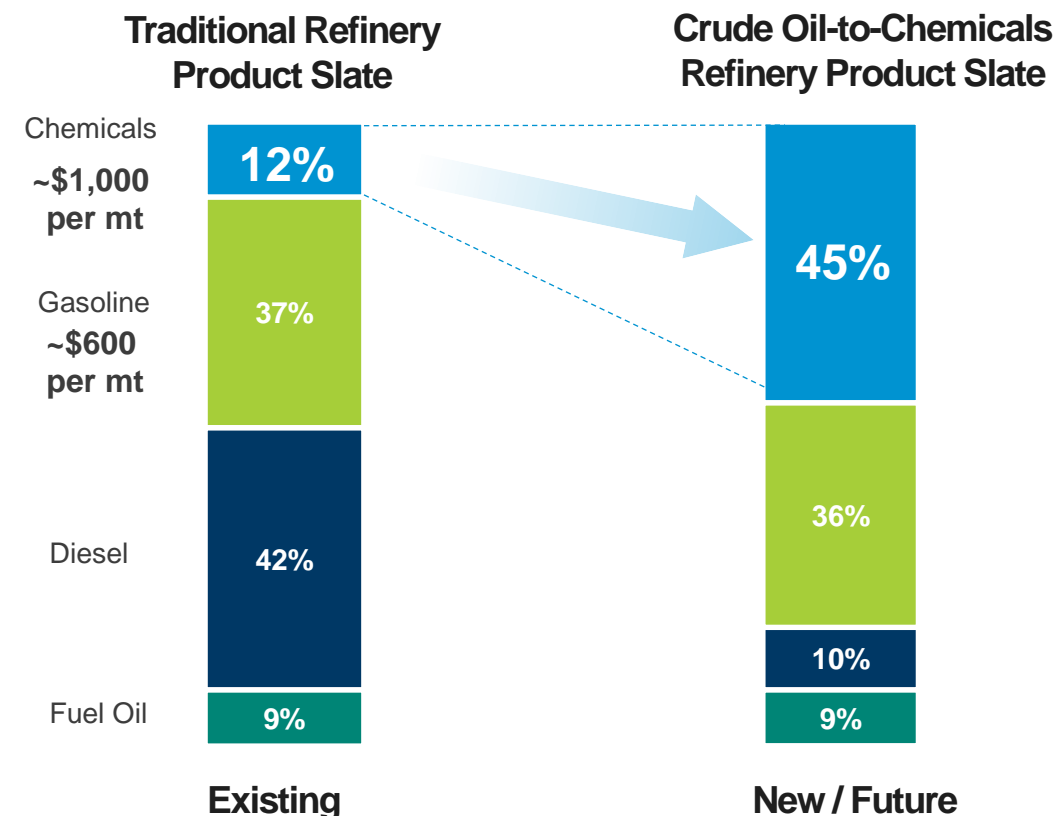
Outlook:

- Emerging Growth Regions: Anticipate demand growth in India and SE Asia
- Crude to chemicals: Expect increased demand in emerging regions with scale-up of new technologies post 2025

ALB Strategic Actions:

- Leverage long-standing customer relationships and establish relationships with new entrants
- Signed MoU with national oil company (NOC) in Asia
- Continued investment in innovation of core technologies and crude-to-chemicals

Petrochemicals Demand & New Crude-to-Chemicals Technologies Drive FCC Industry Growth Beyond “Peak Gasoline”



Chemicals are higher value products for refiners

Accelerating Renewables Platform: HVO & Pyrolysis – Both Relate to Sustainability

Outlook:

- Hydrotreated Vegetable Oil (HVO): Continued regulatory support; expanding beyond early adopters to other potential refining customers
- Pyrolysis: Driven by large producers of consumer goods and demand for recycled content

ALB Strategic Actions:

- Further build out partnerships towards HVO; continue to expand industry insight and track record
- Grow with existing customer base as more refineries go into HVO production
- Broaden relationships with refineries and integrated energy companies
- Build out experience with more contaminated feeds (e.g., bio-based feeds)

Partnering with leaders on renewables

- 20-year relationship with Neste, a front runner in renewable fuels research and manufacturing
- Partnered in the development of NEXBTL catalysts, enabling the production of renewable diesel from animal fat, used cooking oil, and other waste streams

NESTE



Photo provided by Neste

- Albemarle products process renewable feeds to maximize hydrodeoxygenation (HDO) selectivity
 - ReNewFine™ catalyst tackles challenges in the hydrotreater that arise from processing renewables
 - ReNewSTAX™ loading technology for renewables processing to optimize activity, selectivity, and stability

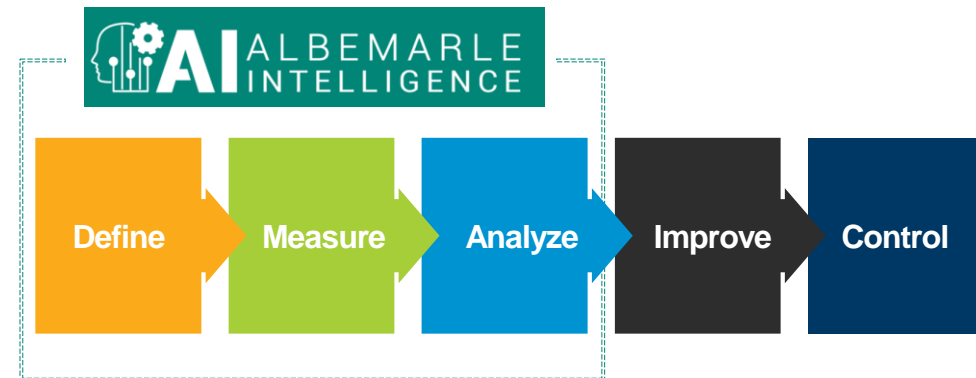
Dedicated to a sustainable future in refining

Operational Discipline: Manufacturing Excellence

- Project AI implements advanced data analytics in our existing chemical process and quality control data
- Enables advanced analytics like Northwest Analytics univariate Statistical Process Control (SPC) and multivariate analytics
- Automates data definition, measurement, and analysis to free up operators to improve and control processes

Case Study: Project Artificial Intelligence (AI)

- Began at Bayport in 2021; currently underway at Amsterdam and La Negra; to be rolled out at Xinyu and Magnolia
- Multivariate machine learning model running real-time
- Automating the Six Sigma process to improve quality, yield, productivity, and raw material consumption
- Notifies operators proactively before problems occur – reducing downtime
- Estimated savings of ~\$4M per year at Bayport

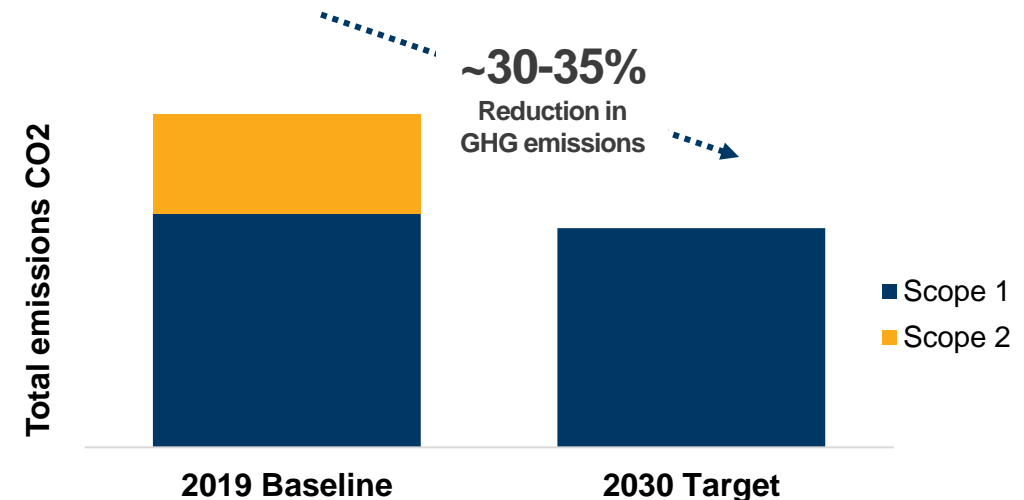


Sustainable Approach: Natural Resources Management

- Executing projects to reduce the carbon-intensity of our Catalysts business by 35% by 2030, in line with science-based targets
- Expand renewable electricity, enhancing energy recovery and recycle, and evaluating alternative energy, such as hydrogen, electrification, etc.
- Ambition to achieve net zero carbon emissions by 2050

Reducing GHG Emissions

- Switch to renewable energy eliminates Scope 2 emissions from purchased electricity
- Dutch national initiative targets additional Scope 1 GHG emissions reductions
- Heat recovery projects at Amsterdam target FCC efficiencies to match our industry-leading Bayport plant



Projects currently in execution contribute to meaningfully lower GHG emissions

5-year Outlook as We Pivot to Long-term Sustainable Growth

Net Sales

\$745M - \$785M
(2021E)

6%-8%

5yr CAGR
(2021E-2026E)

Adj. EBITDA Margin

11% - 13%
(2021E)

26% - 28%
(2026E)

ASSUMPTIONS:

- Shift toward higher chemicals output from refineries
- Continued shift toward sustainable energy products by refineries
- Continued adoption of lower sulfur fuel standards globally
- Continued growth in construction above GDP

BUSINESS ENVIRONMENT

FCC

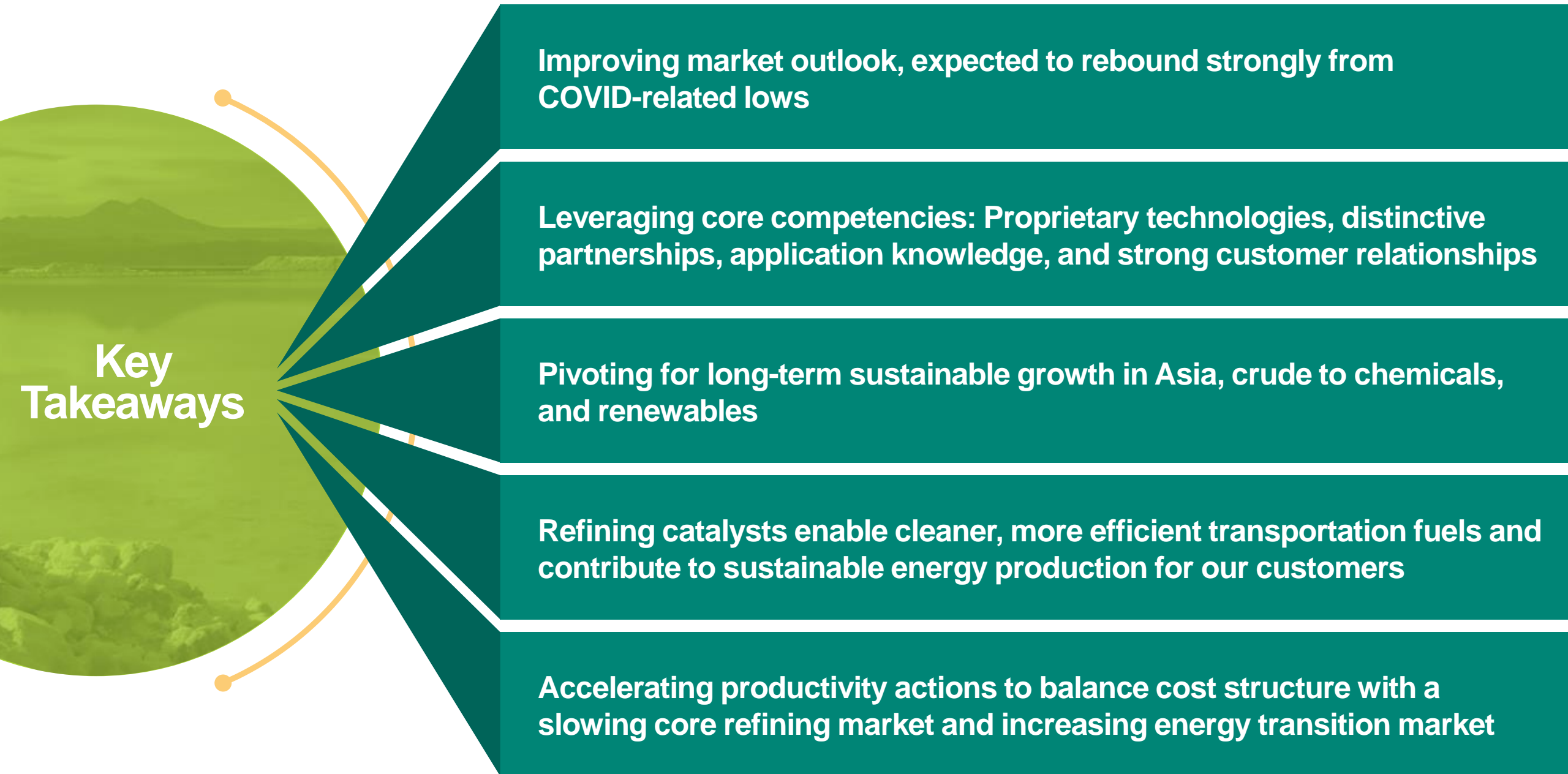
- Growth in SE Asia and India
- North American market flat and trending down in Europe
- Opportunities with petrochemical integration and crude to chemical technology development

CFT (HPC)

- Growth in SE Asia and India and flat in North America and Europe
- Shift towards renewables with renewable diesel and plastic recycling

PCS

- Increase in organometallics driven by electronics and more specifically, semiconductors
- Increase in curatives is mainly driven by countries banning use of MOCA used in polyurethane, such as vehicles coating and construction material





Enabling the EV Revolution

Eric Norris
President, Lithium



Accelerating Growth to Meet Increasing Customer Demand



Diversified across geographies, products, and resources; ample, **world-class resource** capability

Lithium industry demand expected to reach 1.14 million MT LCE by 2025, ~30% CAGR driven by **increasing EV sales** volumes and battery size¹

Proven track record of expanding battery grade conversion capacity to meet customer demand (~6x from 2016 to 2022)

Sustaining **a leadership position**; planned expansions increase FY 2022 nameplate capacity >2x in line with resource capacity

Ability to meet increasing and dynamic customers' needs regarding **quality, technology, and sustainability**

Well-positioned to Remain a Leader as Growth Accelerates

TTM Q2 2021

\$1.2B

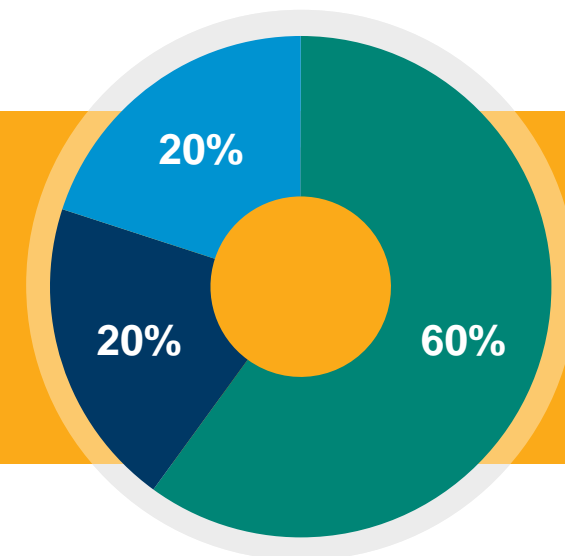
Net Sales

\$436M

Adj. EBITDA¹

36%

Adj. EBITDA Margin¹



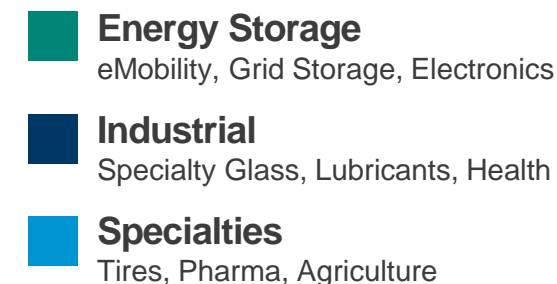
GBU Characteristics

- A leader in battery, industrial, and specialty grade lithium
- Large, world-class resource base; vertically integrated from natural resource to specialty performance products
- Technological differentiation in resource extraction, conversion, and derivatization
- High-quality product portfolio / low-cost position
- Committed to industry-leading sustainability performance

