

# Albemarle Investor Presentation

Dec. 2022

## **Forward-Looking Statements**

Some of the information presented in this presentation, the press release, the conference call and discussions that follow, including, without limitation, information related to the timing of active and proposed projects, production capacity, committed volumes, pricing, financial flexibility, expected growth, anticipated return on opportunities, earnings and demand for Albemarle's products, productivity improvements, tax rates, stock repurchases, dividends, cash flow generation, costs and cost synergies, capital projects, future acquisition and divestiture transactions including statements with respect to timing, expected benefits from proposed transactions, market and economic trends, statements with respect to Albemarle's 2022 outlook, planned resegmenting/realignment of the company's Lithium and Bromine business units and retention of the company's Catalysts business, 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 Albemarle's 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; product development; changes in financial and operating performance of its major customers and industries and markets served by it; the timing of orders received from customers; the gain or loss of significant customers; fluctuations in lithium market pricing, which could impact our revenues and profitability particularly due to our increased exposure to index-referenced and variable-priced contracts for battery grade lithium sales; changes with respect to contract renegotiations; potential production volume shortfalls; competition from other manufacturers; changes in the demand for its products or the end-user markets in which its products are sold; limitations or prohibitions on the manufacture and sale of its products; availability of raw materials; increases in the cost of raw materials and energy, and its ability to pass through such increases to its customers; technological change and development, changes in its markets in general; fluctuations in foreign currencies; changes in laws and government regulation impacting its operations or its products; the occurrence of regulatory actions, proceedings, claims or litigation (including with respect to the U.S. Foreign Corrupt Practices Act and foreign anti-corruption laws); the occurrence of cyber-security breaches, terrorist attacks, industrial accidents or natural disasters, the effects of climate change, including any regulatory changes to which it might be subject; hazards associated with chemicals manufacturing; the inability to maintain current levels of insurance, including 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 its manufacturing operations or joint ventures; changes in accounting standards; the inability to achieve results from its global manufacturing cost reduction initiatives as well as its ongoing continuous improvement and rationalization programs; changes in the jurisdictional mix of its earnings and changes in tax laws and rates or interpretation; changes in monetary policies, inflation or interest rates that may impact its ability to raise capital or increase its cost of funds, impact the performance of its pension fund investments and increase its 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 it may make in the future; future acquisition and divestiture transactions, including the ability to successfully execute, operate and integrate acquisitions and divestitures and incurring additional indebtedness; expected benefits from proposed transactions; timing of active and proposed projects; continuing uncertainties as to the duration and impact of the coronavirus (COVID-19) pandemic; performance of Albemarle's partners in joint ventures and other projects; changes in credit ratings; the inability to realize the benefits of its decision to retain its Catalysts business and realign its Lithium and Bromine global business units into a new corporate structure; and the other factors detailed from time to time in the reports Albemarle files with the SEC, including those described under "Risk Factors" in Albemarle's 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 press release. Albemarle assumes 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 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 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.

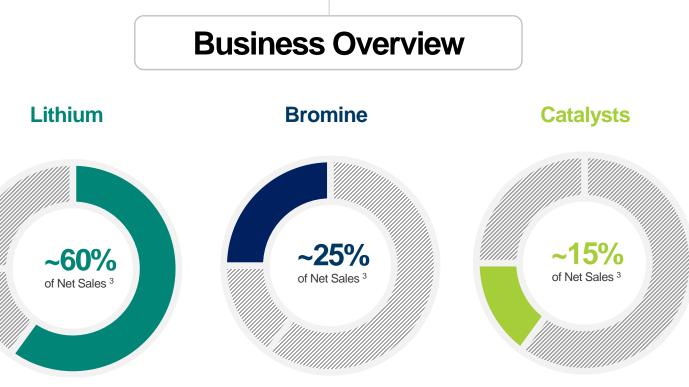


## **Diverse Portfolio Generating Significant Cash**

~5,600
~70
28 <sup>th</sup> consecutive year

#### **Financial Highlights<sup>3</sup>**

Net Sales	\$5.6B
Net Income <sup>4</sup>	\$1.6B
Adj. EBITDA⁵	\$2.5B
Adj. EBITDA Margin⁵	44%

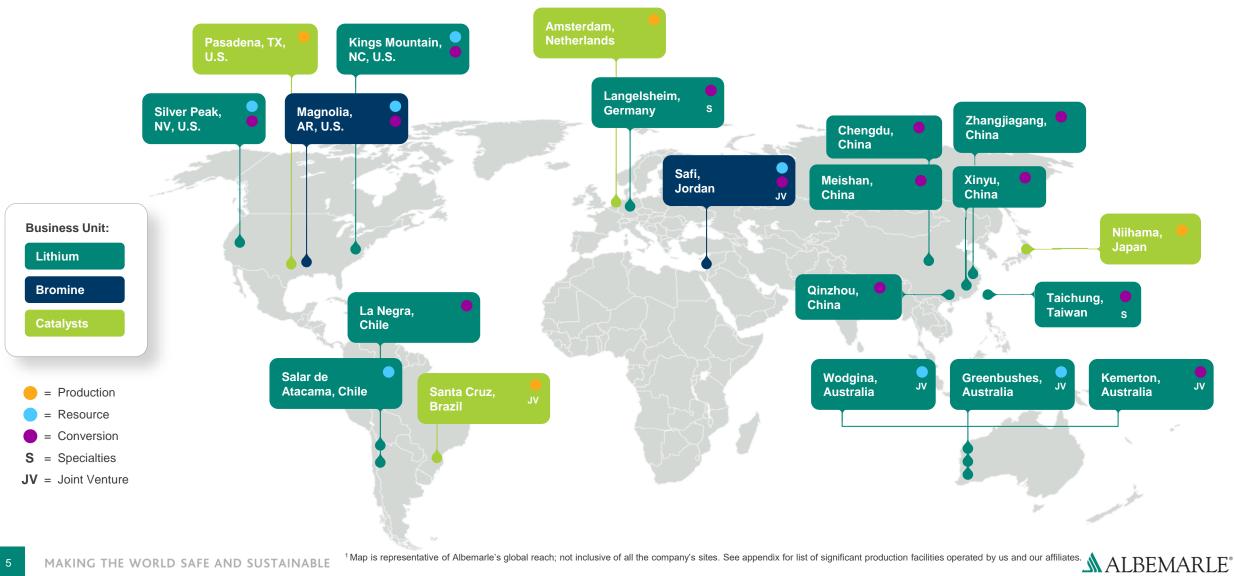


A global market leader with durable competitive advantages Track record of strong financial and operational performance Significant growth expected by 2022 (Adj. EBITDA >3x 2021) Clear strategy to accelerate profitable growth and advance sustainability

<sup>1</sup> As of December 31, 2021. <sup>2</sup> Includes permanent and temporary workers, excludes JVs. <sup>3</sup> Trailing twelve months ended September 30, 2022. <sup>4</sup> Attributable to Albemarle Corporation. Includes an accrual of \$505M after-tax related to the settlement of a prior legal matter. <sup>5</sup> Non-GAAP measure. See Appendix for definition and reconciliations of historical measures to most directly comparable GAAP measure.



