

Albemarle Corporation

Investor Presentation and
Non-GAAP Reconciliations
September 2018



Forward-Looking Statements

Some of the information presented in this presentation, the webcast and discussions that follow, including, without limitation, statements with respect to product development, changes in productivity, market trends, price, expected growth and earnings, input costs, surcharges, tax rates, stock repurchases, dividends, cash flow generation, costs and cost synergies, our portfolio, economic trends, supply and demand outlook, 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 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; 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 Annual Report on Form 10-K and our 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 net income from continuing operations, Adjusted diluted earnings per share attributable to Albemarle Corporation, Adjusted diluted earnings per share from continuing operations, 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, Adj. EBITDA, Adj. EBITDA by operating segment, EBITDA margin, Adj. EBITDA margin, pro-forma Adj. EBITDA, pro-forma Adj. EBITDA margin, Adj. EBITDA excluding the impact of foreign exchange translation (“ex FX”), Adj. EBITDA margin excluding the impact of foreign exchange translation (“ex FX”), net debt to Adj. EBITDA, gross debt to Adj. EBITDA, free cash flow, and Adjusted free cash flow 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 maker uses 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, which is posted in the Investors section of our website at www.albemarle.com, under “Non-GAAP Reconciliations” under “Financials.” 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.

Albemarle Snapshot

Founded	1887
Global Employees	~5,400
Countries ¹	~100
Dividend Yield ²	1.4%
Market Cap ³	\$10.6B

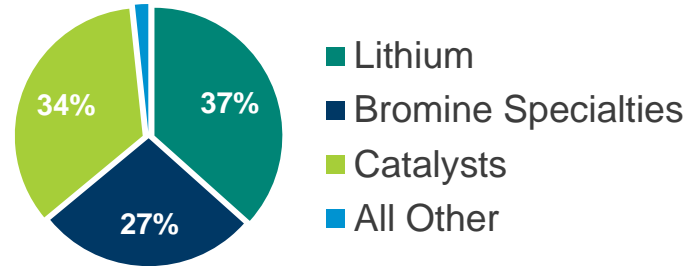
Financial Highlights⁴

Trailing Twelve Months Ended June 30, 2018

Net Sales	\$3.3B
Net Income ⁵	\$335M
Adj. EBITDA ^{6,7}	\$962M
Adj. EBITDA Margin ^{7,8}	29%

Net Sales by Segment⁴

Trailing Twelve Months Ended June 30, 2018



Providing innovative solutions to power the potential of energy efficiency

¹Based on destinations of FY2017 product sales.

²\$96.00 closing price as of August 24, 2018; annualized dividend of \$1.34 per share announced July 26, 2018.

³\$96.00 closing price as of August 24, 2018; 110,659 million diluted shares outstanding as of June 30, 2018.

⁴Includes financial contribution from Polyolefin Catalysts & components business divested April 3, 2018.

⁵Attributable to Albemarle Corporation.

⁶Non-GAAP measure. See Appendix for definition and Non-GAAP reconciliations.

⁷Continuing operations only.

⁸Non-GAAP measure. Adjusted EBITDA margin calculated by dividing net sales by Adjusted EBITDA.

Albemarle Path to Achieve Growth

2016

Diversified specialty chemical company with strong free cash flow¹ to fund growth

Lithium Wave I & II: Expand current resources and BG conversion capacity

Lithium Wave III: Explore new resources

Bromine Specialties: Strong cash flow

Catalysts: Strengthen R&D and technology

Supported by Productivity and Operational Excellence

2021

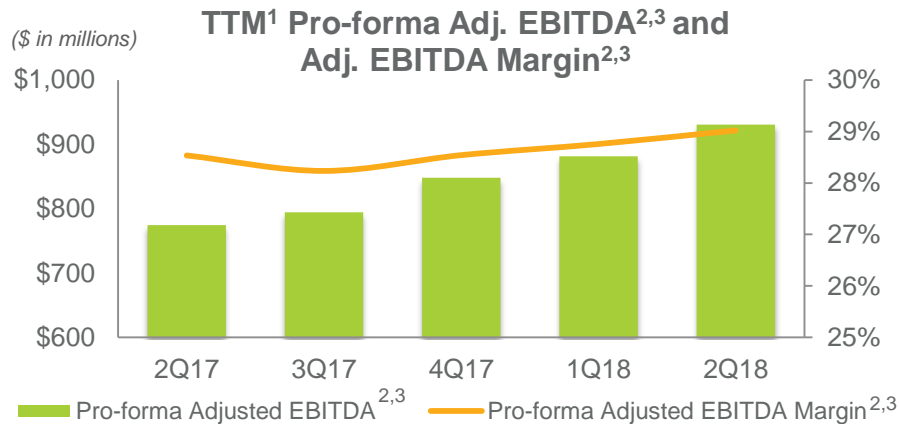
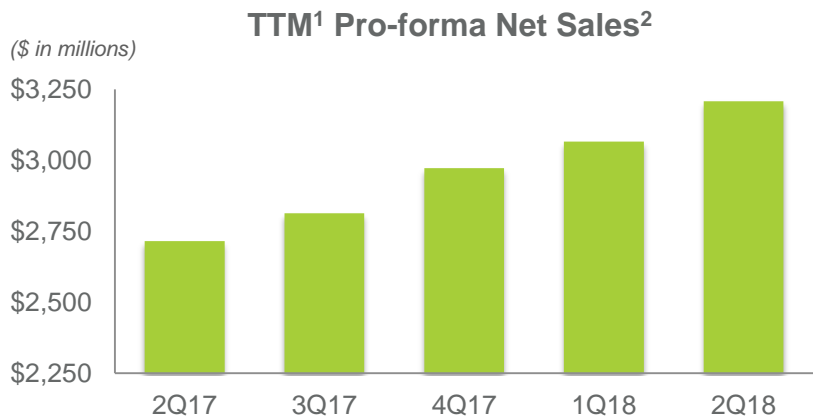
- 165,000 MT LCE annual capacity
- New Lithium resources in development with goal of 265,000 MT LCE capacity mid-2020s
- Strong free cash flow¹ to reinvest in growth businesses
- Ability to sustain margins in mature businesses
- Stronger overall product portfolio offering in refinery catalyst