Business Environment

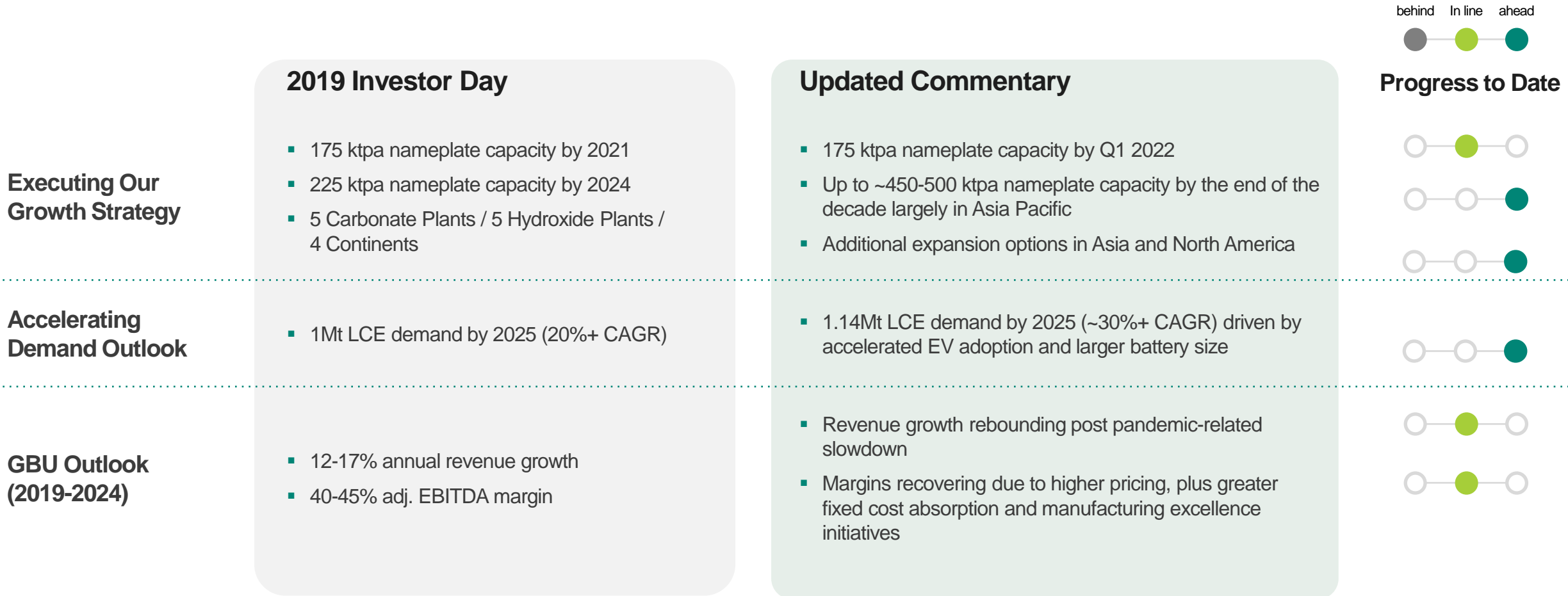
- Volume growth driven by energy storage
- Public policy accelerating e-mobility / renewables
- Highly dynamic, emerging supply chain
- Battery cost declining + performance improving = need for higher-quality lithium and innovation
- Security of supply essential to underwrite global auto OEM investment in vehicle electrification

Net Sales by Applications²



Energy storage is expected to be >85% of Albemarle Lithium revenues by 2026

On Track to Meet or Exceed Expectations from 2019



Poised to drive an even stronger mid-decade outlook than described in 2019

A Leader in High-Growth Energy Storage Business



EVs and eMobility
Grid Storage
Electronics

Specialty Glass
Lubricants
Automotive

Healthcare
Pharmaceuticals
Agriculture

Est. Market
Demand 2020¹

~\$2B

~\$1B

~\$0.5B

Est. Volume Growth
2020-2025 CAGR¹

35-40%

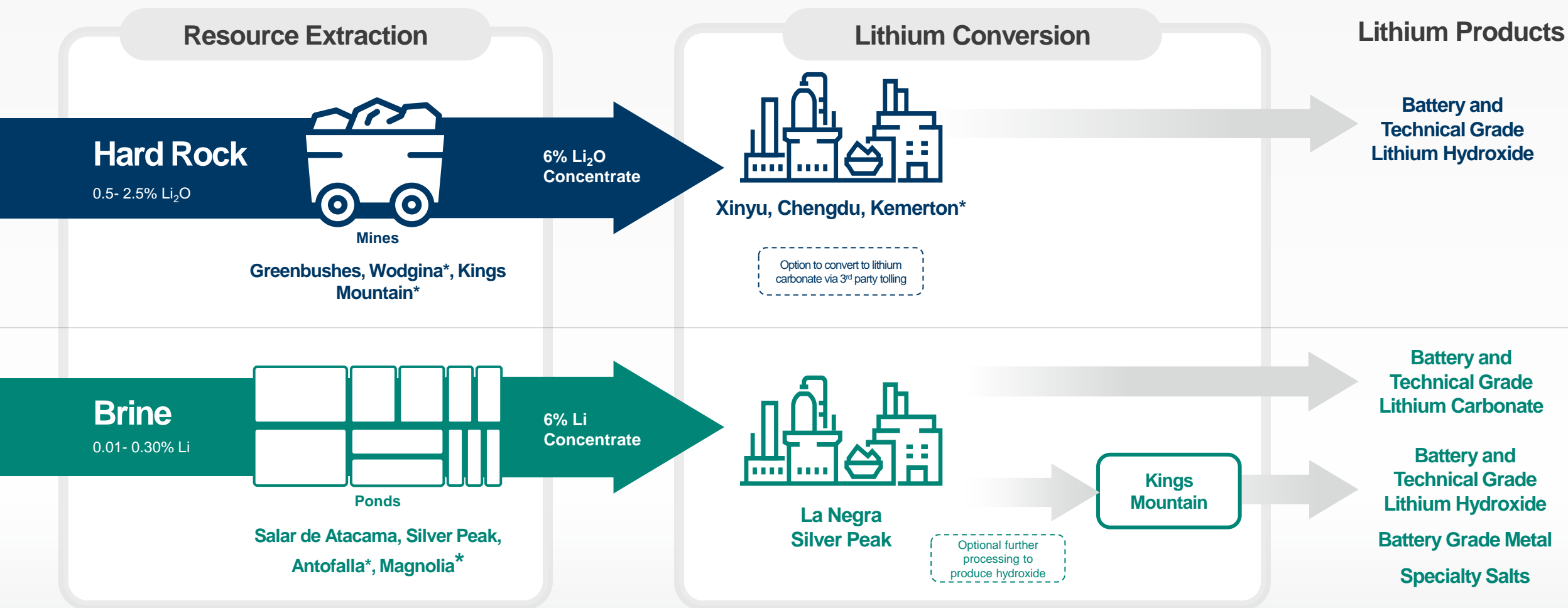
2-4%

3-5%

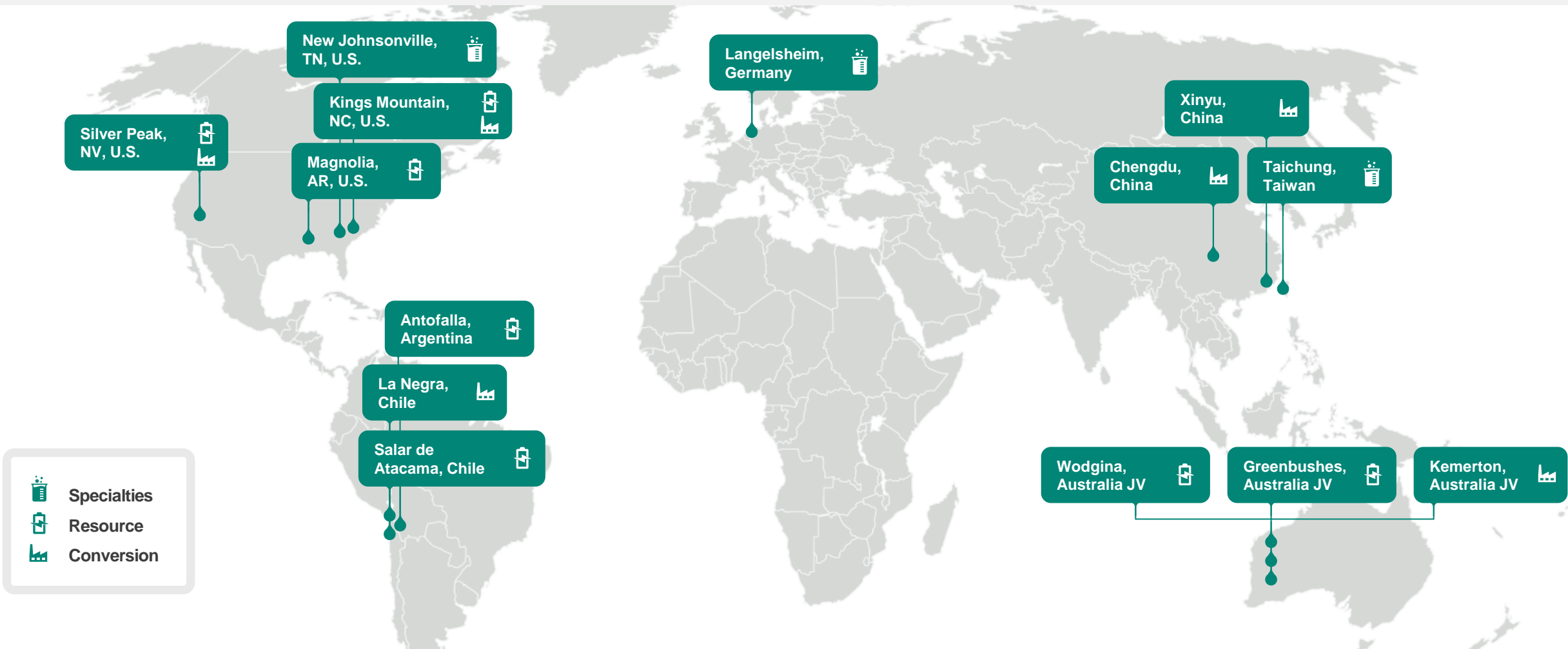
Aim is to sustain leadership position in each of these three markets

Established Processes for Conventional Resources

Continuous improvement through optimization, efficiency, technology advancements



Diversified, Global Asset Base – Presence in Major Geographic Markets

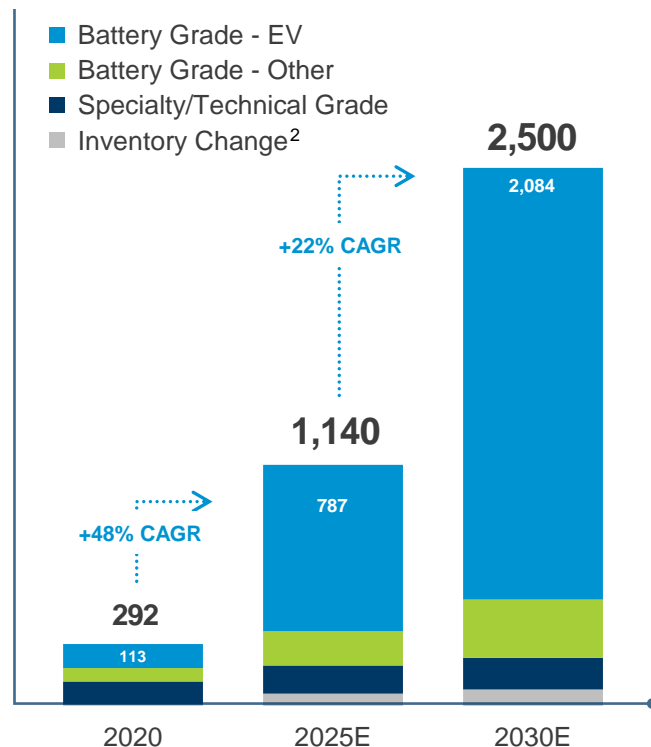


Extraction from multiple low-cost resources and processing into value added products around the world

Lithium Demand Driven by EV Penetration and Battery Size

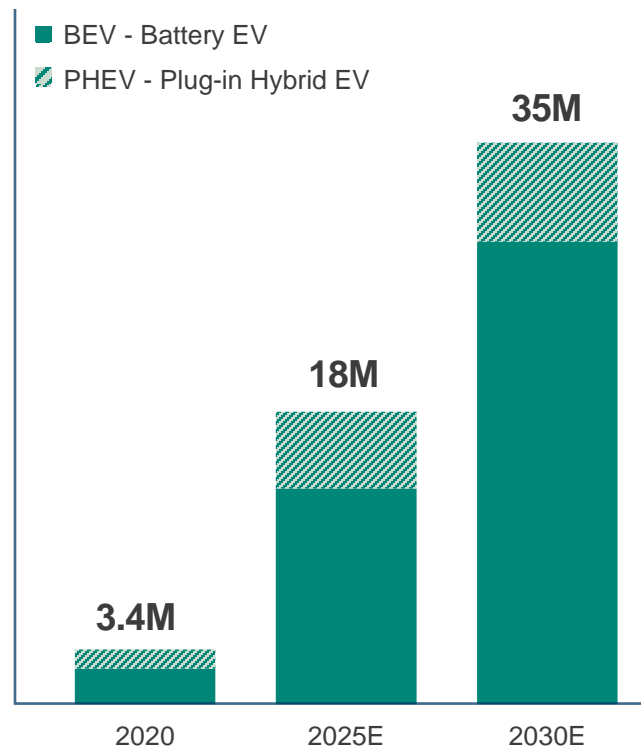
Lithium Demand by Application¹

(ktpa LCE)



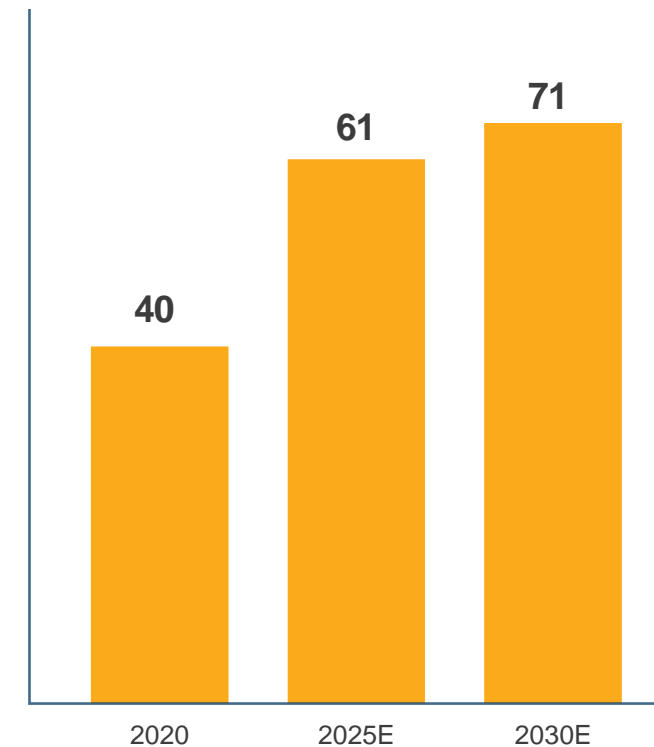
EV Production¹

(Vehicle Units)



Battery Size (EV Average)¹

(kWh per EV)



Strong EV demand growth is expected to continue through the decade

Overall Market Expected to be Tight Through 2026

Carbonate¹

2026 Li_2CO_3
Base Demand

Low Case

High Case

Cash Cost (\$/kg LCE)

Potential Capacity (kT LCE)

Hydroxide¹

2026 LiOH
Base Demand

Low Case

High Case

Potential Capacity (kT LCE)



Outlook is largely in-line with 2019 Investor Day including:

- Long lead times for new supply
- Supply additions largely at higher marginal costs

Albemarle's low-cost position translates to strong margins through the cycle

Long-term Strategy Focused on Sustainable Growth

GROW PROFITABLY

- Accelerate growth to meet demand from strategic customers
- Expand conversion capacity to utilize low-cost, world-class resource base
- Innovate next generation lithium technology for increased energy density

MAXIMIZE PRODUCTIVITY

- Drive commercial and manufacturing excellence to grow efficiently and effectively
- Leverage process technology to improve yields, lower costs, and ensure quality