## **Global Footprint<sup>1</sup> – Strong Presence in Major Markets**



## **Diverse and Dedicated Leadership Team Focused on Delivering Shareholder Value**



Kent Masters

Chairman & CEO Experience: 30+ years



Scott Tozier

Experience: 30+ years



Karen Narwold

Chief Administrative Officer Experience: 30+ years



Kristin Coleman General Counsel

Experience: 30+ years



Sean O'Hollaren

Chief External Affairs Officer 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

C



Jim O'Brien Former Chairman & CEO, Ashland

C**i**it★



**Glenda Minor** Former SVP & CFO, Evraz North America

**i** 



**Ralf Cramer** Former President and CEO, Continental China





**Dean Seavers** Former President, National Grid U.S.

C



**Jerry Steiner** Former EVP, Sustainability & Corporate Affairs, Monsanto





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

**Holly Van Deursen** 

Petrochemicals, BP

ļ

Executive Compensation Committee Nominating & Governance Committee

Audit & Finance Committee

Capital Investment Committee

Former Group Vice President,



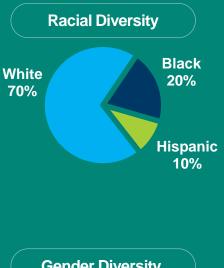


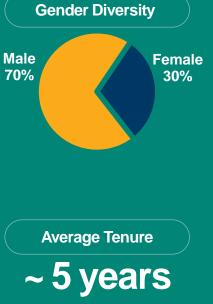


**Alex Wolff** Former U.S. Ambassador to Chile

C

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





#### **ALBEMARLE**<sup>®</sup>

## Sustainability Is Core to Our Long-term Strategy

## GROW PROFITABLY

#### MAXIMIZE PRODUCTIVITY

- Strategically grow lithium and bromine capacity
- Maintain capital discipline and operational excellence
- Optimize earnings, cash flow and cost structure across all our businesses
- Deploy operating model to build a strong platform for growth

## INVEST WITH DISCIPLINE

## ADVANCE SUSTAINABILITY

- Actively manage portfolio to generate shareholder value
- Maintain Investment Grade credit rating and support our dividend
- Drive continuous improvement on ESG performance across our businesses
- Accelerate our customers' sustainability ambitions

## Strategic Execution and the Albemarle Way of Excellence (AWE)



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

#### Values

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

#### Strategy

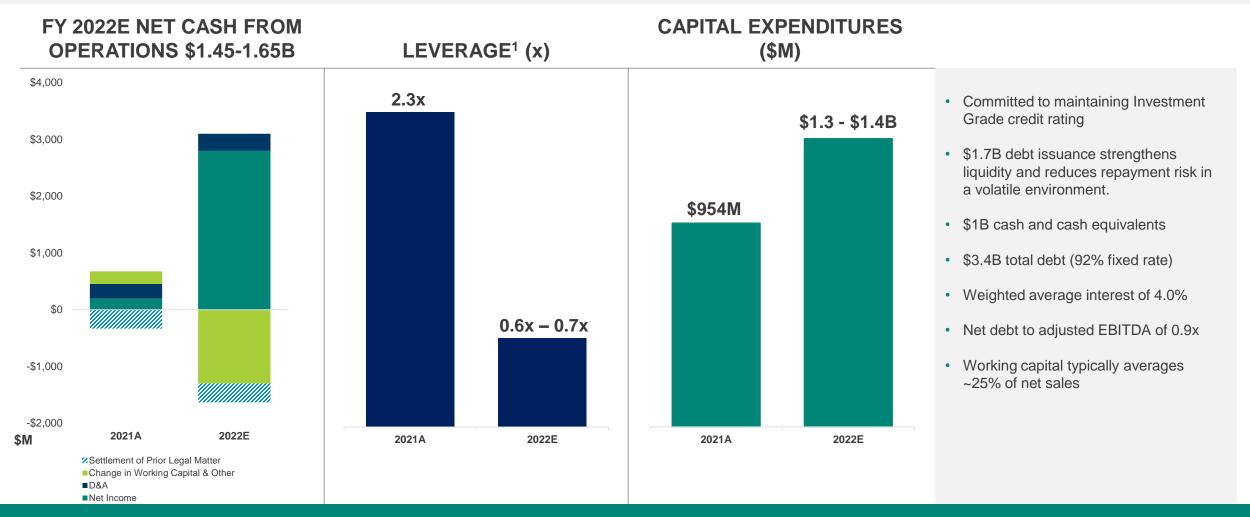
Grow • Maximize • Invest • Sustain

Operating Model: How We Execute & Accelerate Our Strategy





## Strong Financial Position and Ample Liquidity (As of 9/30/22, \$M)



#### Expect to be free cash flow positive in 2022

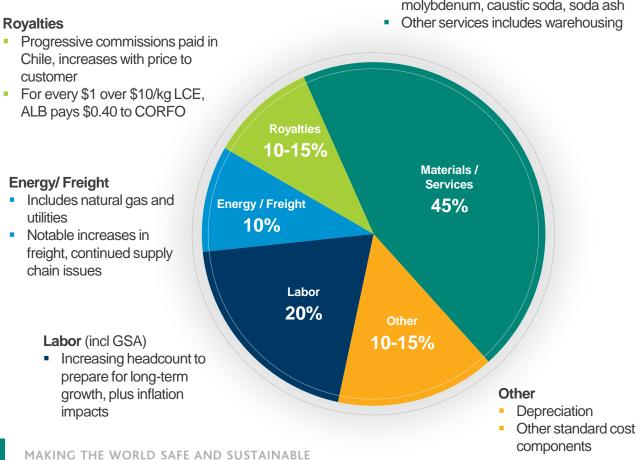
<sup>1</sup> Leverage defined as consolidated net funded debt to consolidated EBITDA ratio; 2022E leverage assumes FY 2022E Adjusted EBITDA guidance of \$3.3B to \$3.5B





# **Continued Growth in a Turbulent Macro Environment**

## 2022E Forecast Cost **Breakdown:**



#### Materials / Services

- Nearly 20% spodumene is company-owned
- Other major inputs include BPA, chlorine, molybdenum, caustic soda, soda ash
- Other services includes warehousing

#### **Economic Conditions Vary By Segment**

#### Lithium

- Expect continued secular growth related to the shift to clean transportation supported by OEM EV investments and public policy
- Key economic indicators include global EV production
- Battery grade demand lags EV production ~1 to 2 quarters
- Contribution margin ~60%

#### **Bromine**

- Diverse end markets ability to divert product to highest margin operations; demand typically rebounds quickly post recession
- Key economic indicators include consumer confidence, total automotive production, building and construction
- ~1 to 3 quarter lag in supply chain
- Contribution margin ~65%

#### Catalysts

- Demand relatively resilient in previous recessions; lower oil prices have historically led to higher demand and lower raw materials costs
- Key economic indicators include transportation fuel demand
- FCC demand changes with fuel consumption with little to no lag
- HPC demand lags multiple quarters as refineries push out turnarounds
- Contribution margin ~40%

## **Prioritizing Capital Allocation to Support Growth Strategy**

	Invest to Grow Profitably	Portfolio Management	Maintain Financial Flexibility	Dividends & Share Repurchases
Objectives	<ul> <li>Strategically grow lithium and bromine capacity to leverage low-cost resources</li> <li>Maintain capital discipline and operational excellence</li> </ul>	<ul> <li>Actively assess portfolio; reinvest proceeds</li> <li>Bolt-on acquisitions to accelerate growth at attractive returns</li> <li>Build and maintain our top-tier resource base</li> </ul>	<ul> <li>Committed to Investment Grade rating</li> <li>Strong balance sheet offers optionality to fund growth</li> </ul>	<ul> <li>Continue to support our dividend</li> <li>Limited cash flow available for repurchase as we invest in growth</li> </ul>
2022 Focus	• \$1.3B - \$1.4B 2022E CAPEX	<ul> <li>\$200M Qinzhou acquisition completed on October 25, 2022.</li> </ul>	<ul> <li>Long-term Net Debt to Adj. EBITDA target of 2.0x - 2.5x</li> </ul>	• \$138M dividends paid YTD 2022
Ability to Adapt to Changing Economic Conditions	<ul> <li>Slow non-critical / non- growth capital expenditures</li> <li>Accelerate partnering / tolling arrangements</li> </ul>	<ul> <li>Position company to take advantage of low- price acquisition targets in a downturn</li> </ul>	<ul> <li>Enable continuation of growth</li> <li>Slow hiring, T&amp;E, and other discretionary costs</li> <li>Shift production volumes to support highest demand markets</li> </ul>	<ul> <li>Continue to support our dividend</li> <li>No repurchases expected</li> </ul>

## **Catalysts Strategic Review Decision & Reshaping Core Portfolio**

#### **Catalysts Update**

- Strategic review concluded
- Albemarle to retain the business as a wholly owned subsidiary
- Raphael Crawford will continue to lead the business
- The subsidiary will be branded as Ketjen
- Focus on tailoring catalysts solutions to complex challenges to enhance performance
- Separation work is underway and expected to be complete by early 2024
- Investing to maximize value and growth opportunities for the new subsidiary

## New Core Portfolio Segmentation

- Reshaping core portfolio with a stronger focus on multiple growth opportunities
- Combination expected to strengthen Albemarle's ability to serve its specialties customers and to develop new products
- Businesses share complementary competencies in complex chemistry, applied knowledge and process technology
- New segments:
  - Energy Storage
  - Specialties
- New structure expected to be effective January 1, 2023