CORPORATE GOALS

Sales Growth: 7 – 10% annualized
Adj. EBITDA Margins¹: 32 – 35%

Every Part of the Portfolio Contributes to the Strategy

Segment Quarterly Highlights











Core Business Performance - Second Quarter 2018

Lithium – \$142M Adj. EBITDA³, up 23% YoY; 45% Adj. EBITDA³ margin

Bromine Specialties – \$69M Adj. EBITDA³, up 12%; 31% Adj. EBITDA³ margin

Catalysts – \$75M Adj. EBITDA³, up 30%²; 26% Adj. EBITDA³ margin

Leadership Across Businesses Is Driven By Core Strengths

	Lithium	Bromine Specialties	Catalysts ²
Global Ranking	#1	#2	#2
TTM Adj. EBITDA ¹	\$504M	\$268M	\$290M
TTM Adj. EBITDA Margin ¹	43%	30%	26%
Key Competitors	 	 	   
Advantages	Globally Diversified, Low Cost Resources; Leading Processing and Application Expertise; Customer Relationships	Globally Diversified, Low Cost Resources; Integrated Product Portfolio	Leading Technology and Application Expertise; Product Stewardship; Customer Relationships

Bromine Specialties Snapshot

TTM Financials

Twelve Months Ended June 30, 2018

Net Sales	\$878M
Adj. EBITDA¹	\$268M
Adj. EBITDA Margin¹	30%

Characteristics

- Mineral extraction and processing
- Low-cost position on global cost curve
- Vertically integrated
- Stable and sustainable cash flow

Applications



- Flame retardants for electronics and construction materials
- Completion fluids for oilfield
- Industrial water treatment
- Plastic and synthetic rubber
- Ag and pharma synthesis

Business Environment

- Stable flame retardants demand across electronics, construction and automotive
- Current completion fluid weakness due to oil prices, with a favorable and long-term outlook
- Excess bromine capacity is limited to few suppliers

Advantaged Position. Stable End Markets. Strong Sustainable Cash Flow.

¹ Non-GAAP measure. See Appendix for definition and Non-GAAP reconciliations of historical measures.

Catalysts Snapshot

TTM Financials

Twelve Months Ended June 30, 2018

Net Sales	\$1,101M
Adj. EBITDA¹	\$290M
Adj. EBITDA Margin¹	26%

Characteristics

- Leading positions in FCC and HPC catalysts
- Technology and applications knowledge
- Focused on value creation for refiners
- Long-term, collaborative customer relationships
- High barriers-to-entry
- Strong free cash flow¹ generation with growth
- Safety, scale and technical service

Fluid Cracking Catalysts (FCC)

FCC Catalyst

- Cracks oil feedstock
- Makes gasoline
- Makes propylene

Clean Fuels Technology (CFT)

HPC Catalyst

- Removes sulfur and contaminants
- Makes clean diesel
- Makes clean oil-feedstock

Alkylation & Isomerization Catalyst

- Makes clean high-octane gasoline

Polymer Catalyst Solutions (PCS)

PCS

- Polymers
- Pharma Synthesis
- AG Chem Synthesis
- Coatings

Leadership in FCC and HPC catalysts with High Margin Business with High Barriers-to-Entry

Lithium Snapshot

TTM Financials

Twelve Months Ended June 30, 2018

Net Sales	\$1,174M
Adj. EBITDA¹	\$504M
Adj. EBITDA Margin¹	43%

Characteristics

- Mining and specialty chemicals capability
- Vertically integrated from natural resource to specialty performance products
- Low cost position globally