INVEST WITH DISCIPLINE

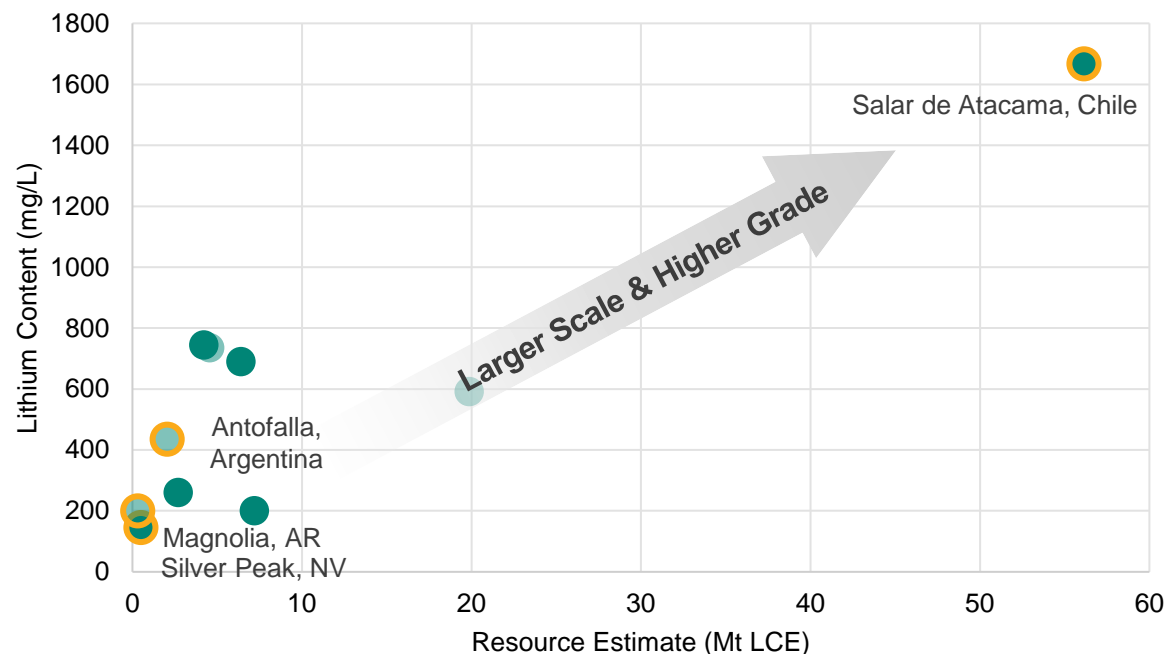
- Best-practice project execution to reduce capital intensity and improve returns
- Evaluate M&A and partnerships for conversion, resources, and technology

ADVANCE SUSTAINABILITY

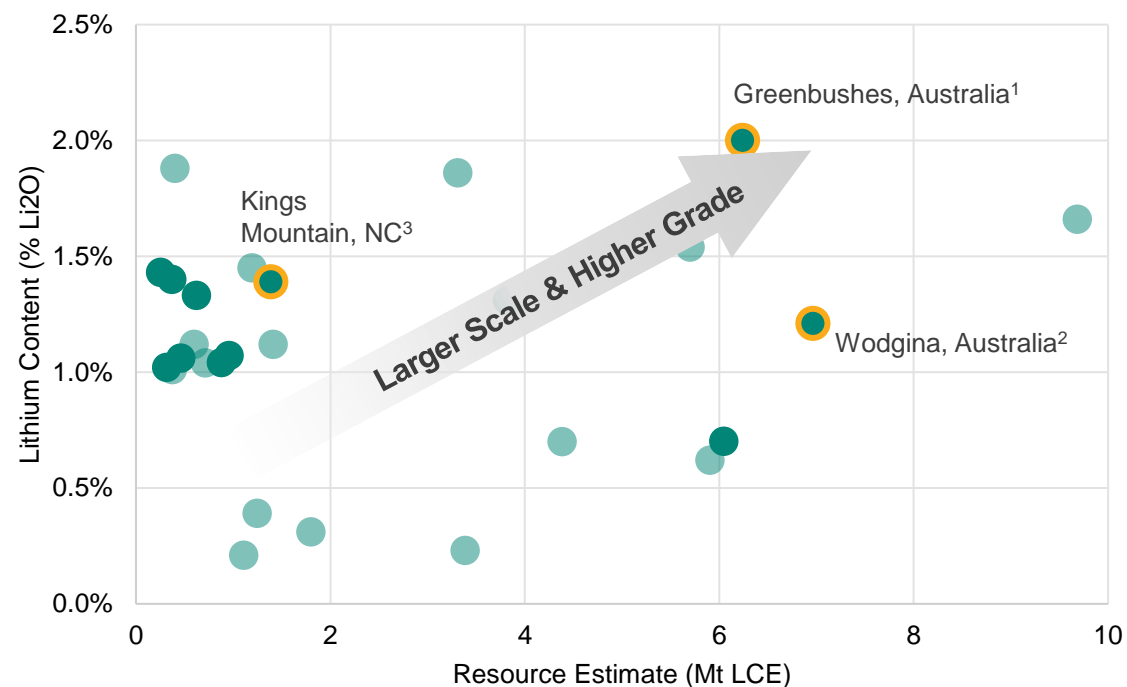
- Committed to industry-leading sustainability performance
- Enable our customers' sustainability ambitions

World-Class Resource Base Supports Low-Cost Position

Lithium Brine Resources



Lithium Mineral Resources



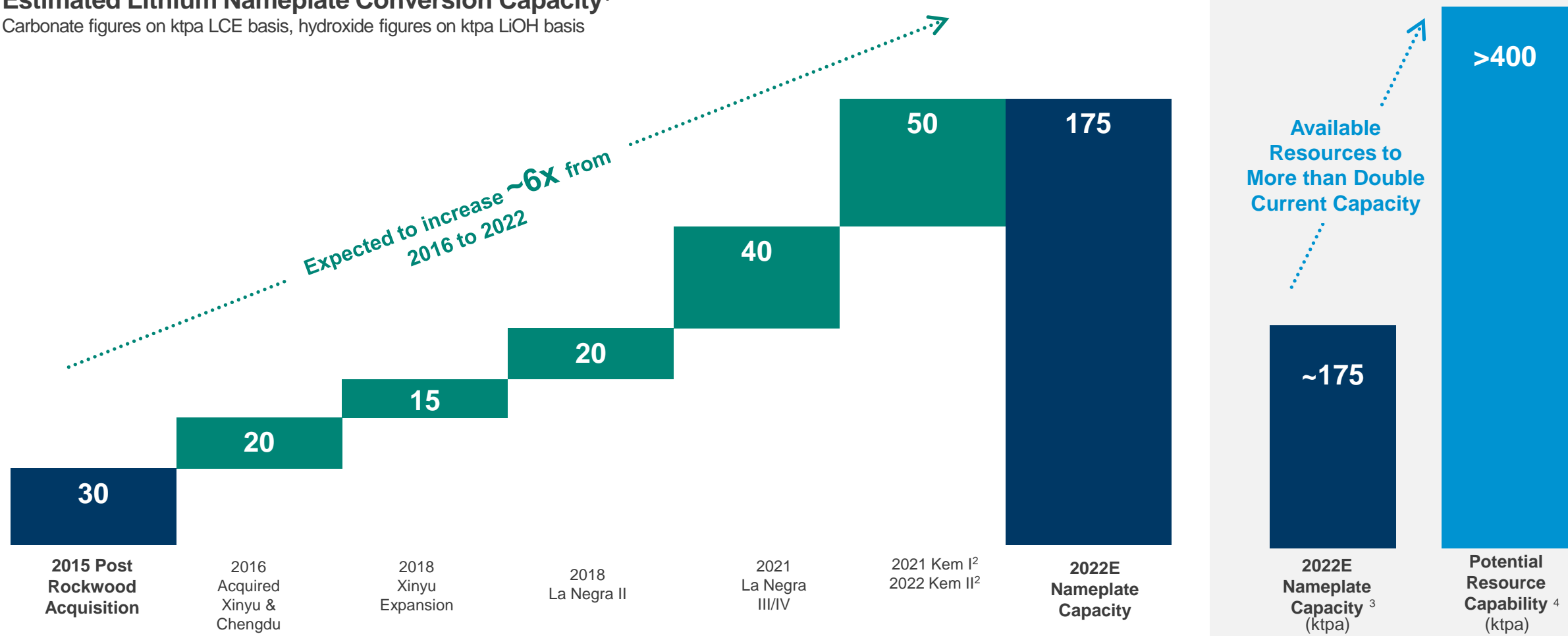
● Operating or Care & Maintenance ● Pre-production project ○ ALB Resource

Grade, scale, and chemistry are the primary determinants of project cost and success

Track Record of Growing Conversion Capacity to Meet Demand

Estimated Lithium Nameplate Conversion Capacity¹

Carbonate figures on ktpa LCE basis, hydroxide figures on ktpa LiOH basis

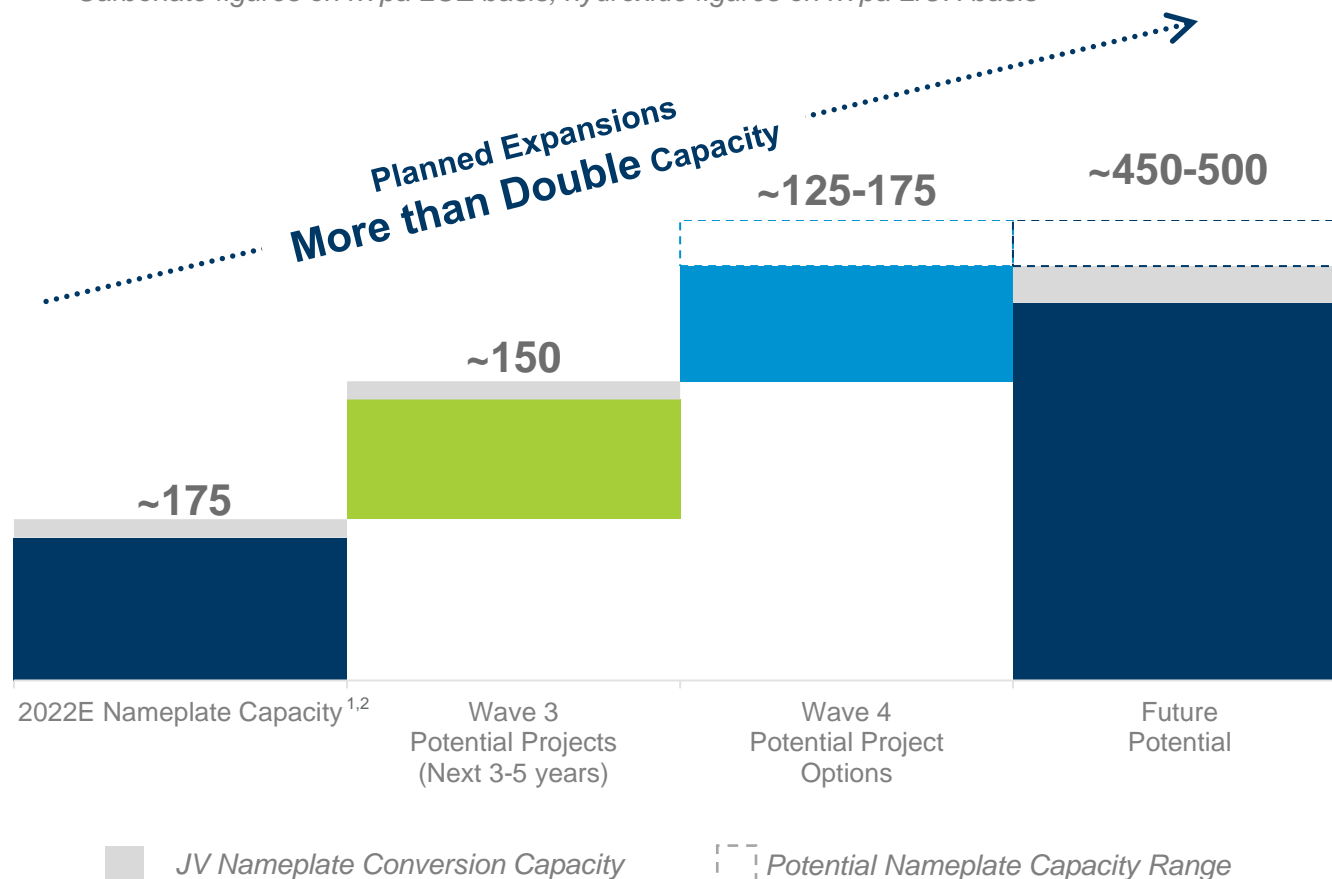


Built significant conversion capacity in three different parts of the world

Investing to Align Capacity with Market Demand

Estimated Lithium Nameplate Conversion Capacity

Carbonate figures on kTpa LCE basis, hydroxide figures on kTpa LiOH basis



Wave 3 Potential Projects (3-5 years)

~\$1.5B CapEx

- Silver Peak, Nevada
- China (JV)
- China (100%)
- Kemerton, Australia (III & IV)

Wave 4 Potential Project Options

Funded with Enhanced FCF

- Carbonate to Hydroxide
- Kemerton, Australia (V)
- Opportunities in Asia
- Kings Mountain, NC
- Magnolia, AR

Deploying capital efficient projects that will fully leverage our available low-cost resource base

Operational Discipline: Manufacturing Excellence

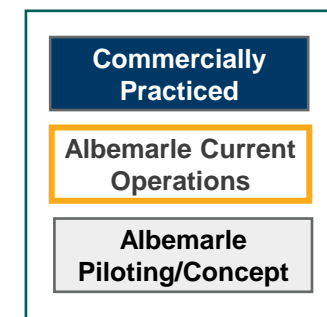
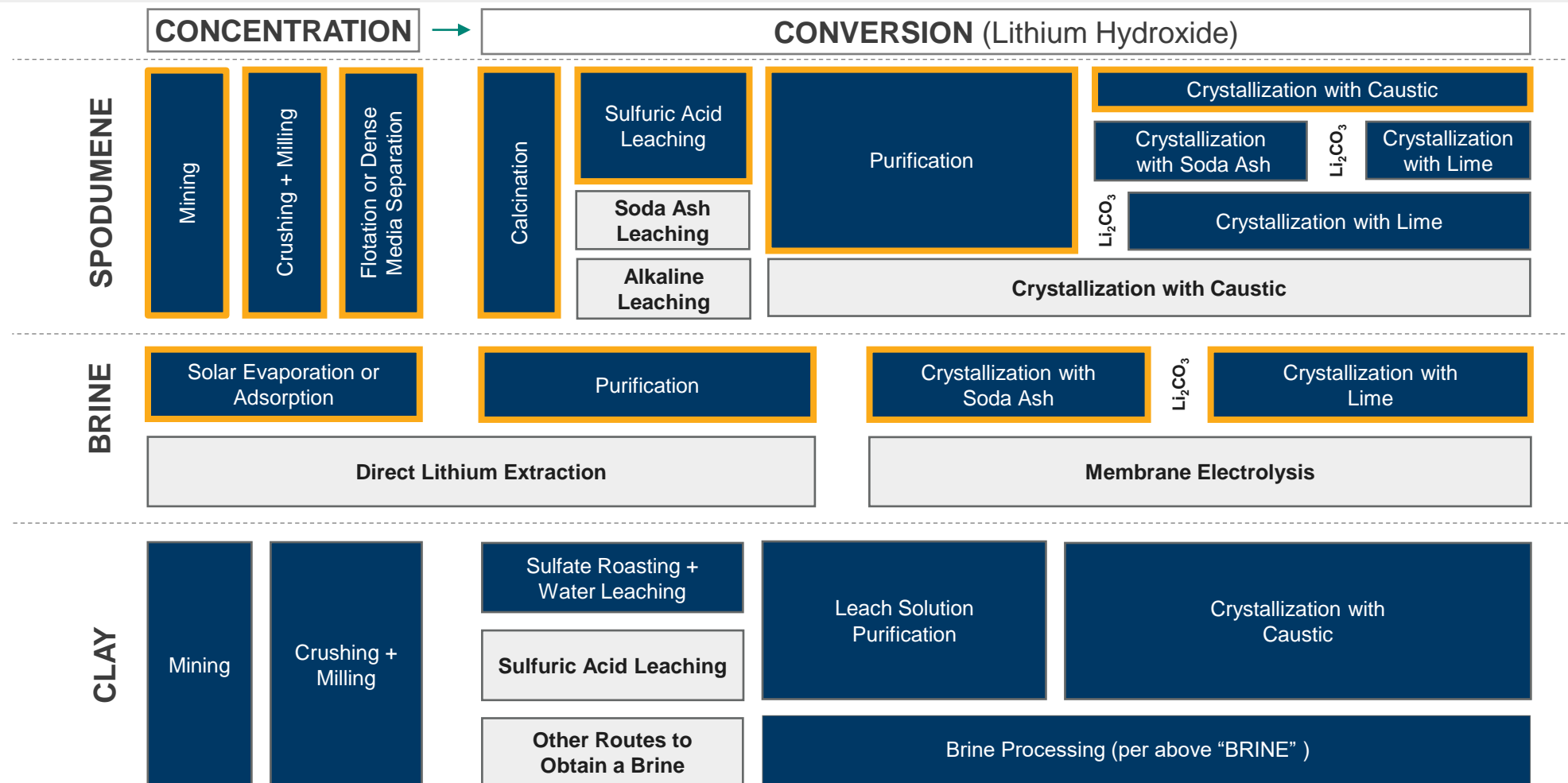
- **Manufacturing Excellence Management Systems (MEMS):** Global playbook of common standards, KPIs, procedures, and expectations
- **Predictive Maintenance:** Increase overall equipment effectiveness and reduce expense & capital costs
- **Continuous improvement:** Initial focus on root cause analysis, overall equipment effectiveness, process data analytics