## **Sustainability Framework Aligns with Strategy**

#### 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 the communities in which we work

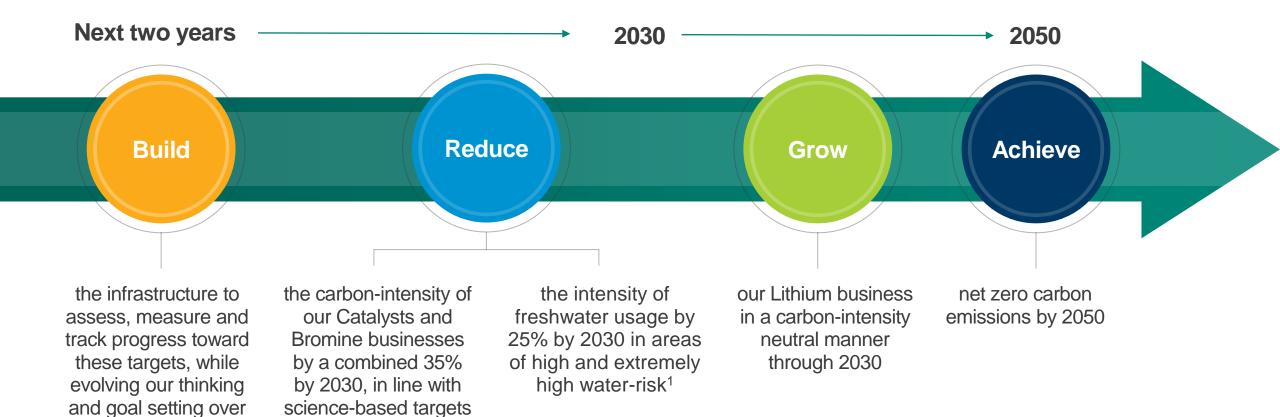
#### Sustainable Shareholder Value

Foster the conditions that create sustainable value for shareholders

## Sustainability is not just doing the right thing, but doing it the right way

## **Our Initial Environmental Targets**

time



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



## **Committed to Industry-leading Sustainability Performance**

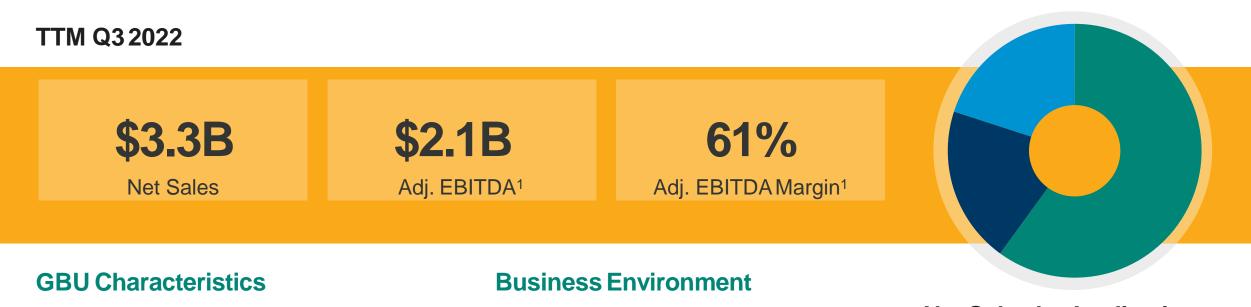
	New in 2021 Sustainability Report	Next Steps
Natural Resource Management	<ul> <li>Report progress on existing GHG &amp; freshwater targets</li> <li>Initial Scope 3 GHG assessment</li> <li>First Lithium product Life Cycle Assessments (LCAs)</li> </ul>	<ul> <li>Full (scored) CDP disclosure in 2022</li> <li>TCFD to be completed this year, publish in 2023</li> <li>Additional LCAs for all GBUs</li> <li>Complete IRMA 3rd party assessment at Salar de Atacama</li> </ul>
People, Workplace & Community	<ul> <li>Diversity targets defined</li> <li>Updated Government &amp; Community Relations structure and strategy</li> </ul>	<ul> <li>Evaluating potential additional ESG metric for executive compensation</li> </ul>
Sustainable Shareholder Value	<ul> <li>Board oversight aligns with sustainability framework</li> <li>Updated global supply chain structure and strategy</li> </ul>	<ul> <li>Incorporating ESG into ERM</li> <li>Updated global tax transparency framework</li> </ul>

## Albemarle 2021 Sustainability Report is now available

# ALBEMARLE®

# Lithium: Enabling the EV Revolution

## Lithium: Well-positioned to Remain a Leader as Growth Accelerates



- Large, world-class resource base; vertically integrated from natural resource to specialty performance products
- Diversified across geography, resources, products
- Technological differentiation in resource extraction, conversion, and derivatization
- High-quality product portfolio / low-cost position
- Committed to industry-leading sustainability performance

- Volume growth driven by energy storage
- Public policy accelerating e-mobility / renewables
- Highly dynamic, emerging supply chain
- Emerging technologies; battery cost declining + performance improving
- Security of supply essential to underwrite global auto OEM investment in vehicle electrification

## Net Sales by Applications<sup>2</sup>

ALBEMARLE<sup>®</sup>

Energy Storage eMobility, Grid Storage, Electronics

**Industrial** Specialty Glass, Lubricants, Health



## Energy storage is expected to be >85% of Albemarle Lithium revenues in 2022

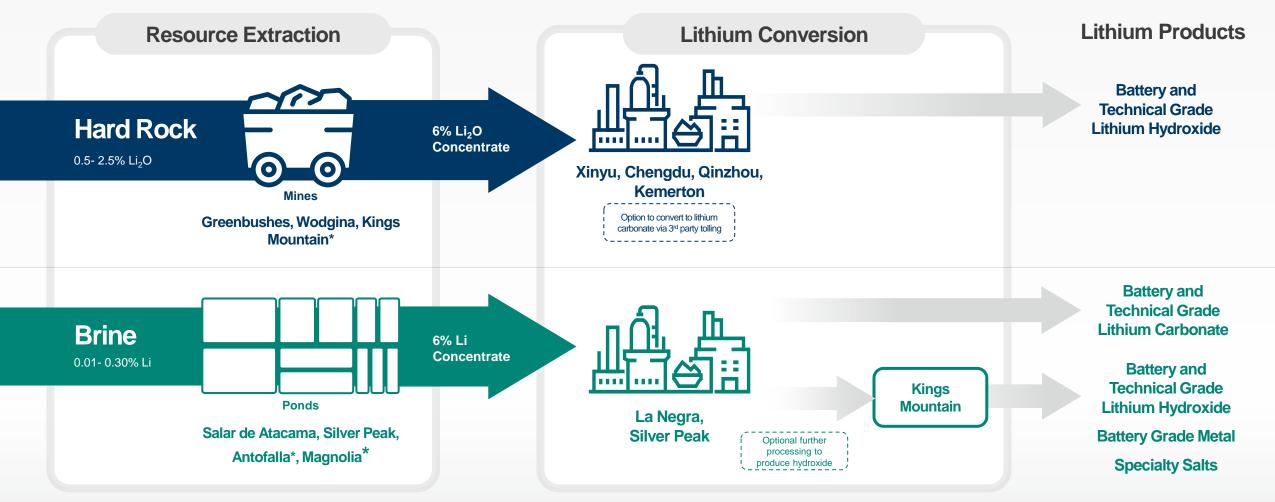
MAKING THE WORLD SAFE AND SUSTAINABLE

Note: Financials for the 12 months ended September 30, 2022.

<sup>1</sup> Non-GAAP measure. See Appendix for definition and reconciliations of historical measures to most directly comparable GAAP measure. <sup>2</sup> Based on approximate average of 2019, 2020, 2021, and 2022E net sales splits.

## **Established Processes for Conventional Resources**

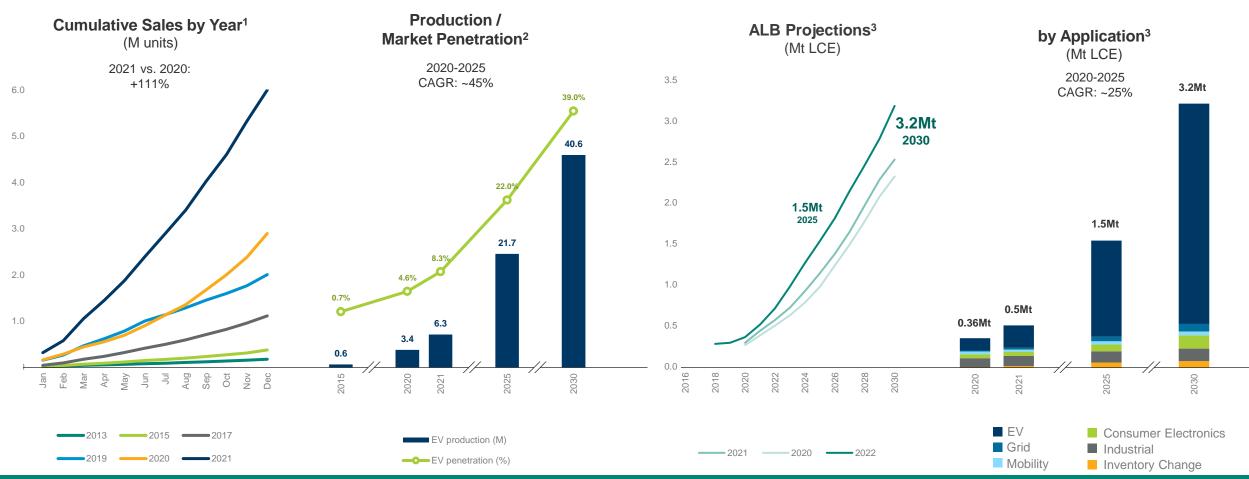
## Continuous improvement through optimization, efficiency, technology advancements



## Pressure From Auto Industry to Accelerate Lithium Supply Growth

**Global EV** 

**Lithium Demand** 



#### Lithium demand acceleration driven by EVs

20 MAKING THE WORLD SAFE AND SUSTAINABLE

<sup>1</sup> Marklines data as of 1/25/2022. <sup>2</sup> IHS Markit, Global Production based Alternative Propulsion Forecast, December 2021. <sup>3</sup> Albemarle analysis.



## Lithium Contracts Offer Leverage to Strong Market Prices



#### **Battery Grade Revenues**

- ~15% spot (at the time of purchase order)
- ~65% index-referenced, variable-priced (typically 3-month lag, some with floors and ceilings, specifics vary by contract)
- ~20% fixed contracts with price openers (typically 6-to-12-month lag); successfully renegotiated price

#### **Technical Grade Revenues**

Similar contracts to battery grade

#### **Specialty Grade Revenues**

- ~100% value in use
- Typically, annual contracts

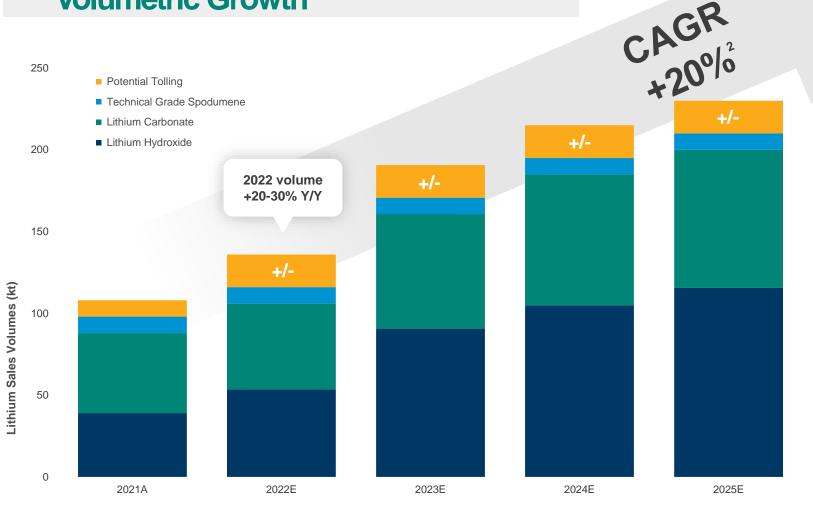
2022E Revenues<sup>1</sup>

#### Contracting Approach Continues to Evolve<sup>2</sup>

- Majority of volumes sold under long-term contracts (typically 2-5 years duration) with strategic customers
- Partnership offering varies by segment in terms of price, contract duration, value added services, etc.
- Moving fixed pricing mechanisms to predominantly index-referenced and variable pricing; moving floors higher - negotiations continue to progress for 2023 onward
- Revenue split varies with market price and contract changes
- Changes from previous outlook reflect updated index pricing



## Executing Our Strategy to Deliver Volumetric Growth



- Volume increases reflect expansions at Silver Peak, La Negra, Kemerton, and Qinzhou
- Technical-grade spodumene sales (~10 ktpa) and tolling (0-20 ktpa) included
- Further upside potential from:
- Additional tolling volumes as Wodgina ramps up; bridge to further conversion expansions
- Additional conversion assets (e.g., Meishan greenfield)

## Lithium Conversion Expected to Be > 200ktpa in 2025

22 MAKING THE WORLD SAFE AND SUSTAINABLE

<sup>1</sup> Carbonate on ktpa LCE basis, hydroxide on ktpa LiOH basis, volumes include ALB/MRL JV (60% ownership, 100% marketing rights), excludes specialty ALBEMARLE\*

# **Current Expansions Support Long-term Growth Strategy**

#### Expanding global lithium conversion capacity...

- Qinzhou acquisition closed Oct 2022; designed to produce 25ktpa LCE with expansion potential
- Kemerton I expected to produce qualification samples by year end
- Kemerton II mechanically complete and in the commissioning phase
- Meishan construction underway; mechanical completion expected by YE 2024; 50ktpa LiOH capacity with expansion potential
- Zhangjiaghang has been deferred as we continue to fine tune the carbonate engineering design

#### ... To leverage world-class spodumene resources

- Wodgina trains 1 and 2 produced first spodumene concentrate in May and July, respectively
- Greenbushes CGP2 (chemical-grade plant) continues to ramp; broken ground on CGP3

#### Australia/Asia Resource & Conversion



#### Full vertical integration from lithium resource to conversion is a competitive advantage

## ALBEMARLE<sup>®</sup>

# **Expanding Our Western Footprint to Address Growing Demand**

#### Kings Mountain, North Carolina Lithium Resource



- Mine operated 1940s-1980s
- 700-acre site atop a top tier global spodumene deposit
- Home to state-of-the-art Global Lithium Technical Center, Battery Materials Innovation Center, and current Kings Mountain conversion and piloting operations
- IRMA certifications, ambitious renewable power target

#### Southeastern U.S.-based Lithium Conversion Facility (location: TBD)



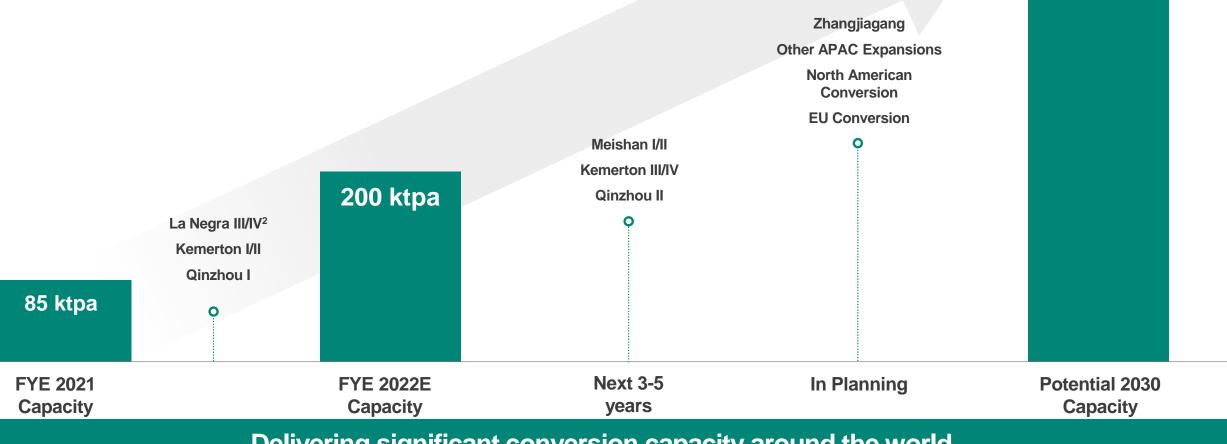
- Site selection & design efforts in progress for a Mega-Flex site:
  - "Mega" production volumes planned from multiple trains
  - "Flex" design to process multiple sources of feedstock including recycled stock
- Provides supply security to US based cathode and battery production