Case Study: J2E Manufacturing Excellence Program

- 2021: Engaged third party assistance to implement at La Negra, Langelsheim, and Salar; internal teams will implement at smaller sites
- 2022: Xinyu implementation
- Kemerton will start-up with programs in place
- Key benefits include:
 - Improved safety and quality performance
 - Higher production and yields
 - Lower costs (expect cumulative savings of >\$70M over the next 5 years)
 - Improved operational efficiency (e.g., OEE)

Various manufacturing excellence projects expected to add ~20-25ktpa LCE per year by 2025 – the equivalent of adding a full train of conversion capacity with minimal additional capital

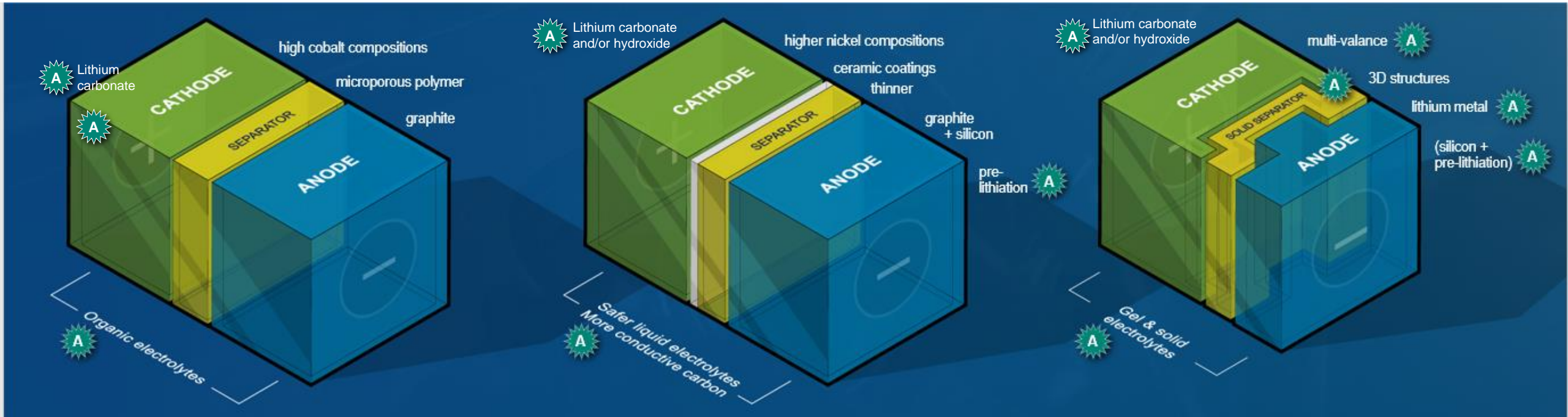
Competitive Capability: Know-how in Extraction and Process Technology



Key considerations: resource quality, by-products, water use, energy consumption, carbon emissions

Developing Novel Materials to Enable Next Generation Battery Performance

Legacy	Advanced	Next Generation
Established Technologies in Use (Current) e.g., LFP and higher cobalt chemistries	New Technologies in Commercialization (~2020-2025) e.g., NMC 622, NMC811 and higher nickel chemistries	New Technologies in Development (2025+) e.g., Li metal anode, solid-state
Low \$100's/kwh ¹	20-40% improved energy density & improved costs ¹	2x energy density, ½ cost ¹



Improving safety, energy density, affordability, and charging speed to enable broad EV adoption

Differentiated Approach to Customer Partnerships and Contracting

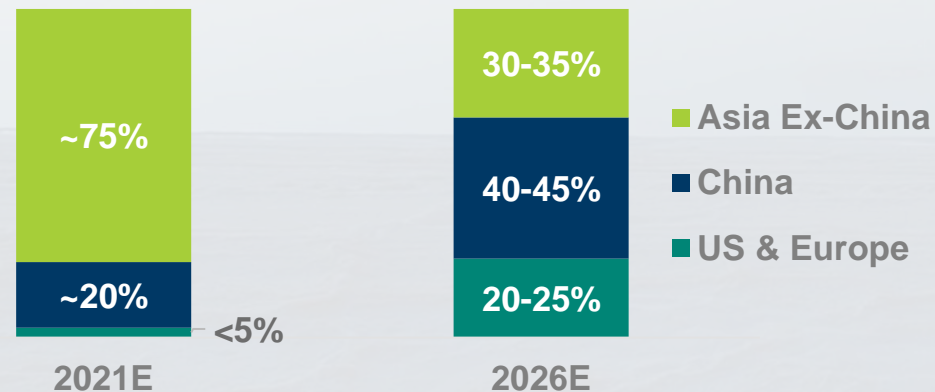
Commitment to LTAs is Unchanged

- 70%+ of battery grade sales on multi-year commitments to support aggressive expansion
- Minimum returns of >1X WACC at trough pricing; >2X WACC at mid-cycle
- Varied contract duration: 1-5 years, majority are 3-4 years
- Staggered contract expirations to reduce potential volatility

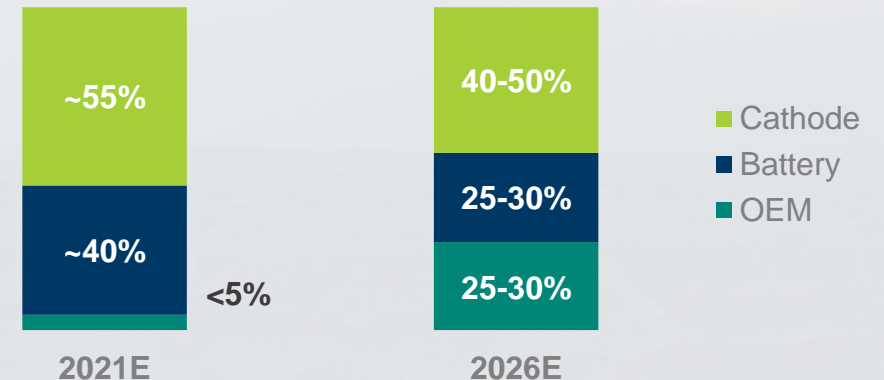
Contracting Approach is Evolving

- Strategically segmenting customers by key requirement – **price**, **security** of supply, or **performance** (technology, sustainability, etc.)
- Product offering varies by segment in terms of price, contract duration, value added services, etc.
- 2022 avg realized lithium price is expected to increase $\geq 15\text{-}20\%$ Y/Y based on expiration of price concessions and market conditions
- Future price sensitivity will depend on future contract mix

Geographic Mix Evolving with the Lithium Market



Contracts Across Value Chain



Lithium Growth Accelerating Due to Electrification of Transportation

Net Sales

\$1.3B - \$1.4B
(2021E)

24%-28%

5yr CAGR
(2021E-2026E)

**Adj. EBITDA
Margin**

32% - 34%
(2021E)

43%-47%
(2026E)

ASSUMPTIONS:

- Global accelerated EV adoption supported by regulation and technological improvements
- Steady, GDP/GDP+ growth for non-EV businesses

BUSINESS ENVIRONMENT:

Energy Storage

- Pricing environment expected to improve as supply becomes more balanced in the mid-term; expect strong EV growth over next 5 years
- Volume driven by capacity additions in a rapidly growing market

Industrial

- Remains a GDP market and prices driven by Energy Storage

Specialties

- Pricing based on value in use
- Growth above GDP due to favorable macro-economics trend of aging population



Key Takeaways

Albemarle has a broad range of resources, manufacturing capabilities, products, and customer relationships

Global Lithium demand is on track to reach 1.14 million MT LCE by 2025, a ~30%+ CAGR¹

Projected growth in lithium demand cannot be met without leveraging the largest and most highly concentrated resources in the world, and we have access to 3 world-class resources

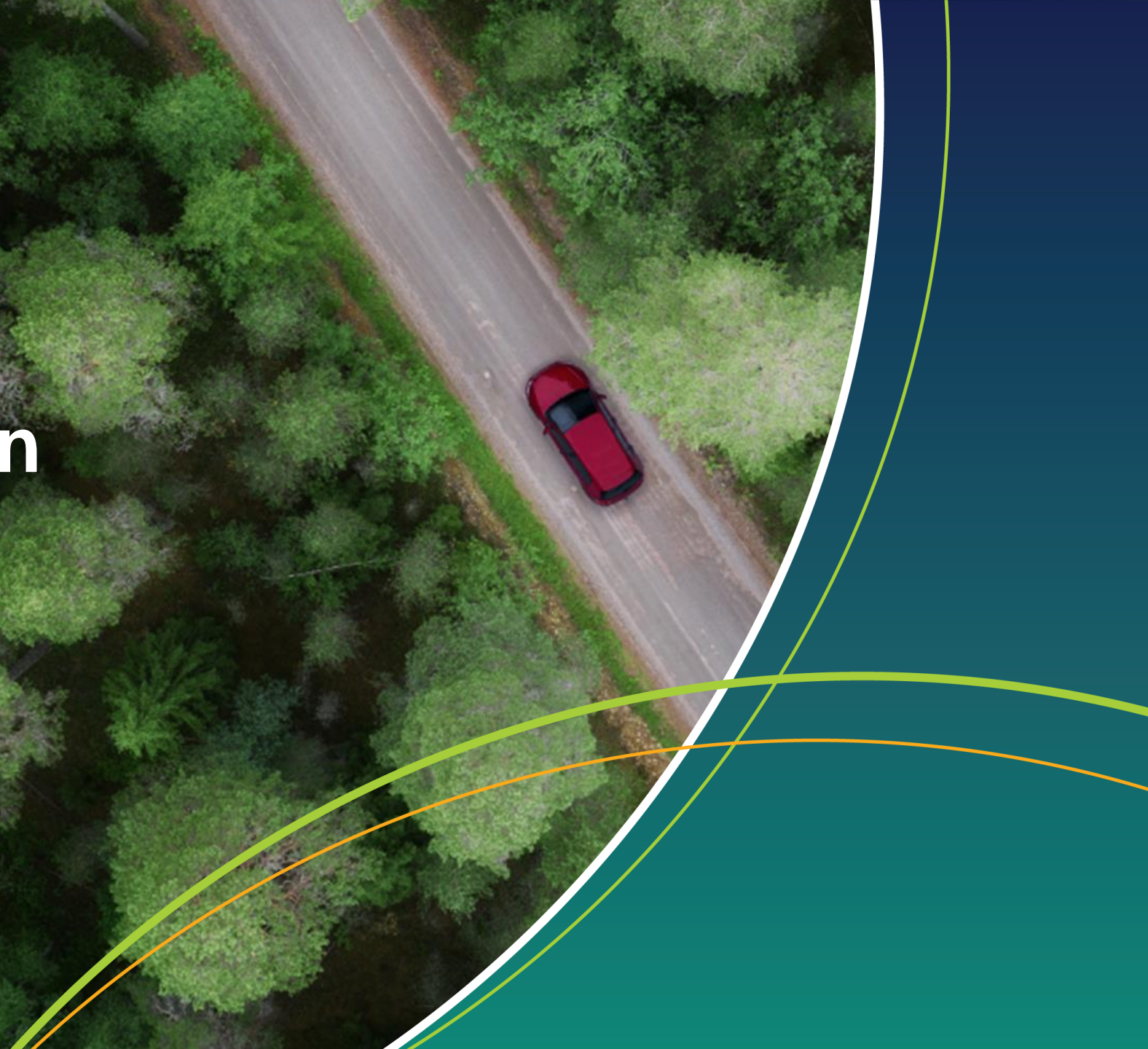
We have a disciplined plan to build battery grade conversion capacity that provides attractive returns and meets significant demand from our customers

Customer value proposition driven by quality, innovation, and sustainability



Sustainable Lithium Production

Ellen Lenny-Pessagno
VP, Lithium Sustainability



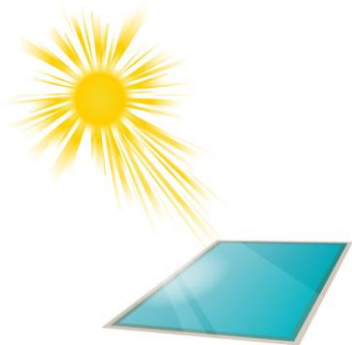
How We Produce Lithium is as Important as How Much We Produce

Lithium production focused on minimizing environmental and social impact and maximizing stakeholder benefit

- Plan to grow Lithium business in a carbon-intensity neutral¹ manner through 2030
 - Includes ~30% reduction in hydroxide carbon footprint
- Plan to reduce freshwater intensity by 25% by 2030 in areas of high and extremely high water-risk², including Chile
 - \$100M investment in thermal evaporator at La Negra reduces freshwater intensity by >30%
 - Studying opportunity to replace freshwater with green, desalinated seawater in 2026 in La Negra
- Maintain positive community relationships through open, transparent communication as well as economic and community development



Managing our Carbon Footprint and Reducing GHG Emissions



Passive solar energy makes up 78% of total Albemarle energy consumption

At the Salar de Atacama in Chile and in Silver Peak, Nevada, an arid climate makes passive solar energy the most cost effective – and sustainable – way to concentrate brine



Reducing GHG emissions in China

In 2017, Albemarle converted the energy supply at our lithium hydroxide plants in Xinyu, China and Chengdu, China from coal to natural gas



Greening the electricity mix at Kemerton and La Negra

Kemerton expected to use ~35% green electricity by 2023; plan in place to reach net-zero 2050 for energy use

La Negra and Salar de Atacama plan to move to solar powered electricity by 2025



Deploying electric vehicles

Electric forklifts in Langelshiem

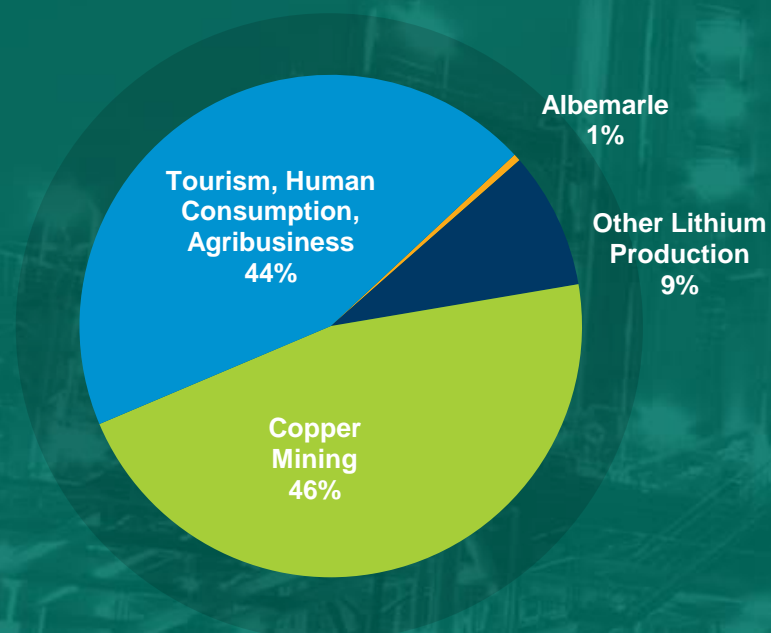
Electric buses to transport employees in Chile

Kemerton intends to use electric vehicles including forklifts

Responsible Water Management

Case Study: Salar de Atacama

Albemarle uses <1% of the freshwater rights¹ in the Salar de Atacama



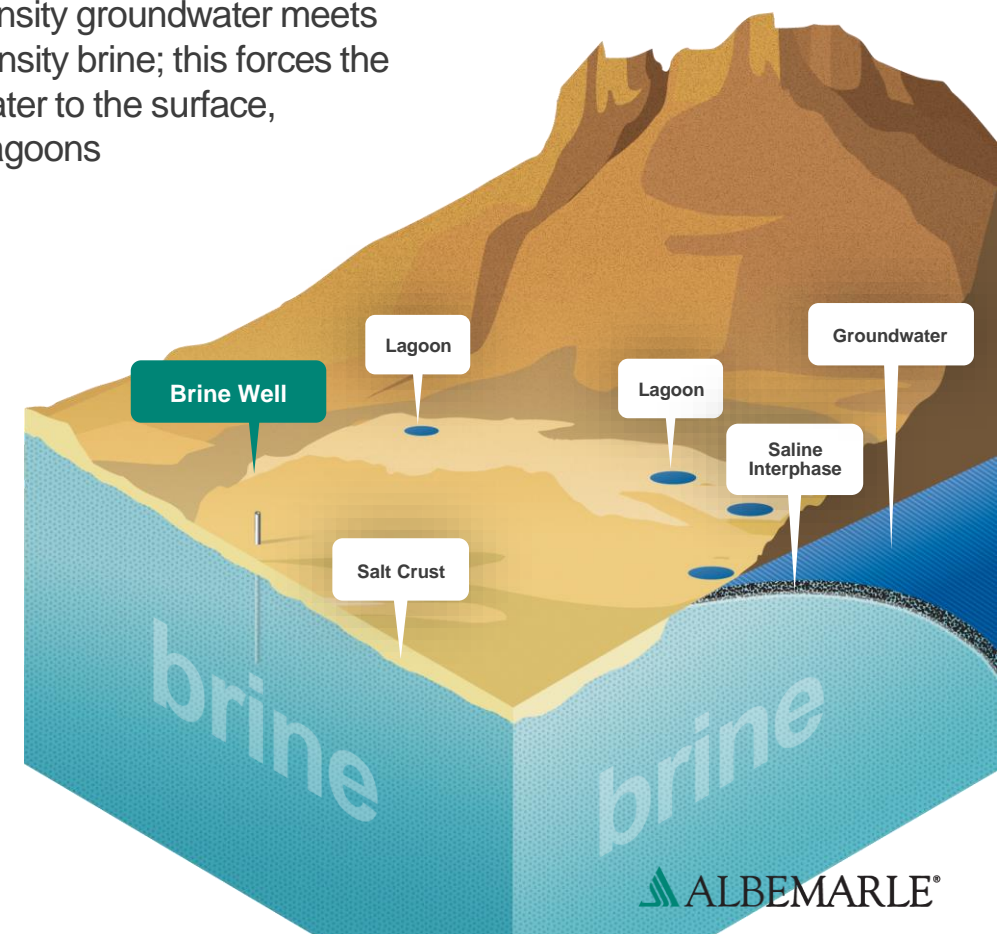
Brine resource is 10x saltier than seawater² – cannot be used for human or agricultural consumption

¹ DGA (Chilean Water Authority) ² SGA, 2015, Hydrogeological Study and Numerical Model of the South Sector of Salar de Atacama (Annex 1). For Environmental Impact Study Project Modifications of the Solar Evaporation Pools System in the Salar de Atacama of Rockwood Lithium. Santiago, Chile.