#### Full vertical integration from lithium resource to conversion is a competitive advantage

## Building Conversion Capacity to Leverage World-class Resources

#### Estimated Lithium Nameplate Conversion Capacity<sup>1</sup>

100% basis, Carbonate figures on ktpa LCE basis, hydroxide figures on ktpa LiOH basis



## Delivering significant conversion capacity around the world

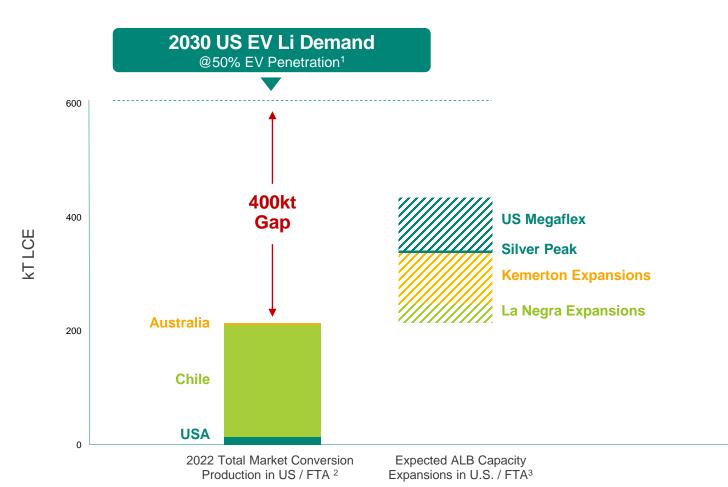
<sup>1</sup> Conversion capacity does not include 10 ktpa of technical-grade lithium concentrate. Includes ALB/MRL JV (60% ownership, 100% marketing rights). <sup>2</sup> Full nameplate capacity at La Negra III/IV requires completion of Salar Yield Improvement Project.



450-500

**ktpa** 

## **Albemarle Well-Positioned to Provide US Lithium Supply**



## Inflation Reduction Act (IRA) encourages domestic EV supply chain investment

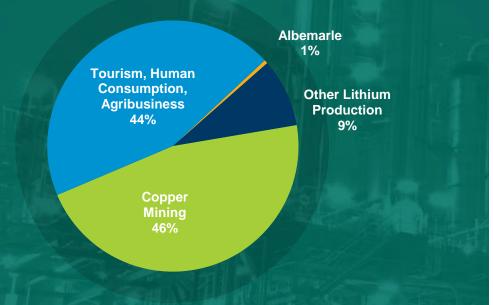
- Credits for sourcing of critical minerals extracted or processed in U.S. / Free Trade Agreement ("FTA") countries
- Albemarle expansions either in place or underway in FTA-partner countries
- Albemarle has the resources, expertise, innovation and financial flexibility to move the U.S. supply chain and global EV industry forward

## Inflation Reduction Act (IRA) incentivizes lithium supply in North America and FTA-partner countries

Source: <sup>1</sup> ALB Analysis; <sup>2</sup> BMI Lithium Forecast, Q2 2022. August 2022; <sup>3</sup> 100% nameplate capacity, includes expansions expected to be completed YE 2022. Full nameplate capacity at La Negra III/IV requires completion of Salar Yield Improvement Project

## Responsible Water Management Case Study: Salar de Atacama

Albemarle uses <1% of the freshwater rights<sup>1</sup> in the Salar de Atacama



#### Brine resource is 10x saltier than seawater<sup>2</sup> – cannot be used for human or agricultural consumption

MAKING THE WORLD SAFE AND SUSTAINABLE

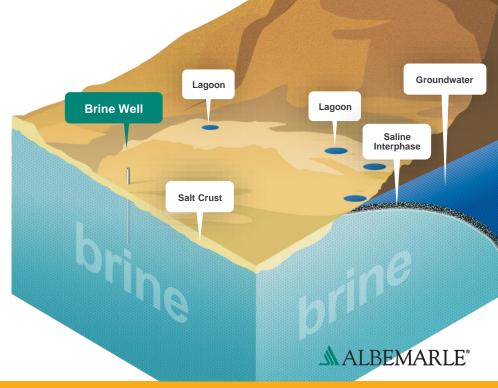
27

<sup>1</sup> DGA (Chilean Water Authority) <sup>2</sup> 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



## **Lithium Overview**

#### Y/Y Q3 Performance Drivers

- Net sales up 318% (price<sup>1</sup> +298%, volume +20%); adjusted EBITDA +786%
- Increased sales due to renegotiated fixed and index-referenced variable price contracts and increased market pricing
- Adjusted EBITDA margin benefited from a spodumene shipment from Talison originally expected in Q4 that occurred in Q3, resulting in a \$100M benefit in equity income

#### FY 2022 Outlook (as of 11/02/2022)

- Lithium FY 2022 adj. EBITDA is expected to grow ~500-550% Y/Y
- Average realized pricing growth is expected to be 225-250% Y/Y resulting from previously negotiated contracts and increased market pricing
- Volume growth is expected to be 20-30% due to new capacity coming online and higher tolling volumes
- Outlook range for Lithium reflects the potential upside for additional spot price improvements and the potential downside of volume shortfalls (e.g., delays in commissioning and production ramp up at expansion sites and qualifications for tolling) for the remainder of the year

#### **Drivers/Sensitivities**

- Energy storage (~85% of Li sales<sup>4</sup>): Primary driver EV sales in Europe and China
- Specialties & TG (~15% of Li sales<sup>4</sup>): Primary driver consumer spending & industrial production

#### Q3 2022 Performance

(in millions)	Q3 2022	Y/Y
Net Sales	\$1,501	+318%
Net Sales ex FX <sup>2</sup>	\$1,534	+327%
Adj. EBITDA <sup>3</sup>	\$1,111	+786%
Adj. EBITDA ex FX <sup>2,3</sup>	\$1,099	+776%
Adj. EBITDA Margin <sup>3</sup>	74%	+3,912 bps
Adj. EBITDA Margin ex FX <sup>2,3</sup>	72%	+3,673 bps

#### Historical Trend (TTM)



## ALBEMARLE®

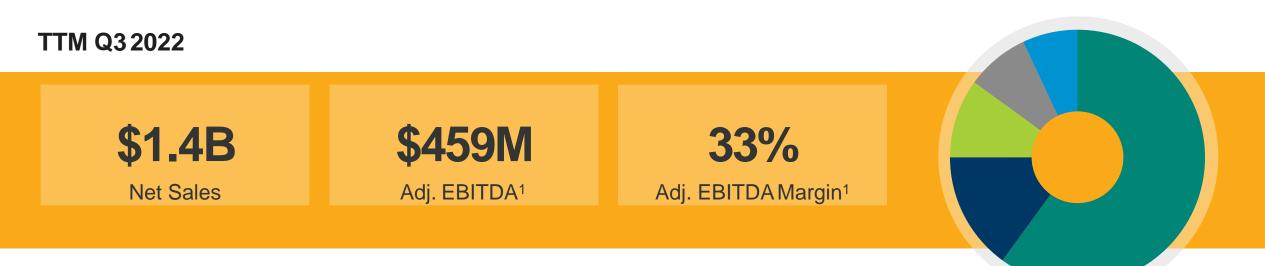
#### 8 MAKING THE WORLD SAFE AND SUSTAINABLE

Note: Numbers may not reconcile due to rounding. 1 Includes FX impact; 2 Net of FX impacts; 3 See appendix for non-GAAP reconciliations; 4 Sales based on historical average



# Bromine: Providing Critical Materials for Electrification and Digitization

## **Bromine: A Leader Across Diverse End-Use Markets**



#### **GBU Characteristics**

- Access to world-class natural resources with lowcost 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 macrotrends:
  - 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 Applications<sup>2</sup>





Energy



**Others** Pharma, Agriculture



Note: Financials for the 12 months ended September 30, 2022.

MAKING THE WORLD SAFE AND SUSTAINABLE

<sup>1</sup> Non-GAAP measure. See Appendix for definition and reconciliations of historical measures to most directly comparable GAAP measure. <sup>2</sup> Based on approximate average of 2019, 2020, 2021, and 2022E net sales splits.

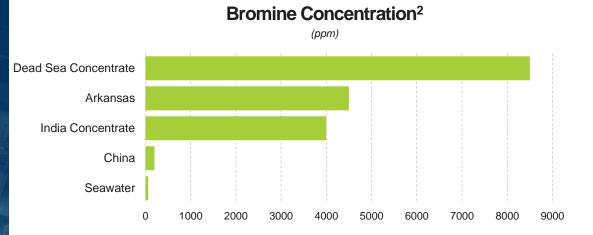
## Access to Highly Concentrated Bromine is a Low-Cost Advantage

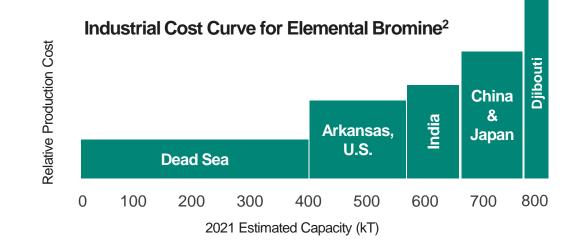
## Albemarle Operates from Two World-Class Bromine Resources:

**Dead Sea, Jordan** Jordan Bromine Company<sup>1</sup> (JBC) - operated and marketed by Albemarle

## Arkansas, U.S.

Highly integrated and specialty focused drives product flexibility and profitability





## Leveraging Bromine Capital Project Excellence to Capture Growth

Expansions driven by new product innovation, process development, and application testing facility in Baton Rouge, LA

- +10% of annual revenue anticipated to be generated from new products by 2026
- First commercial sales of SAYTEX ALERO<sup>™</sup> achieved; scaling production in 2023

# Brine resource in Magnolia, AR feeds the production facility and offers opportunities for expansion

- Completed resource expansion in 2021-2022 to support demand
- Investing \$540 million to expand facilities through 2027

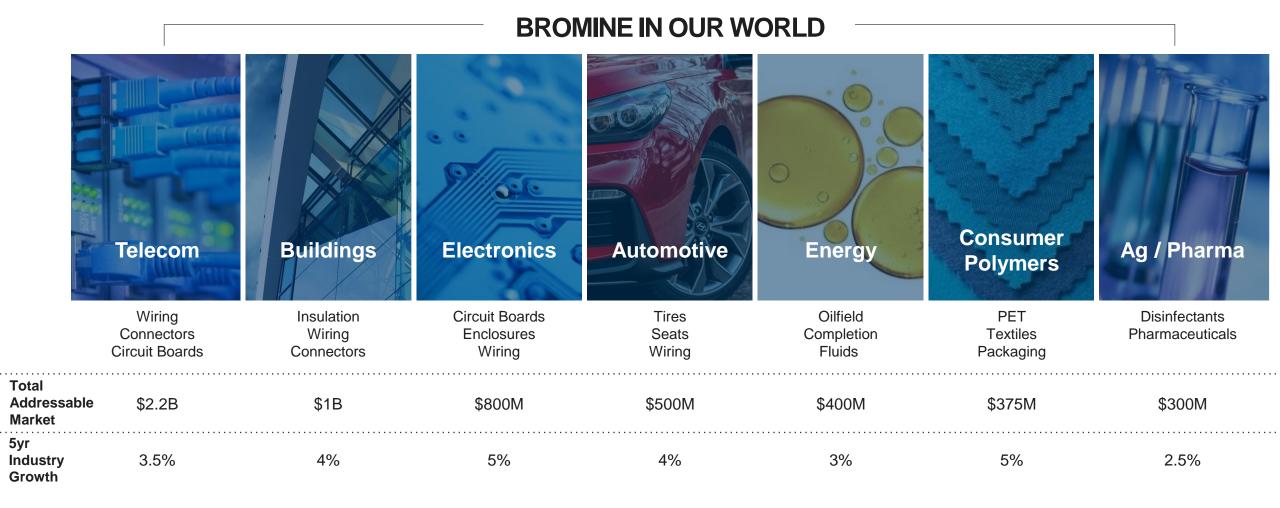
## Brine resource in Safi, Jordan supplies highly concentrated bromine stream to our JV conversion facility

- Continuing tetrabrom expansions Phase 2 completed in 2H 2022
- Project work continues in 2023 to optimize assets and reduce water intensity, with completion by 2024



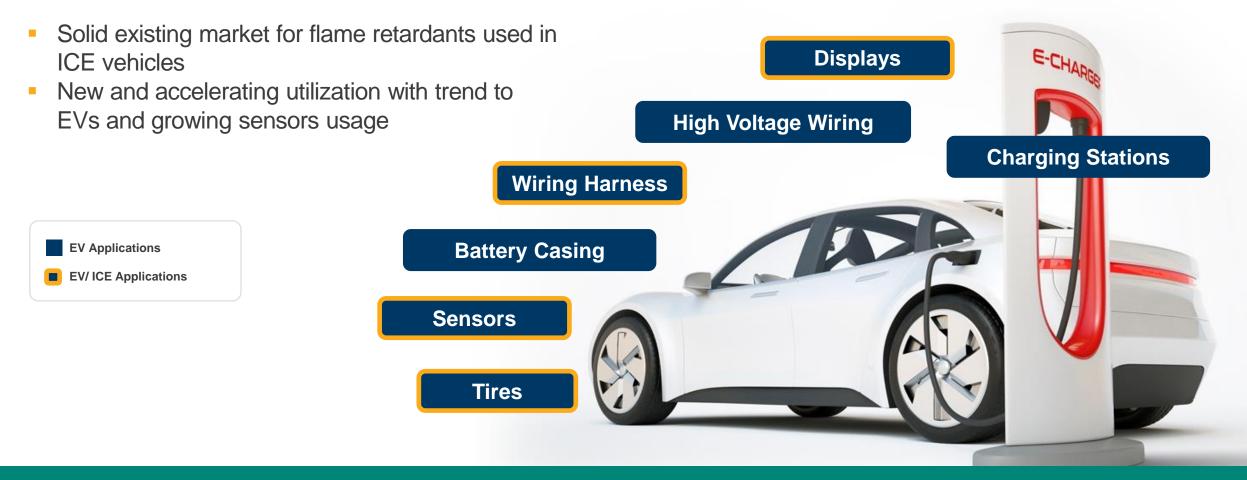
## Integrated resource and production facilities maximize product flexibility and profitability

## **Expanding Markets in Core and New Businesses to Accelerate Growth**





## Automotive Use is Accelerating with Trend to EVs



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



## Sustainable Approach: Natural Resources Management

## Material reduction targets by 2025

(on an intensity basis, per mt Br<sub>2</sub>)



## **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

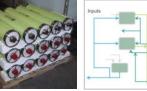
- 11% water intensity reduction
- 6 % energy intensity reduction

Membranes



HBr Cleanup

and WTU









Marsh Water Recovery

Grid Greening

(e.g., Bromine Optimization Project)

Heat & By-Product

Integration



## **Bromine Overview**

#### Y/Y Q3 Performance Drivers

- Net sales up 28% (price<sup>1</sup> +18%, volume +10%); adjusted EBITDA +24%
- Favorable pricing driven by robust demand and tight market conditions
- · Increase in net sales partially offset by higher costs for raw materials and freight

#### FY 2022 Outlook (as of 11/2/2022)

- Bromine FY 2022 adj. EBITDA is expected to be at the low end of previous outlook of approximately 25-30%, reflecting emerging softness in some end markets
- Demand softness in consumer and industrial electronics and building and construction
- · Continuing to monitor global economic conditions

#### **Drivers/Sensitivities**

- GDP-plus business industrial and consumer electronics, automotive, construction, and appliances
- Fire Safety Solutions (~60% of sales<sup>4</sup>): Primary driver digitization, electrification
  - Industrial and consumer electronics, automotive, construction, appliances

#### Q3 2022 Performance

(in millions)	Q3 2022	Y/Y
Net Sales	\$355	+28%
Net Sales ex FX <sup>2</sup>	\$363	+31%
Adj. EBITDA <sup>3</sup>	\$107	+24%
Adj. EBITDA ex FX <sup>2,3</sup>	\$113	+31%
Adj. EBITDA Margin <sup>3</sup>	30%	-84 bps
Adj. EBITDA Margin ex FX <sup>2,3</sup>	31%	+17 bps