The Atacama Basin: Saline Interphase

At the saline interphase:

- Naturally occurring, low permeability sediments act as a barrier between the groundwater and the brine
- Lower density groundwater meets higher density brine; this forces the groundwater to the surface, forming lagoons



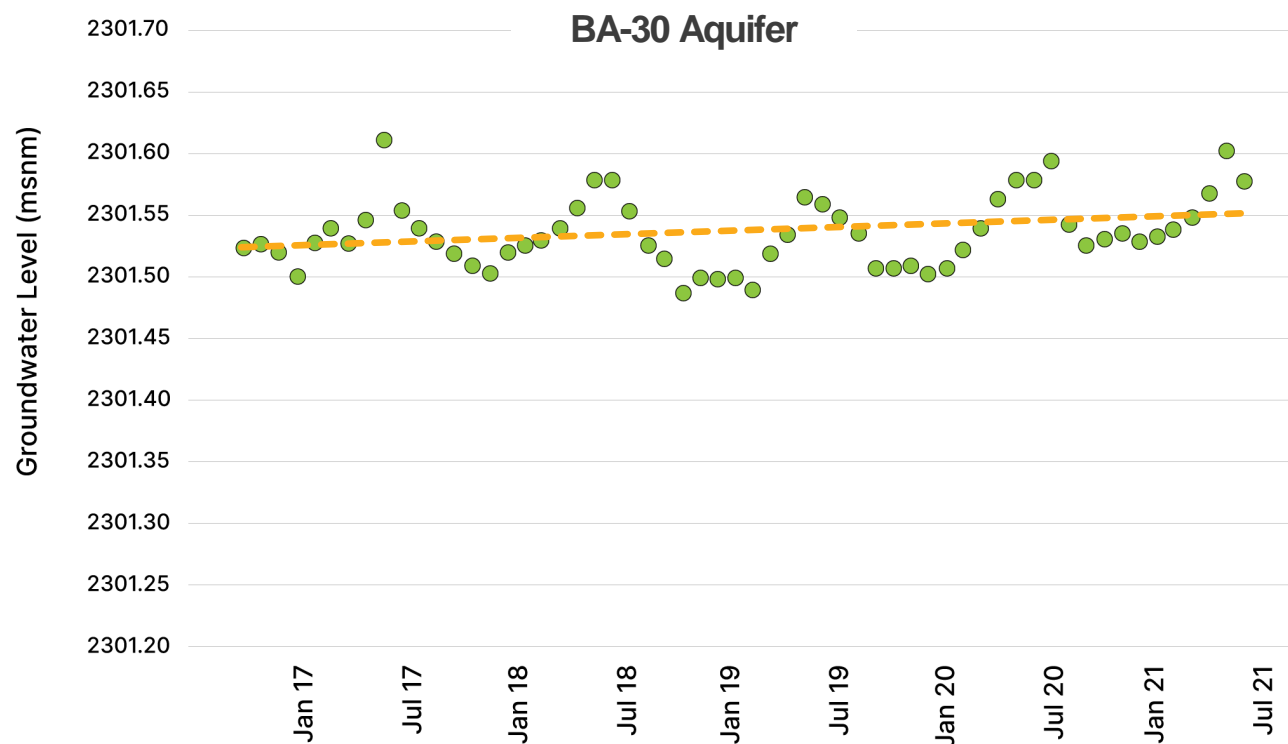
Environmental Monitoring of Salar de Atacama with Local Community

Extensive efforts to support responsible lithium production

- Since 2008, Albemarle has developed one of the most sophisticated hydrogeological models of the Salar de Atacama
- The only company in the Salar de Atacama that jointly monitors brine and freshwater levels with the indigenous communities
- Measuring to ensure against negative impacts; key data points include water levels, lagoon area size, and biodiversity
- Data shared with regulators and the local community
- Communities utilize Albemarle funding to hire full-time environmental advisors to analyze and interpret environmental data

Our hydrogeological model and monitoring data demonstrate that brine pumping does not adversely affect the upstream groundwater levels

Fresh water levels well above threshold and rising in community near our Salar de Atacama plant



Collaborating with and Contributing to Our Communities Around the World

Maintain positive relations with communities in which we operate through open, transparent communication as well as economic and community development

Employees at **Kings Mountain, North Carolina** planted a pollinator garden that has been recognized for excellence in corporate conservation.

Shanghai employees participated in a "Pick in Red" event to help cleanup Shanghai's coast

Employees in **Australia** volunteered for the 2019 National Science and Engineering Challenge held in Bunbury, Western Australia.

Case Study: Managing our environmental and social impacts in the Salar de Atacama

Agreement with the Council of Atacameñan Peoples (CPA)

- Based on UN Declaration on the Rights of Indigenous Peoples and ILO Convention 169 standards recognizing the right of self-determination for indigenous peoples
- CPA represents 18 indigenous communities in the Salar
- 3.5% of Chilean sales contributed annually to CPA
- Communities select projects to be funded
- Third party audits ensure that funds contributed by Albemarle are spent as designated by the communities

Examples of Projects Funded by Albemarle Include:

- 2 photovoltaic plants, reducing reliance on diesel generators
- 3 drinking water networks
- 5 community centers
- 40 houses, allowing community members to return to ancestral village
- >300 scholarships

Partnering with IRMA to Assure the Sustainability of Our Lithium Production

Initiative of Responsible Mining Assurance (IRMA)

- Objective, independent third-party verification of industrial-scale mine sites
- Comprehensive definition of responsible mining
- Collaborative, multi-stakeholder process

Collaborative, Multi-Stakeholder Process



DAIMLER



Leading the Way for Sustainable Lithium Production



First lithium mine to self-assess and begin independent 3rd-party assessment
First mine in Chile to self-assess and begin independent 3rd-party assessment

Self-Assessment

Salar de Atacama

Greenbushes

Wodgina

Complete

H2 2021

H1 2022

IRMA
Transparency

YE 2022

YE 2022

YE 2023

IRMA 50

YE 2025

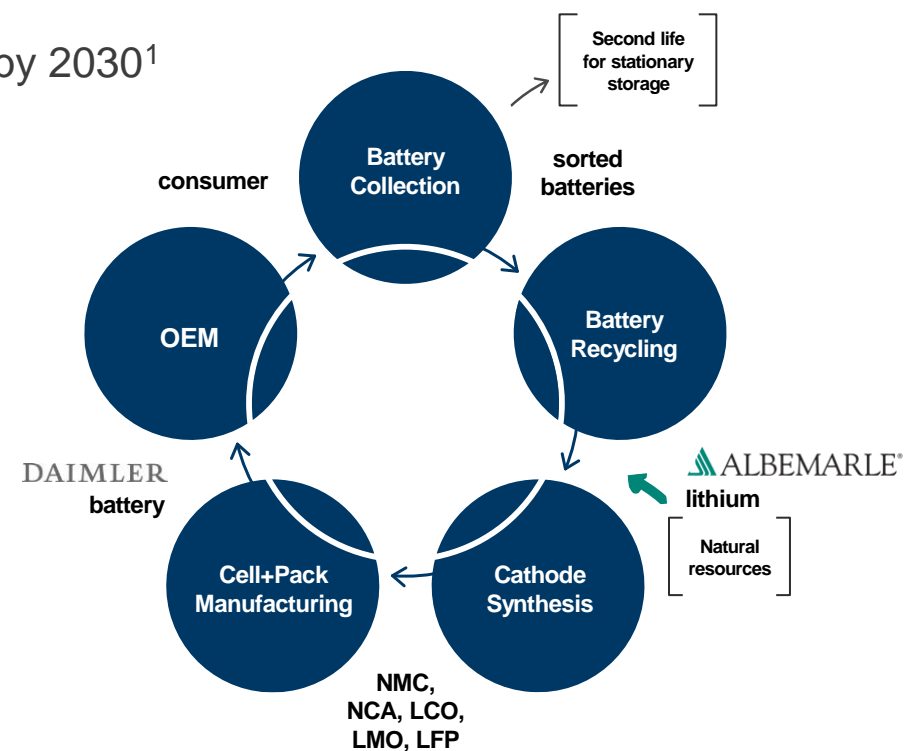
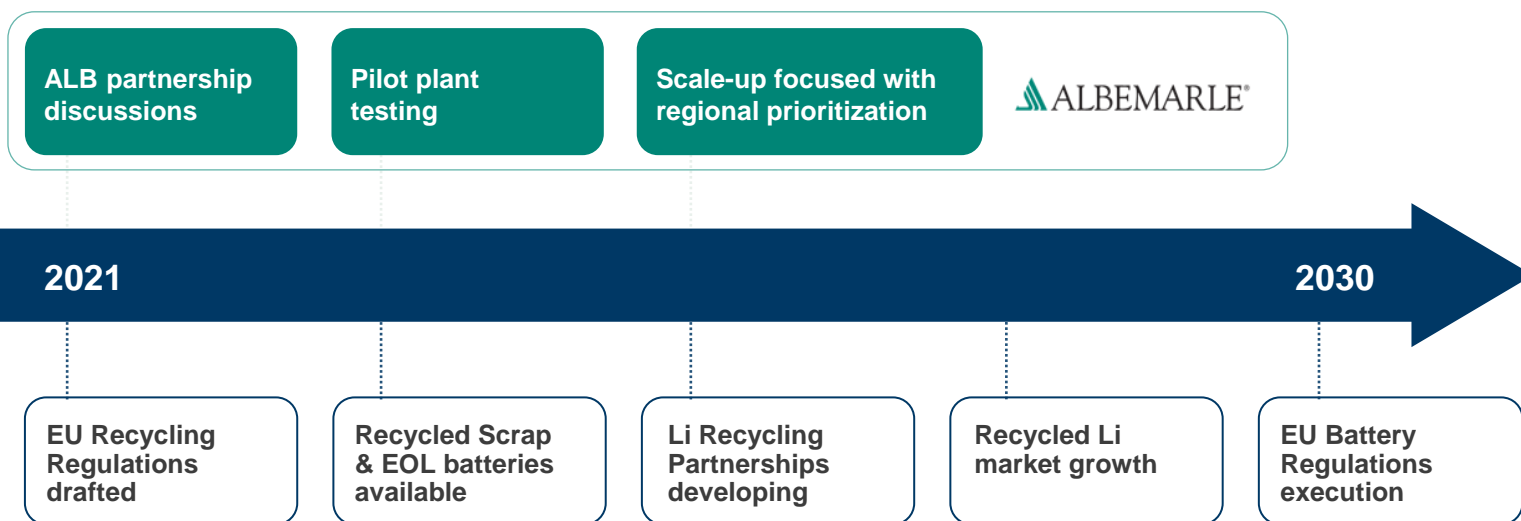
YE 2025

YE 2025

Working to Advance Lithium Recycling in the Circular Economy

Lithium from recycled batteries will play a valuable role in meeting demand projections

- Applying proprietary processing know-how, and adapting conversion plant designs, for future recycling feedstocks
- Develop partnerships across the value chain to meet evolving EU regulatory requirements and support OEM expectations
- Lithium recycling market is projected to grow from ~15kt by 2026 to ~40kt by 2030¹





Capital Projects: Capability to Deliver Growth

Jac Fourie
Chief Capital Projects Officer



Foundation in Place for Significant and Sustainable Growth

Capability to Execute Large-Scale Projects

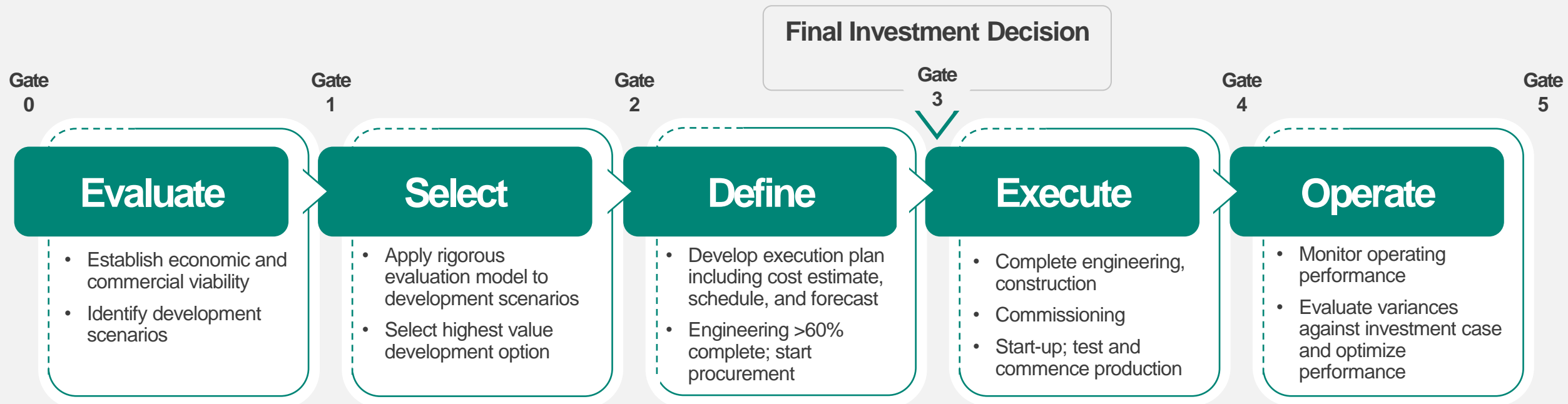
- **Launched capital investment committee**
Assist with Board oversight of capital projects and strategic execution
- **Launched Albemarle Project Process**
Standardized development and delivery
- **Developed “cross-functional capability”**
Understand and support capital projects
- **Built expert major project teams in Chile, Australia, and China**
Local experience supported by global functions