Historical Trend (TTM)

Adjusted EBITDA
 Adjusted EBITDA Margin

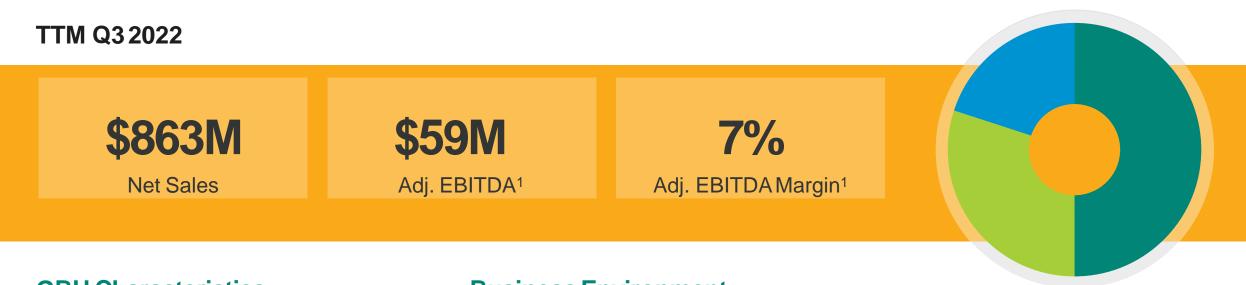




ALBEMARLE®

## Catalysts: Positioning to Execute on Longterm Opportunities

## **Catalysts: A Leader in Refining and Petrochemical Catalysts**



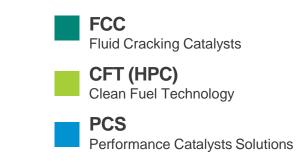
#### **GBU** Characteristics

- Portfolio of global best-in-class assets
- Extensive product application and technical knowhow
- 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 Applications<sup>2</sup>



MAKING THE WORLD SAFE AND SUSTAINABLE

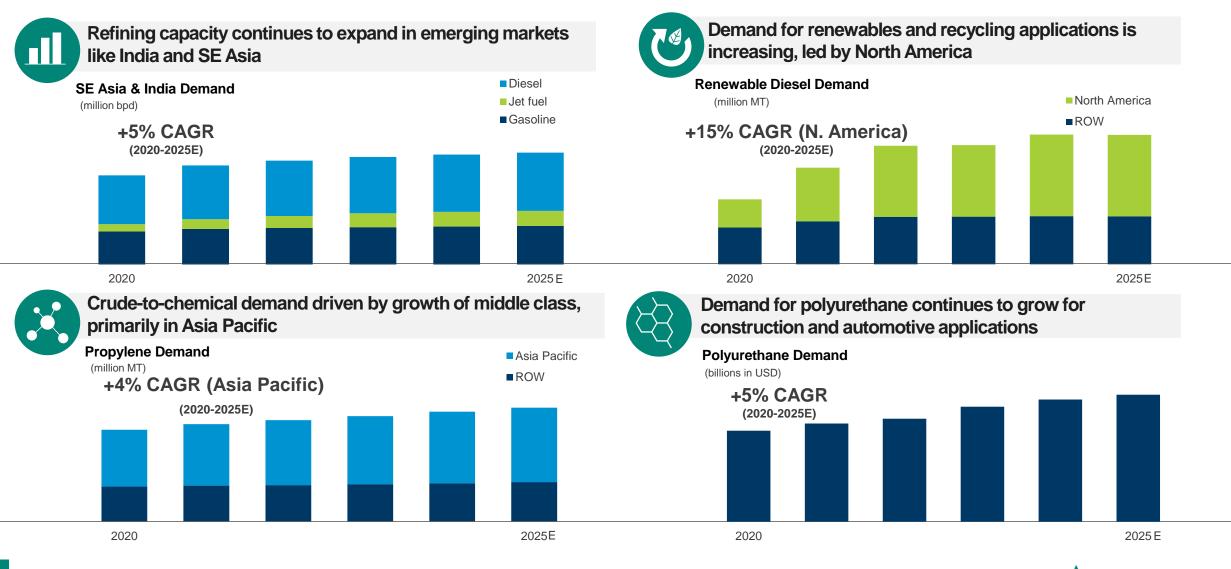
Note: Financials for the 12 months ended September 30, 2022.

<sup>1</sup> Non-GAAP measure. See Appendix for definition and reconciliations of historical measures to most directly comparable GAAP measure.



<sup>2</sup> Based on approximate average of 2019, 2020, 2021, and 2022E net sales splits.

## **Aligning Growth Opportunities with Major Macrotrends**







# Leveraging Our Core Skills in Growth Markets

#### **Outlook:**

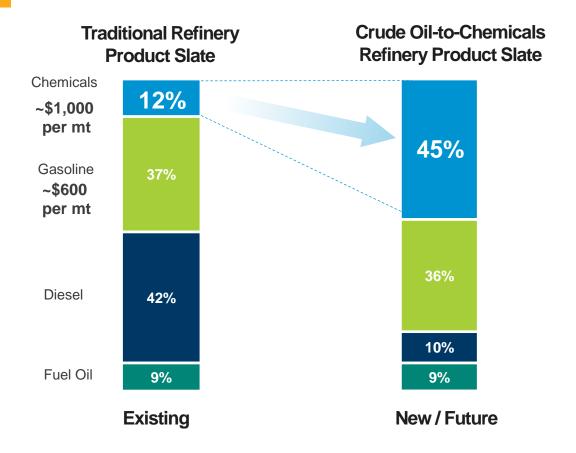
40

- 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

Source: IHS Markit

## ALBEMARLE®

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

## **Outlook:**

41

- 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



hoto provided by Neste

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

#### Dedicated to a sustainable future in refining

## ALBEMARLE®

## **Catalysts Overview**

#### Y/Y Q3 Performance Drivers

- Net sales up 22% (price<sup>1</sup> 5%, volume 17%); adjusted EBITDA down 86%
- Adjusted EBITDA declined as increased sales were offset by cost pressures including natural gas and raw materials

#### FY 2022 Outlook (as of 11/02/2022)

- Catalysts FY 2022 adj. EBITDA expected to be down 45-65% Y/Y, within the lower range of previous outlook
- Mitigating headwinds from higher costs with price increases and cost pass-throughs

#### **Drivers/Sensitivities**

- FCC (~ 50% of sales<sup>4</sup>): Primary drivers miles driven/transportation fuel consumption
- HPC (~ 30% of sales<sup>4</sup>): Primary drivers environmental sulfur regulations and miles driven/transportation fuel consumption
- PCS (~ 20% of sales<sup>4</sup>): Primary drivers plastic and polyurethane demand

#### Q3 2022 Performance

(in millions)	Q3 2022	Y/Y
Net Sales	\$236	+22%
Net Sales ex FX <sup>2</sup>	\$241	+25%
 Adj. EBITDA⁴	\$5	-86%
Adj. EBITDA ex FX <sup>2,3</sup>	\$2	-93%
Adj. EBITDA Margin <sup>3</sup>	2%	-1,514 bps
Adj. EBITDA Margin ex FX <sup>2,3</sup>	1%	-1,608 bps



#### ALBEMARLE®

## **Investor Relations Contacts**

Meredith Bandy, CFA Vice President Investor Relations and Sustainability Meredith.Bandy@albemarle.com +1 980-999-5168 Brook Wootton, IRC Senior Director Investor Relations Brook.Wootton@albemarle.com +1 980-299-5700 Eran del Castillo Manager Investor Relations Eran.delCastillo@albemarle.com +1 980-299-5619











## **Appendix: Non-GAAP Reconciliations**



MAKING THE WORLD SAFE AND SUSTAINABLE

## **Definitions of Non-GAAP Measures**

NON-GAAP MEASURE	DESCRIPTION
Adjusted Net Income	Net income attributable to Albemarle Corporation before non-recurring, other unusual and non-operating pension and OPEB.
Pro-forma Adjusted Net Income	Net income attributable to Albemarle Corporation before non-recurring, other unusual and non-operating pension and OPEB items, and the net impact of the divested business.
Adjusted Diluted EPS	Diluted EPS before non-recurring, other unusual and non-operating pension and OPEB.
Pro-forma Adjusted Diluted EPS	Diluted EPS before non-recurring, other unusual and non-operating pension and OPEB items, and the net impact of the divested business.
EBITDA	Net income attributable to Albemarle Corporation before interest and financing expenses, income taxes, and depreciation and a mortization.
Adjusted EBITDA	EBITDA before non-recurring, other unusual and non-operating pension and OPEB.
Pro-forma Adjusted EBITDA	Adjusted EBITDA before the net impact of EBITDA of the divested business.
Pro-forma Net Sales	Net Sales before the impact of Net Sales from the divested business.
Adjusted Effective Income Tax Rate	Reported effective income tax rate before the tax impact of non-recurring, other unusual and non-operating pension and OPEB items.



## **Production Facilities**

Location	Business Segment	Principal Use	Owned/Leased
Greenbushes, Australia	Lithium	Production of lithium spodumene minerals and lithium concentrate	Owned <sup>(c)</sup>
Guangxi, China	Lithium	Production of lithium carbonate and technical and battery-grade lithium hydroxide	Owned
Kemerton, Australia <sup>(a)</sup>	Lithium	Production of lithium carbonate and technical and battery-grade lithium hydroxide	Owned <sup>(c)</sup>
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
Langelsheim, 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 <sup>(d)</sup>
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	Lithium	Production of lithium spodumene minerals and lithium concentrate	Owned and leased <sup>(c)</sup>
Xinyu, China	Lithium	Production of lithium carbonate and technical and battery-grade lithium hydroxide	Owned
Baton Rouge, LA	Bromine	Research and product development activities, and production of flame retardants	Leased
Magnolia, AR	Bromine	Production of flame retardants, bromine, inorganic bromides, agricultural intermediates and tertiary amines	Owned
Safi, Jordan	Bromine	Production of bromine and derivatives and flame retardants	Owned and leased <sup>(c)</sup>
Twinsburg, OH	Bromine	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 <sup>(c)</sup>
La Voulte, France	Catalysts	Refinery catalysts regeneration and treatment, research and development activities	Owned <sup>(c)</sup>
McAlester, OK	Catalysts	Refinery catalyst regeneration, rejuvenation, pre-reclaim burn off, as well as specialty zeolites and additives marketing activities	Owned <sup>(c)</sup>
Mobile, AL	Catalysts	Production of tin stabilizers	Owned <sup>(c)</sup>
Niihama, Japan	Catalysts	Production of refinery catalysts	Leased <sup>(c)</sup>
Pasadena, TX <sup>(b)</sup>	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 <sup>(c)</sup>
Takaishi City, Osaka, Japan	Catalysts	Production of aluminum alkyls	Owned <sup>(c)</sup>
MAKING THE WORLD SAF	E AND SUSTAINABLE (c) Owr	ins I and II in commissioning (b) The Pasadena, Texas location includes three separate manufacturing plants which are owned, primarily utilized by Catalysts, including one plant that is owned unconsolidated joint venture. nership 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.	▲ ALBEMARLE

## Adjusted EBITDA (twelve months ended)

	Twelve Months Ended										
(\$ in thousands)	s	Sep 30, 2021	Dec 31, 2021		Mar 31, 2022		Jun 30, 2022	s	Sep 30, 2022		
Net income attributable to Albemarle Corporation	\$	\$ 212,131		123,672	\$	281,378	\$	263,551	\$	1,553,547	
Depreciation and amortization		247,535	254,000		258,314			267,884		283,515	
Non-recurring and other unusual items (excluding items associated with interest expense)		291,102		481,194		478,490		885,605		215,768	
Interest and financing expenses		75,322		61,476		45,428		79,685		104,240	
Income tax expense		4,321		29,446		87,869		69,902		381,510	
Non-operating pension and OPEB items		32,965		(78,814)		(78,629)		(78,196)		(77,752)	
Adjusted EBITDA	\$	863,376	\$	870,974	\$	1,072,850	\$	1,488,431	\$	2,460,828	
Net impact of adjusted EBITDA from divested businesses		(44,866)		(28,415)		(6,990)				—	
Adjusted EBITDA excluding impact from divested business	\$	\$ 818,510		\$ 842,559		\$ 1,065,860		1,488,431	\$	2,460,828	
Net sales	\$	3,312,900	\$	3,327,957	\$	3,626,394	\$	4,332,091	\$	5,593,330	
Net impact of net sales from divested business		(120,095)		(65,648)		(21,191)					
Net sales excluding impact from divested business	\$	\$ 3,192,805		\$ 3,262,309		3,605,203	\$	4,332,091	\$	5,593,330	
Adjusted EBITDA margin excluding impact from divested businesses		26 %		26 %		30 %		% 34 %		44 %	

See above for a reconciliation of adjusted EBITDA and pro-forma adjusted EBITDA, the non-GAAP financial measures, to Net income attributable to Albemarle Corporation, the most directly comparable financial measure calculated and reported in accordance with GAAP.

See above for a reconciliation of pro-forma net sales, the non-GAAP financial measure, to net sales, the most directly comparable financial measure calculated and reported in accordance with GAAP.



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

		Twelve Months Ended									
(\$ in thousands)	:	Sep 30, 2021		Dec 31, 2021		Mar 31, 2022		Jun 30, 2022		Sep 30, 2022	
Lithium			_								
Net income attributable to Albemarle Corporation	\$	326,745	\$	192,365	\$	383,682	\$	761,188	\$	1,732,165	
Depreciation and amortization		129,831		138,772		145,492		154,497		167,999	
Non-recurring and other unusual items		6,848		148,401		152,543		151,799		153,147	
Adjusted EBITDA		463,424		479,538		681,717		1,067,484		2,053,311	
Net Sales		1,317,131		1,363,284		1,634,580		2,205,762	3,347,606		
Adjusted EBITDA Margin		35 %		35 %		42 %		6 48 %		61 %	
Bromine											
Net income attributable to Albemarle Corporation	\$	311,260	\$	309,501	\$	343,949	\$	386,262	\$	406,039	
Depreciation and amortization		51,092		51,181		51,327		52,051		53,220	
Non-recurring and other unusual items		(1,200)		_		_		_			
Adjusted EBITDA		361,152		360,682	395,276			438,313		459,259	
Net Sales		1,101,376		1,128,343		1,207,475		1,305,479	1,382,604		
Adjusted EBITDA Margin		33 %	6	32 %	33		)	34 %	)	33 %	
Catalysts											
Net income attributable to Albemarle Corporation	\$	50,780	\$	55,353	\$	46,426	\$	34,597	\$	2,085	
Depreciation and amortization		50,967		51,588		51,998		52,455		52,080	
Adjusted EBITDA		101,747	_	106,941		98,424		87,052	_	58,584	
Net Sales		757,876		761,235	758,869		820,850			863,120	
Adjusted EBITDA Margin		13 9	6	14 %		5 13 %		11 %	ő 7 %		

See above for a reconciliation of adjusted EBITDA on a segment basis, the non-GAAP financial measures, to Net income attributable to Albemarle Corporation ("earnings"), the most directly comparable financial measure calculated and reporting in accordance with GAAP.



## Adjusted EBITDA supplemental<sup>1</sup>

		welve Months Ended	Three Months Ended										
		Sep 30, 2022		Sep 30, 2022		n 30, 2022	Ма	Mar 31, 2022		c 31, 2021			
Adjusted EBITDA	\$	\$ 2,460,828		1,189,966	\$	610,209	\$	431,930	\$	228,723			
Net income attributable to noncontrolling interests		110,267		33,991		33,819		28,164		14,293			
Equity in net income of unconsolidated investments (net of tax)		(483,031)		(258,884)		(128,156)		(62,436)		(33,555)			
Dividends received from unconsolidated investments		385,912		193,931		117,796		39,168		35,017			
Consolidated EBITDA	\$	\$ 2,473,976		1,159,004	\$	633,668	\$	436,826	\$	244,478			
Total Long Term Debt (as reported)	\$	3,369,969											
Off balance sheet obligations and other		130,000											
Consolidated Funded Debt	\$	3,499,969											
Less Cash		1,382,803											
Consolidated Funded Net Debt	\$	2,117,166											
Consolidated Funded Debt to Consolidated EBITDA Ratio		1.4											
Consolidated Funded Net Debt to Consolidated EBITDA Ratio		0.9											



49



# ALB LISTED NYSE www.albemarle.com