**Strong Project Execution
through COVID-19
Restrictions, Global Supply
Chain Disruptions, and Labor
Shortages**

The Albemarle Project Process: Disciplined Approach to Project Delivery

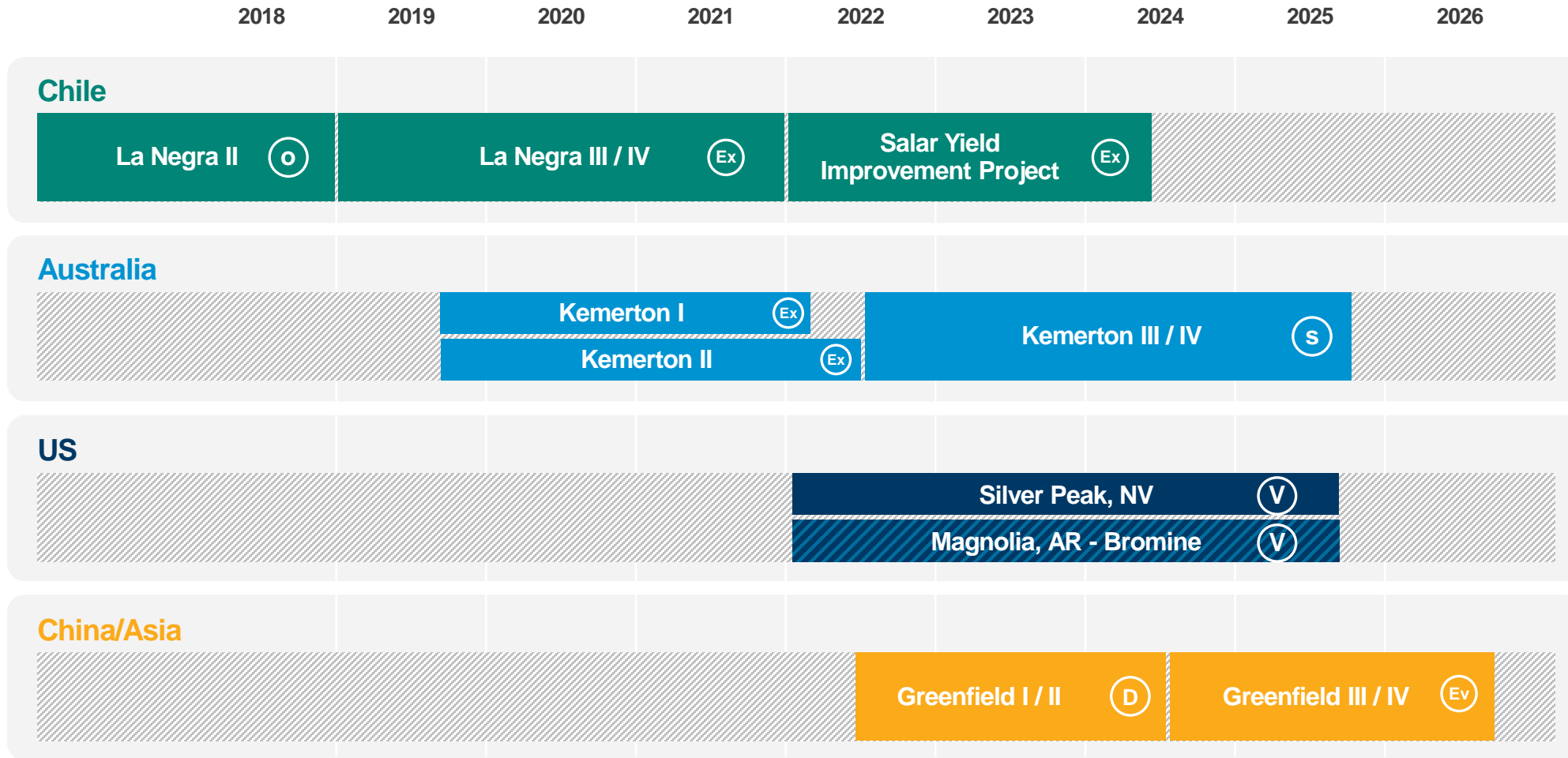
Developing capabilities to consistently deliver high-return projects, on-time and within budget

- Standardizing project development and decision approach to accelerate project cycle times
- Establishing criteria to identify and select high-return opportunities that fit our strategy
- Creating scalable processes that can be repeated reliably across different geographies



Leveraging Strong Talent and Best Practices Across Projects

Building and transitioning teams across projects over time



- Diverse global team (Houston, Santiago, Amsterdam, Shanghai, Perth)
- Projects staffed primarily with experienced local team members, supported by a global network of experts
- Continuity from one project to the next
- Center of gravity shifting to Asia Pacific

Current Project Stage:

- (Ev) Evaluate
- (S) Select
- (D) Define
- (Ex) Execute
- (o) Operate
- (V) Various



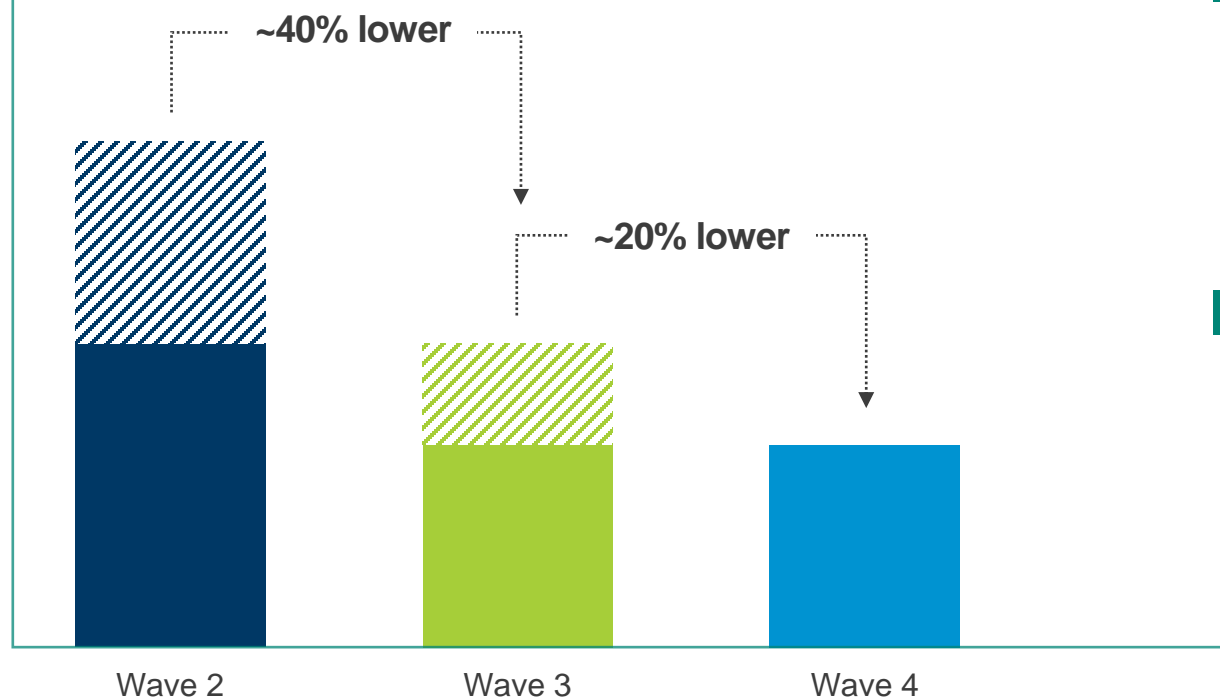
Technical Building Blocks to Replicate Projects and Accelerate Growth

Leveraging processes, people, and technology

- » Deep internal expertise in process technology, from the mine to the final product
- » Partnerships with multinational EPCs¹ and with leading Local Design Institutes in China
- » Best-in-class engineering standards applied for safety and sustainability; local codes to minimize capital intensity
- » Standardized designs that we can repeat rapidly and at lower cost with each iteration

Disciplined Project Planning and Execution Drive Strong Investment Returns

Illustrative Lithium Capital Intensity Range (Cost/kg)



Expected Key Drivers of Cost Reduction

- Repeating proven designs
- Leverage expertise in large-scale project construction
- Take advantage of brownfield economics
- Projects in lower-cost jurisdictions (e.g., China)

Investment Focus – Predominantly Lithium

- Major lithium expansions – focused on conversion assets
- US-based Bromine expansion
- Projects expected to generate >2x WACC at mid-cycle pricing; minimum of >1x WACC at trough pricing

Reduced capital intensity to achieve higher returns



Financial Flexibility to Accelerate Growth

Scott Tozier
Chief Financial Officer



Financial Flexibility to Accelerate Growth



Strong history of execution and investment in **high-return projects**

Reaffirming 2021 financial targets and introducing **2026 outlook with accelerated growth**

Deployment of AWE operating model enhances **low-cost competitive positioning**

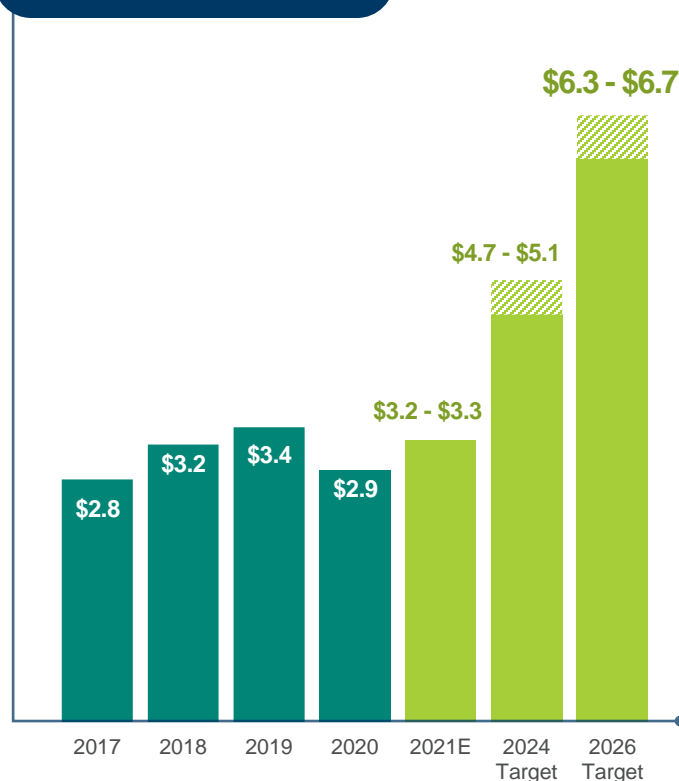
Capacity for **cash generation expected to grow significantly**

Disciplined capital allocation priorities: accelerate **profitable growth**, maintain **financial flexibility**, support our **shareholder return**

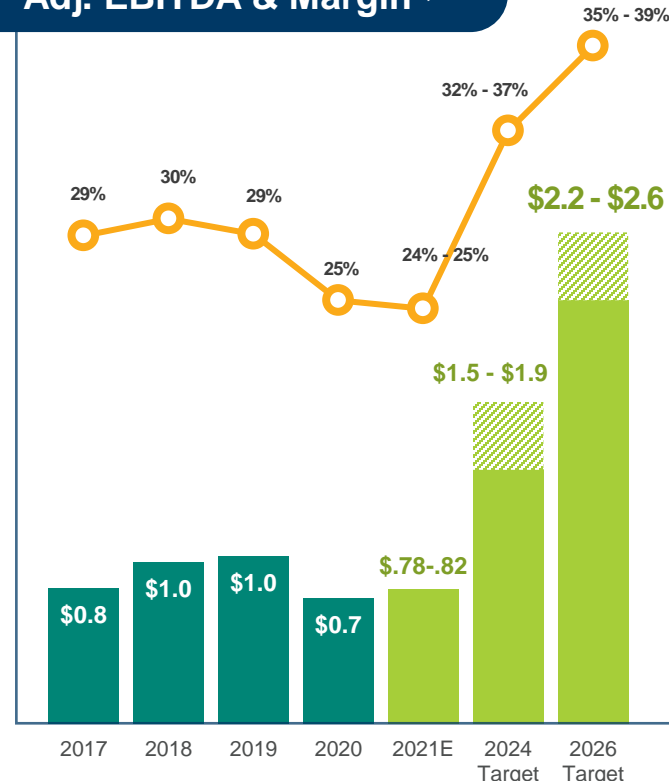
History of Strong Financial Performance

Financials on a Pro-forma Basis (in billions)

Net Sales¹



Adj. EBITDA & Margin^{1,2}



Focused Portfolio

Strong margin businesses, 5-year targets:

Lithium	43% - 47%
Bromine	32% - 36%
Catalysts	26% - 28%

Divestitures of Lower-margin, Non-core Businesses

- 2018: Divested Polyolefin Catalysts and Components
- 2021: Divested Fine Chemistry Services

Leverage Operational Excellence

Focus on low-cost operations and business processes

Deliberate, transformational steps to position for substantial earnings growth

Reaffirming Full Year 2021 Guidance

	FY 2021 Guidance
Net Sales	\$3.2B - \$3.3B
Adj. EBITDA	\$775M - \$815M
Adj. EBITDA Margin	24% - 25%
Adj. Diluted EPS	\$3.35 - \$3.70
Net Cash from Operations	\$550M - \$650M
Capital Expenditures	\$850M - \$950M

2022 Outlook

Company:

Adj. EBITDA up 25%-35%, or 30%-40% pro forma excluding FCS

CAPEX of \$1.0-\$1.3B

Lithium:

40%-50% Adj. EBITDA growth with new capacity coming on-line

Catalysts:

Adj. EBITDA to improve ~50-60%, off a low base

Bromine:

Strong end markets leads to 4%-10% YoY adj. EBITDA growth despite constrained volumes

Building a Strategically Advantaged Supply Chain

Key Initiatives

- 01 Reorganize enterprise supply chain and create center of excellence
- 02 Establish one procurement framework – SAP Ariba Suite
- 03 Align supply chain logistics structure for continuous improvement – SAP Transportation Management
- 04 Implement supply chain savings initiatives

Benefits

- Improvements in end-to-end supply chain process effectiveness and process standardization
- Increased accountability, customer focus, and talent development
- Expect \$80M run-rate savings by 2022; \$35M achieved to date

Utilize technology and standardize processes to drive effectiveness and efficiency

Optimize Back Office Support

Key Initiatives

- 01 Support GBU strategic growth plans with business services excellence
- 02 Establish a business process excellence team and incorporate **Lean Six Sigma capabilities** for project deployment across non-manufacturing teams
- 03 Create an **excellence academy** to build continuous improvement across Albemarle
- 04 Drive **end-to-end process efficiency** and effectiveness with deployment of digitization tools (e.g., business process mining, robotics)

Benefits

- Enhanced back office strategic partnership with GBUs with a focus on process effectiveness and efficiency
- Standardized and optimal project management focused on strategic projects in a prioritized portfolio
- Digitization tools become a game changer optimizing process performance
- Expect to drive 4% YoY productivity (~\$9M/yr)

Back-office excellence is a key component for more effective and efficient GBU execution

J2E Leveraging Operational Excellence to Enhance Low-cost Position

Manufacturing Spend & Operational Efficiency

- Raw material yield and cost reduction
- Energy and waste reduction
- Increase OEE (Overall Equipment Effectiveness)

Sales & Administration

- Business process excellence
- Efficiencies from IT investments and global systems
- Reduce office footprint

Supply Chain

- Logistics optimization
- Procurement “buy better” and “spend better” initiatives

EBITDA on Improved Customer Experience

- Reduce customer churn
- Optimize cost to serve
- Focus on value-add services



**Journey to
Excellence**

\$100M+ in cost savings from 2022E – 2024E

Prioritizing Capital Allocation to Support Growth Strategy

Invest to Grow Profitably

- Prioritize investment in growth
- Strategically grow lithium capacity – near-term focus on conversion
- Focus on capital discipline and operational excellence

Limited Share Repurchases

- Limited cash flow available for repurchase in near term as we invest in growth



Maintain Financial Flexibility

- Committed to Investment Grade rating
- Long-term Net Debt to Adj. EBITDA target of 2.0x - 2.5x

Grow Dividend

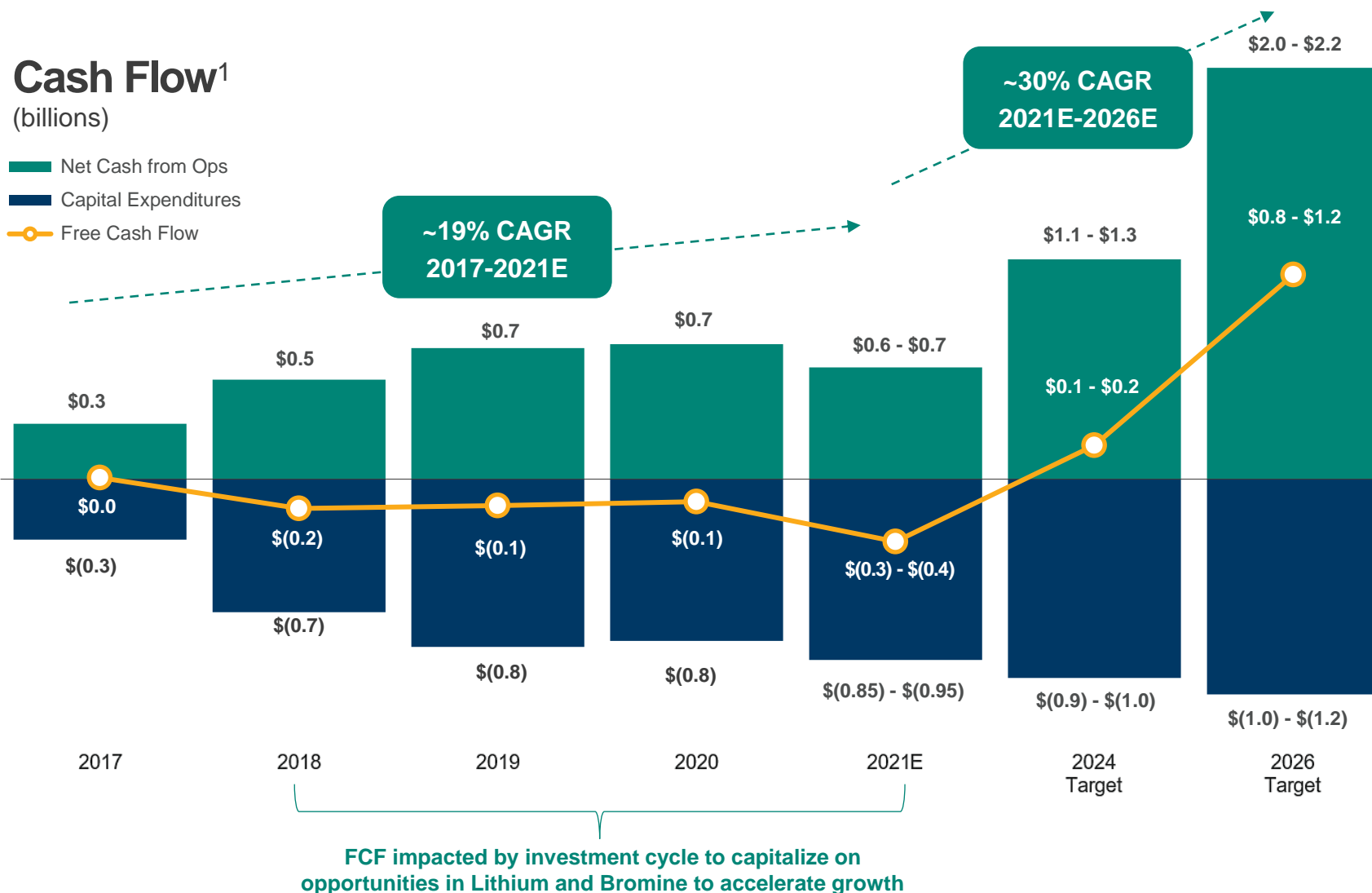
- 27th year of consecutive dividend increase

Growth via M&A and / or JVs

- Disciplined approach to investment opportunities
- Improved capital efficiency
- Low-cost resources and operations

Committed to driving stakeholder value

Significant Operating Cash Flow for Investment in Accelerated Growth

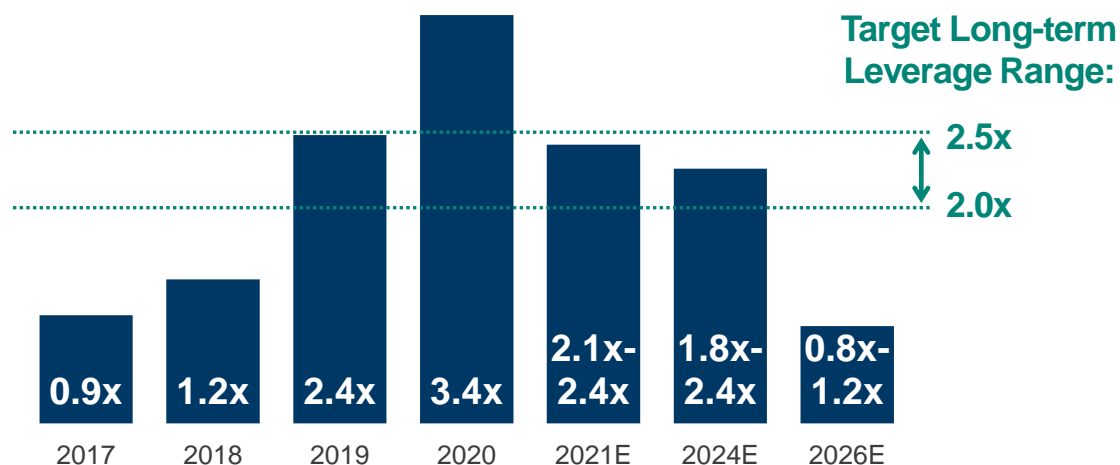


Highlights

- Net Cash from Operations improving on revenue growth and improved operating leverage
- CAPEX expansion continues throughout 5-year plan
- Positive FCF before dividend in 2024
 - Lithium: operating cash flow CAGR 38%-40% as new capacity comes online
 - Bromine: operating cash flow CAGR 5%-6% with volume growth
- Significant opportunity for shareholder returns and reinvestment

Disciplined Balance Sheet Management Allows Flexibility to Accelerate Growth

Net Debt to Adjusted EBITDA¹



Selected Financial Metrics

(\$ in millions, as of 6/30/2021)

Dividends Paid (TTM)	\$169
Dividend Growth (Y/Y)	6.8%
Cash Balance ²	\$824
Gross Debt ³	\$2,044

- Higher Adj. EBITDA, proceeds from the sale of FCS, and the \$1.5B equity raise have improved leverage ratio
- Increased annual dividend for 27th consecutive year

Strong Financial Position Results in Strategic Flexibility

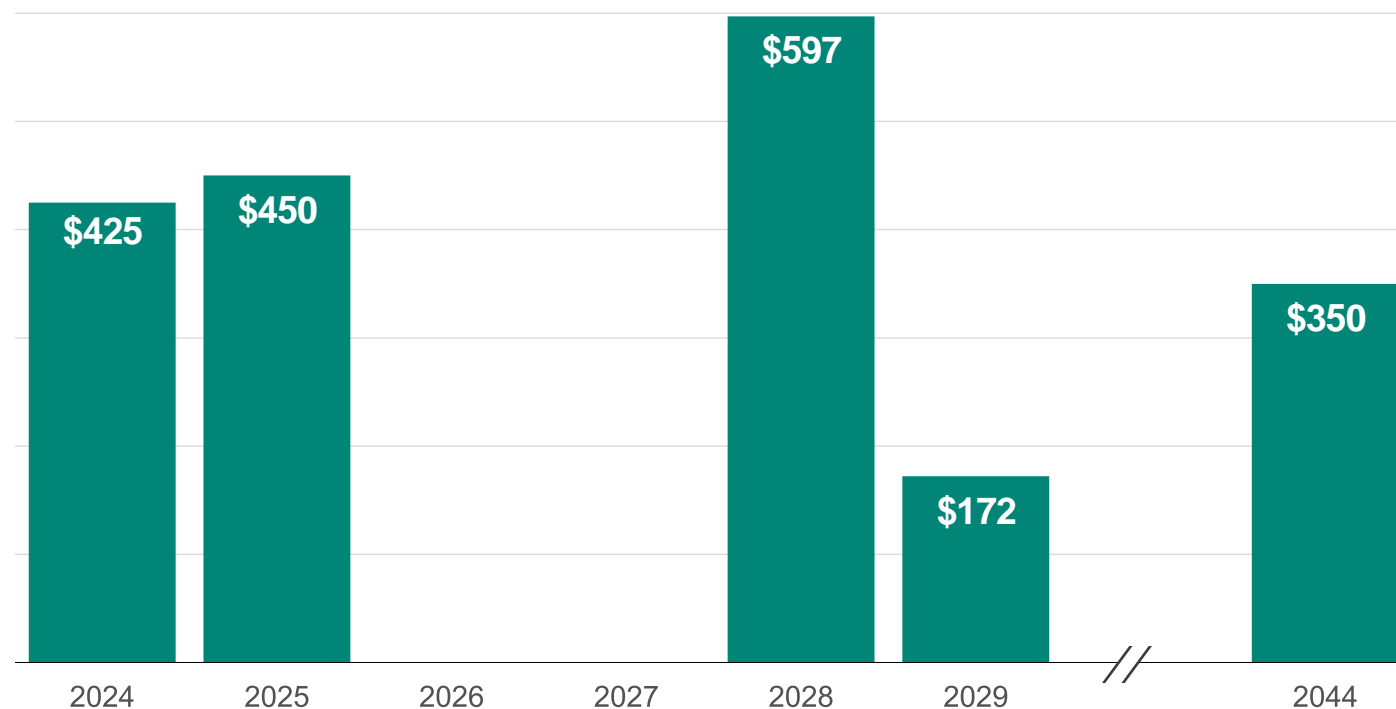
Credit Ratings:

S&P	BBB Stable
Moody's	Baa3 Stable
Fitch	BBB Stable

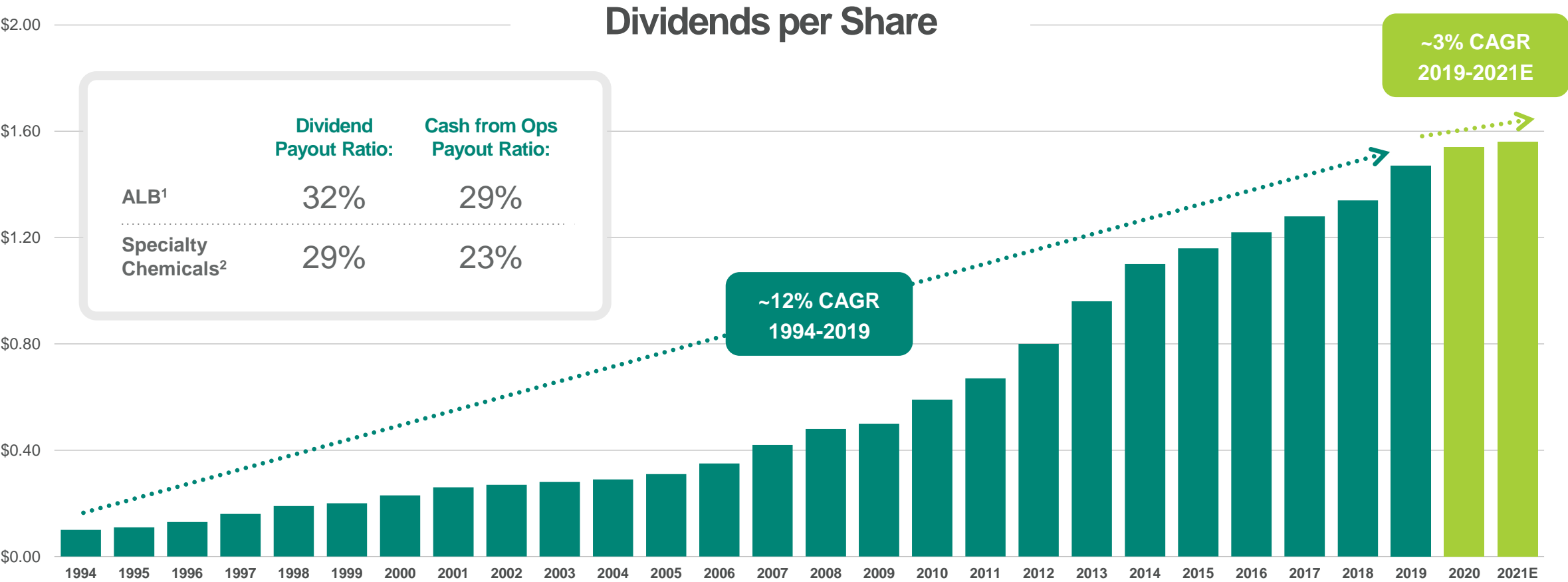
- Committed to maintaining Investment Grade credit rating
- Significant liquidity (~\$2.0B); \$1.0B untapped credit revolver
- 2021 Q2 Net Debt to Adj. EBITDA of 1.5x (bank covenant definition)
- Weighted average interest rate of 2.9%

Maturity Profile

(\$ in millions, as of 6/30/2021)



Committed to Supporting Our Dividend



27th year of consecutive dividend increase

¹ Five-year average 2017-2021E. ² Peer Median of Specialty Chemicals five-year average 2017-2021E. Specialty Chemicals peers include: Avient Corporation (AVNT), Cabot Corporation (CBT), Celanese Corporation (CE), CF Industries Holdings, Inc. (CF), FMC Corporation (FMC), H.B. Fuller.

Long-term Financial Targets

	Lithium	Bromine	Catalysts	Total ¹
Net Sales (5 yr CAGR)	24% - 28%	5% - 6%	6% - 8%	13% - 17%
Adj. EBITDA Margin (2026E)	43% - 47%	32% - 36%	26% - 28%	35% - 40%
Adj. EBITDA (2026E)	\$1.7B - \$1.9B	\$0.4B - \$0.5B	\$0.2B - \$0.3B	\$2.2B - \$2.6B
Free Cash Flow (2026E)	--	--	--	\$0.8B - \$1.2B

Assumptions:

- \$100M run-rate gross productivity savings by 2024
- 20% effective tax rate
- Currency flat at January 2021 rate
- No material economic or pricing cycle disruptions





Leadership Bios

MAKING THE WORLD SAFE AND SUSTAINABLE

 ALBEMARLE®



Kent Masters
Chairman,
President &
CEO

Kent Masters was named Chairman, President and Chief Executive Officer of Albemarle Corporation in April 2020. He joined the Albemarle board of directors in 2015 and served as Lead Independent Director from 2018 until April 2020.

Masters brings significant global business experience and a strong knowledge of Albemarle's strategy, values, and history. He joined the company's board of directors as part of the Rockwood Holdings Inc. acquisition, where he had previously served on the Rockwood board of directors since 2007.

Prior to joining Albemarle, Masters served as Operating Partner of Advent International, an international private equity group. Prior to Advent, he served as Chief Executive Officer of Foster Wheeler AG, a global engineering and construction contractor and power equipment supplier, when Foster Wheeler AG was acquired by Amec plc to form Amec Foster Wheeler plc. He is also a former member of the executive board of Linde AG, a global leader in manufacturing and sales of industrial gases, with responsibility for the Americas, Africa, and the South Pacific.

Masters earned a Master of Business Administration from New York University and a bachelor's degree in chemical engineering from the Georgia Institute of Technology.



Netha Johnson
President,
Bromine
Specialties

Netha Johnson joined Albemarle in 2018 as President of Bromine Specialties business unit after more than 20 years of diverse leadership experience, both domestically and internationally. He has worked extensively in Singapore, Malaysia, Taiwan, Japan, and Germany.

Prior to joining Albemarle, Johnson served in several progressive leadership roles with 3M Company. Most recently, he served as Vice President and General Manager, Electrical Markets Division, where he was directly responsible for 3M's electrical and renewable energy solutions.

Prior to that, he served as 3M's Vice President, Advanced Materials Division. In this role, he was responsible for three distinct businesses comprising the Advanced Material division, which provided world-leading, innovative solutions in fluoropolymer chemicals, advanced ceramics, and light-weighting materials.

Preceding his business career, Johnson served as a U.S. Naval Special Operations Officer.

Johnson earned a Master of Business Administration from Duke University and a bachelor's degree in aerospace engineering from the University of Southern California.

Johnson is a member of the board of directors of Xcel Energy.



**Raphael
Crawford**
President,
Catalysts

Raphael Crawford joined Albemarle in 2012 as Vice President of the Performance Catalyst Solutions division. In 2015, he was appointed Vice President of the Synthesis and Polymer Solutions division, as well as the Managing Director for Rockwood Lithium GbmH in Germany. Later in 2015, Crawford was appointed President of the Bromine Specialties business unit. In 2018, he assumed his current role as President of the Catalysts business unit.

Prior to Albemarle, Crawford served as the Director of Global Marketing and Business Development for Dow Coating Materials, a global business unit of The Dow Chemical Company. He also served as the Global Commercial Director and Global Asset Director for Dow Water and Process Solutions, following the acquisition of Rohm and Haas Company. Previously, Crawford held various strategic marketing and commercial roles at Rohm and Haas.

Prior to Rohm and Haas, Crawford worked at Campbell Soup Company as a Marketing Manager. He began his career at SNET Telecommunications where he served in several capacities including new ventures, finance, and marketing.

Crawford earned a master's degree in finance from the University of New Haven, where he currently serves on their Board of Governors, and a bachelor's degree in economics from Wesleyan University. He is a graduate of the Advanced Management Program at the University of Chicago Booth School of Business and maintains professional certifications in management accounting and financial management by the Institute of Management Accountants.

Crawford is a member of the board of directors of the American Fuel & Petrochemical Manufacturers (AFPM) association, where he had served as chairman of the Petrochemical Members Committee and as a member of the Executive Committee.



Eric Norris
President,
Lithium

Eric Norris joined Albemarle in January 2018 as Chief Strategy Officer. In this role, he managed the company's strategic planning, M&A, and corporate business development programs as well as its investor relations efforts. In August 2018, he was appointed President of the Lithium global business unit.

Prior to joining Albemarle, Norris served as President of Health and Nutrition for FMC Corporation. Following FMC's announcement to acquire DuPont Agricultural Chemical assets, he led the divestiture of FMC Health and Nutrition to DuPont. Previously, Norris served as Vice President and Global Business Director for FMC Health and Nutrition, and Vice President and Global Business Director for FMC Lithium. During his 16-year FMC career, he served in additional leadership roles including Investor Relations, Corporate Development and Director of FMC Healthcare Ventures.

Prior to FMC, Norris founded and led an internet-based firm offering formulation and design tools to the chemical industry. He started his career in a range of leadership roles with the Rohm and Haas Company.

Norris earned a Master of Business Administration from Harvard University and a bachelor's degree in chemistry and German from Colgate University.

Norris is a member of the board of directors of Communities in Schools of Charlotte-Mecklenburg and is a member of the board of advisors of The Zero Emission Transportation Association (ZETA).



**Ellen Lenny-
Pessagno**
VP, Lithium
Sustainability

Ellen Lenny-Pessagno serves as Vice President, Lithium Sustainability.

Lenny-Pessagno supports the execution of the corporate strategy, leads Albemarle's relationship with government entities and the local community, guides the development and execution of environmental policy, management and compliance, and provides visible leadership in the areas of corporate and local compliance, HSE and crisis management, and people and organization. She is also a member of the Lithium Division's corporate leadership team and is accountable for sustainability in the lithium division globally.

Prior to joining Albemarle, Lenny-Pessagno served as a career diplomat for the United States for more than 25 years. At U.S. Embassies in Argentina, Mexico, Spain, Chile, and Colombia, she led the commercial portfolio, dialoguing with local governments to drive policy and regulatory changes to increase bilateral trade, developing commercial strategies and programs to promote US exports and helping American companies invest. She has extensive experience in international trade policy, international business strategy, negotiations, public affairs, and communications. She also served as a Board Member of the American Chamber of Commerce in those markets. Her U.S. assignments included trade roles in Washington and Houston.

Lenny-Pessagno has a bachelor's degree in business administration from Wake Forest University and a master's in international commerce and policy from George Mason University. In 2017, she became the first American to participate in the top Senior Executive Management program in Chile at the ESE Business School of the University of Los Andes.



Jac Fourie
Chief Capital
Projects Officer

Jac Fourie joined Albemarle in January 2019 as Vice President, Engineering and Project Execution. In his role, he is responsible for Albemarle's engineering, project development, and project execution activities across major projects and sustaining capital. In June 2021, he was appointed Chief Capital Projects Officer.

Prior to joining Albemarle, Fourie served as Senior Vice President of Capital Projects for Barrick Gold Corporation, where he was responsible for projects in the U.S., Chile, Argentina, and Saudi Arabia.

Previously, Fourie spent 16 years with BHP Billiton where he held various leadership roles in projects, operations, marketing and business development. As VP Projects - Iron Ore, he oversaw a portfolio of major capital projects and sustaining capital projects in Western Australia. As Head of Group Business Management Systems, he was responsible for implementing a large SAP system project for BHP Billiton, while based in Singapore. Prior to this, he was Asset President of BHP Billiton's New Mexico Coal business.

Fourie earned his Master of Business Administration from The Wharton School at the University of Pennsylvania and was recognized as the Ford Scholar for best academic performance. He graduated with honors from University of Pretoria with a bachelor's degree in both chemical engineering and mathematics.



Scott Tozier
EVP & CFO

Scott Tozier joined Albemarle in January 2011. He serves as Executive Vice President and Chief Financial Officer. In this role, Tozier is responsible for all financial and fiscal management aspects of the company's operations.

Tozier sets internal controls within the organization to protect the financial interest of stakeholders, provides leadership and coordination in the administrative, business planning, accounting and budgeting efforts of the company, and addresses strategic management decisions from a financial standpoint. Customer service, purchasing and logistics functional groups report to him.

Prior to joining Albemarle, Tozier served as Vice President of Finance, Transformation and Operations of Honeywell International. During his 16-year career with Honeywell, he held senior financial positions in the U.S., Australia, and Europe. His increasingly progressive roles included management of Financial Planning, Analysis and Reporting, Global Credit and Treasury Services. He also served as Chief Financial Officer of Honeywell's Transportation Systems, Turbo Technologies EMEA, Building Solutions EMEA, and Process Solutions Asia Pacific divisions.

Prior to Honeywell, Tozier served as Senior Auditor with the international firm Ernst & Young, LLP. Tozier is a certified public accountant. He earned a Master of Business Administration from the University of Michigan and a bachelor's degree in accounting and information systems from the University of Wisconsin-Madison.

Tozier is a member of the board of directors of Garrett Motion, a trustee of Blumenthal Performing Arts, and a member of the board of advisors for Junior Achievement of the Carolinas.



**Meredith
Bandy**
VP, Investor
Relations &
Sustainability

Meredith Bandy serves as Albemarle's Vice President, Investor Relations & Sustainability. In this role, she oversees the company's sustainability reporting and corporate initiatives and leads its investor relations efforts.

Bandy joined Albemarle in March 2020 with 22 years of experience in investor relations and capital markets. Prior to joining Albemarle, she served as Vice President, Investor Relations and Corporate Communications for GrafTech International Ltd., a global graphite electrode leader based in Ohio. Prior to this, she held the role of Vice President, Investor Relations for Newmont Mining in Denver, Colo.

Her previous roles also include more than 10 years in equity research covering basic materials industries for BMO Capital Markets, a leading Canadian brokerage.

Bandy is a Chartered Financial Analyst. She earned a Master of Business Administration from the University of North Carolina at Chapel Hill and a bachelor's degree in business administration from Georgetown University.



Appendix

MAKING THE WORLD SAFE AND SUSTAINABLE

 ALBEMARLE®

Adjusted EBITDA (twelve months ended)

(\$ in thousands)	Twelve Months Ended December 31,				Twelve Months Ended
	2017	2018	2019	2020	June 30, 2021
Net income attributable to Albemarle Corporation	\$ 54,850	\$ 693,562	\$ 533,228	\$ 375,764	\$ 703,213
Depreciation and amortization	196,928	200,698	213,484	231,984	244,132
Non-recurring and other unusual items (excluding items associated with interest expense)	102,660	(90,112)	117,243	42,781	(360,075)
Interest and financing expenses	115,350	52,405	57,695	73,116	89,413
Income tax expense	431,817	144,826	88,161	54,425	149,644
Non-operating pension and OPEB items	(16,125)	5,285	26,970	40,668	35,535
Adjusted EBITDA	\$ 885,480	\$ 1,006,664	\$ 1,036,781	\$ 818,738	\$ 861,862
Pro-forma: Net impact of adjusted EBITDA from divested businesses	(51,002)	(25,003)	(48,059)	(76,325)	(66,657)
Pro-forma Adjusted EBITDA	\$ 834,478	\$ 981,661	\$ 988,722	\$ 742,413	\$ 795,205
Net Sales	\$ 3,071,976	\$ 3,374,950	\$ 3,589,427	\$ 3,128,909	\$ 3,229,202
Pro-forma: Net impact of Net sales from divested businesses	(228,406)	(154,086)	(148,294)	(201,311)	(162,290)
Pro-forma Net Sales	\$ 2,843,570	\$ 3,220,864	\$ 3,441,133	\$ 2,927,598	\$ 3,066,912
Adjusted EBITDA Margin	29 %	30 %	29 %	26 %	27 %
Pro-forma Adjusted EBITDA Margin	29 %	30 %	29 %	25 %	26 %

Adjusted EBITDA - by Segment *(twelve months ended)*

(\$ in thousands)	Twelve Months Ended				
	Jun 30, 2020	Sep 30, 2020	Dec 31, 2020	Mar 31, 2021	Jun 30, 2021
Lithium					
Net income attributable to Albemarle Corporation	\$ 250,572	\$ 217,538	\$ 277,711	\$ 299,101	\$ 307,656
Depreciation and amortization	106,862	110,337	112,854	119,263	124,262
Non-recurring and other unusual items	83,278	83,167	2,528	2,528	3,879
Adjusted EBITDA	440,712	411,042	393,093	420,892	435,797
Net Sales	1,262,066	1,197,326	1,144,778	1,186,936	1,223,548
Adjusted EBITDA Margin	35 %	34 %	34 %	35 %	36 %
Bromine Specialties					
Net income attributable to Albemarle Corporation	\$ 275,206	\$ 266,530	\$ 274,495	\$ 284,943	\$ 304,399
Depreciation and amortization	48,724	49,176	50,310	51,240	51,389
Non-recurring and other unusual items	901	(241)	(1,200)	(1,200)	(1,200)
Adjusted EBITDA	324,831	315,465	323,605	334,983	354,588
Net Sales	964,102	945,028	964,962	1,013,817	1,060,786
Adjusted EBITDA Margin	34 %	33 %	34 %	33 %	33 %
Catalysts					
Net income attributable to Albemarle Corporation	\$ 163,297	\$ 134,128	\$ 80,149	\$ 58,173	\$ 55,917
Depreciation and amortization	49,834	49,893	49,985	49,918	50,561
Non-recurring and other unusual items	794	794	—	—	—
Adjusted EBITDA	213,925	184,815	130,134	108,091	106,478
Net Sales	948,128	884,701	797,914	810,950	762,241
Adjusted EBITDA Margin	23 %	21 %	16 %	13 %	14 %

Adjusted EBITDA supplemental¹

(\$ in thousands)

	Twelve Months Ended	Three Months Ended			
	Jun 30, 2021	Jun 30, 2021	Mar 31, 2021	Dec 31, 2020	Sep 30, 2020
Adjusted EBITDA	\$ 861,862	\$ 194,628	\$ 230,054	\$ 221,125	\$ 216,055
Adjusted EBITDA of divested businesses	(66,657)	(6,990)	(21,425)	(16,451)	(21,791)
Net income attributable to noncontrolling interests	79,915	21,608	22,021	17,542	18,744
Equity in net income of unconsolidated investments (net of tax)	(104,312)	(17,998)	(16,511)	(43,649)	(26,154)
Dividends received from unconsolidated investments	107,547	27,420	4,950	26,852	48,325
Consolidated EBITDA	\$ 878,355	\$ 218,668	\$ 219,089	\$ 205,419	\$ 235,179
Total Long Term Debt (as reported)	\$ 2,044,417				
Off balance sheet obligations and other	87,700				
Consolidated Funded Debt	\$ 2,132,117				
Less Cash	823,572				
Consolidated Funded Net Debt	\$ 1,308,545				
Consolidated Funded Debt to Consolidated EBITDA Ratio	2.4				
Consolidated Funded Net Debt to Consolidated EBITDA Ratio	1.5				

Free Cash Flow

(\$ in thousands)	Twelve Months Ended December 31,			
	2017	2018	2019	2020
Net Cash from Operations	\$ 303,979	\$ 546,165	\$ 719,374	\$ 798,914
Pro-forma: Net impact of Net cash from operations from divested businesses	(13,000)	(22,673)	(30,200)	(90,200)
Pro-forma Net Cash from Operations	\$ 290,979	\$ 523,492	\$ 689,174	\$ 708,714
Capital Expenditures less Pension Contributions	\$ 304,362	\$ 684,755	\$ 835,318	\$ 834,043
Pro-forma: Net impact of Capital expenditures less pension contributions from divested businesses	(3,400)	(6,478)	(6,511)	(6,675)
Pro-forma Capital Expenditures less Pension Contributions	\$ 300,962	\$ 678,277	\$ 828,807	\$ 827,368
Free Cash Flow	\$ (383)	\$ (138,590)	\$ (115,944)	\$ (35,129)
Pro-forma: Net impact of Free cash flow from divested businesses	(9,600)	(16,195)	(23,689)	(83,525)
Pro-forma Free Cash Flow	\$ (9,983)	\$ (154,785)	\$ (139,633)	\$ (118,654)

See above for a reconciliation of pro-forma free cash flow, to remove the impact of divested businesses. Free cash flow is calculated by subtracting Capital expenditures and adding pension contributions to Net cash from operations.

Equity Income and Noncontrolling Interest

	Twelve Months Ended					
	June 30, 2021		December 31, 2020		June 30, 2020	
	Equity Income	Noncontrolling Interest	Equity Income	Noncontrolling Interest	Equity Income	Noncontrolling Interest
<i>(\$ in thousands)</i>						
Lithium	81,647	—	96,155	—	92,389	—
Bromine Specialties	—	(79,871)	—	(70,853)	—	(66,972)
Catalysts	9,732	—	15,809	—	22,035	—
Corporate	12,933	(44)	15,557	2	(629)	(23)
Total Company	104,312	(79,915)	127,521	(70,851)	113,795	(66,995)

Production Facilities

Location	Business Segment	Principal Use	Owned/Leased
Greenbushes, Australia	Lithium	Production of lithium spodumene minerals and lithium concentrate	Owned(d)
Kemerton, Australia(a)	Lithium	Production of lithium carbonate and technical and battery-grade lithium hydroxide	Owned(d)
Kings Mountain, NC	Lithium	Production of technical and battery-grade lithium hydroxide, lithium salts and battery-grade lithium metal products	Owned
La Negra, Chile	Lithium	Production of technical and battery-grade lithium carbonate and lithium chloride	Owned
Langelshiem, Germany	Lithium	Production of butyllithium, lithium chloride, specialty products, lithium hydrides, cesium and special metals	Owned
Meishan, China	Lithium	Production of lithium carbonate and technical and battery-grade lithium hydroxide	Owned
New Johnsonville, TN	Lithium	Production of butyllithium and specialty products	Owned
Salar de Atacama, Chile	Lithium	Production of lithium brine and potash	Owned(e)
Silver Peak, NV	Lithium	Production of lithium brine, technical-grade lithium carbonate and lithium hydroxide	Owned
Taichung, Taiwan	Lithium	Production of butyllithium	Owned
Wodgina, Australia(b)	Lithium	Production of lithium spodumene minerals and lithium concentrate	Owned and leased(d)
Xinyu, China	Lithium	Production of lithium carbonate and technical and battery-grade lithium hydroxide	Owned
Baton Rouge, LA	Bromine Specialties	Research and product development activities, and production of flame retardants	Leased
Magnolia, AR	Bromine Specialties	Production of flame retardants, bromine, inorganic bromides, agricultural intermediates and tertiary amines	Owned
Safi, Jordan	Bromine Specialties	Production of bromine and derivatives and flame retardants	Owned and leased(d)
Twinsburg, OH	Bromine Specialties	Production of bromine-activated carbon	Leased
Amsterdam, the Netherlands	Catalysts	Production of refinery catalysts, research and product development activities	Owned
Bitterfeld, Germany	Catalysts	Refinery catalyst regeneration, rejuvenation, and sulfiding	Owned(e)
La Voulte, France	Catalysts	Refinery catalysts regeneration and treatment, research and development activities	Owned(e)
McAlester, OK	Catalysts	Refinery catalyst regeneration, rejuvenation, pre-reclaim burn off, as well as specialty zeolites and additives marketing activities	Owned(e)
Mobile, AL	Catalysts	Production of tin stabilizers	Owned(e)
Niihama, Japan	Catalysts	Production of refinery catalysts	Leased(e)
Pasadena, TX(d)	Catalysts	Production of aluminum alkyls, orthoalkylated anilines, refinery catalysts and other specialty chemicals; refinery catalysts regeneration services and research and development activities	Owned
Santa Cruz, Brazil	Catalysts	Production of catalysts, research and product development activities	Owned(e)
Takaishi City, Osaka, Japan	Catalysts	Production of aluminum alkyls	Owned(e)

(a) Construction of the Kemerton, Australia facility is expected to be completed in late 2021, followed by a six-month commissioning and qualification process.

(b) The Wodgina mine has idled production of spodumene.

(c) The Pasadena, Texas location includes three separate manufacturing plants which are owned, primarily utilized by Catalysts, including one plant that is owned by an unconsolidated joint venture.

(d) Owned or leased by joint venture.

(e) Ownership will revert to the Chilean government once we have sold all remaining amounts under our contract with the Chilean government pursuant to which we obtain lithium brine in Chile.

Glossary

- Brine: strong saline solution
- CAGR: compound annual growth rate
- Calcination: heating to a high temperature without fusing to effect change
- CAPEX: capital expenditure
- Caustic: capable of destroying by chemical action
- EBITDA: earnings before interest, taxes, depreciation, and amortization
- ESG: environmental, social, and governance
- EV: electric vehicle
- FCS: Fine chemistry Services
- GBU: Global Business Unit
- GDP: gross domestic product
- GHG: greenhouse gas
- Hard rock: non-fuel metal and mineral deposits of solid ores, including spodumene

- HBr: hydro bromic acid
- ICE: internal combustion engine
- JV: joint venture
- kT: 1000's Metric Tons
- LCE: Lithium Carbonate equivalent
- Leaching: process of water carrying soluble substances or small particles through soil or rock
- LFP: lithium iron phosphate
- Li: lithium
- Li_2CO_3 = lithium carbonate
- Li_2O = lithium oxide
- LiOH = lithium hydroxide
- MoU: memorandum of understanding
- MT: Metric Tons
- NMC: nickel-manganese cobalt
- OEE: overall equipment effectiveness

- OEM: original equipment manufacturer
- PPM: parts per million
- Purification: removal of contaminants
- Scope 1: direct GHG emissions from company-owned resources
- Scope 2: indirect emissions from the generation of purchased energy
- Soda ash: sodium carbonate
- Solid-state: electronic equipment using semiconductor devices
- WACC: weighted-average cash cost
- WTU: water-treatment unit



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