Applications

- Energy storage (Batteries)
- Glasses and Ceramics
- Greases and Lubricants
- Pharmaceutical Synthesis
- Polyolefins and Elastomers



Business Environment

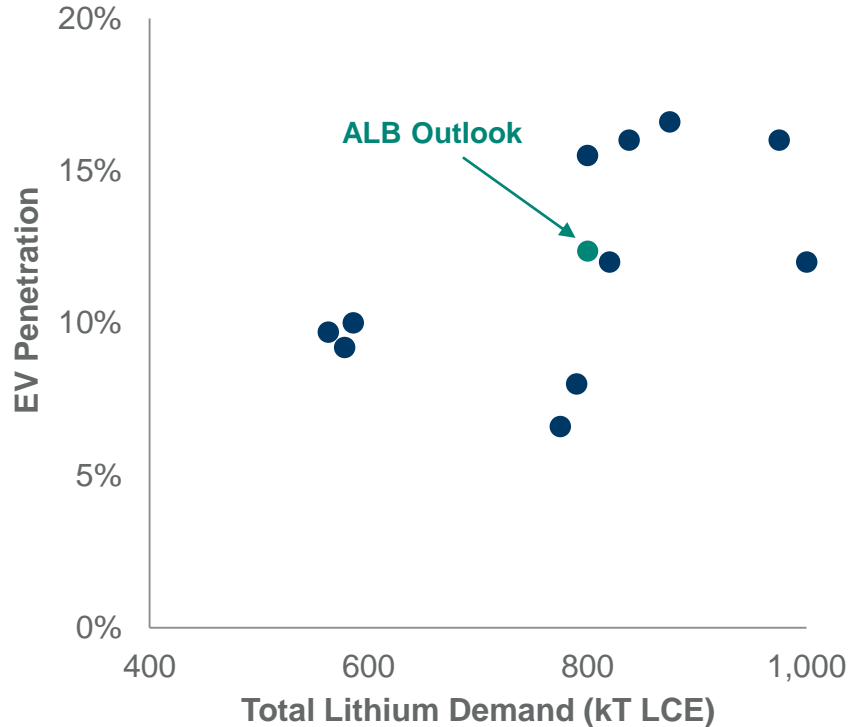
- Volume growth driven by energy storage
- Public policy accelerating e-mobility / renewables
- Battery cost declining / performance improving
- Long-term supply agreements becoming industry standard

Best-In-Class Resources Coupled with Derivatives Expertise Are Differentiators

¹ Non-GAAP measure. See Appendix for definition and Non-GAAP reconciliations of historical measures.

Battery Markets Continue to Accelerate Lithium Demand

2025 EV and Lithium Outlook¹



Demand Buildup by Application

Applications	2017 Demand	'17 – '25 CAGR	2025 Demand
Transportation	50	35%	550
Consumer Electronics ²	60	8%	110
All Other/Industrial	110	3 – 4%	140
Total	220	~18%	800

2025 Transportation Demand Buildup	% of Light Vehicles Sold	Vehicle Count (million)	Battery Size (KWh per Vehicle)	Lithium Demand (kT LCE)
BEV	6.7%	7.4	51	360
PHEV	5.6%	6.2	13	80
HEV	45%	50	0.6	30
e-buses, e-trucks, & other	N/A	<1	96	80
Total Transportation				550

- Lithium Content: 0.85 kg LCE/kWh for cathode; 0.10 kg LCE/kWh electrolyte
- Penetration figures based on 110 million light vehicles sold in 2025

¹Includes estimates from Roskill, BMO Capital Markets, Citi Investment Research, Deutsche Bank, Goldman Sachs, Instinet|Nomura, Morgan Stanley, UBS, Oppenheimer, SQM, and FMC. Estimates are same data points that were presented in March 2018 investor presentation.

²Includes 20 kT LCE in grid storage (ESS) volume

Long-term Relationships Required for EV Growth

Recent VW
Announcement



	Lithium Producer	Battery Manufacture	Auto Manufacture
Volume	140 kT LCE	150 GWh	3 Million EVs
Expansion Investment	\$2 – \$3 billion	\$9 – \$12 billion	\$20 – \$25 billion
Standard Customer Commitment	3 – 5 year contracts with cathode manufactures; up to 10 year agreements being discussed	3 – 5 year contracts with auto manufacture	7 – 10 year battery warranty with end consumer

- Recent announcement from Volkswagen for 2 - 3 million EVs by 2025 illustrates need for significant investment in value chain
- The desire to base load and secure future lithium requirements with limited number of suppliers incentivizes buyers to partner with capable and proven companies

Investment decisions being made across EV supply chain today for consumer commitments in 2030s

Albemarle the Partner of Choice in EV Battery Markets

Deep relationships

- Leading cathode/battery producers largely based in Asia
- Average ALB supply relationship of 10+ years
- Baseload volume, but not sole supplier

Long-term Contracts

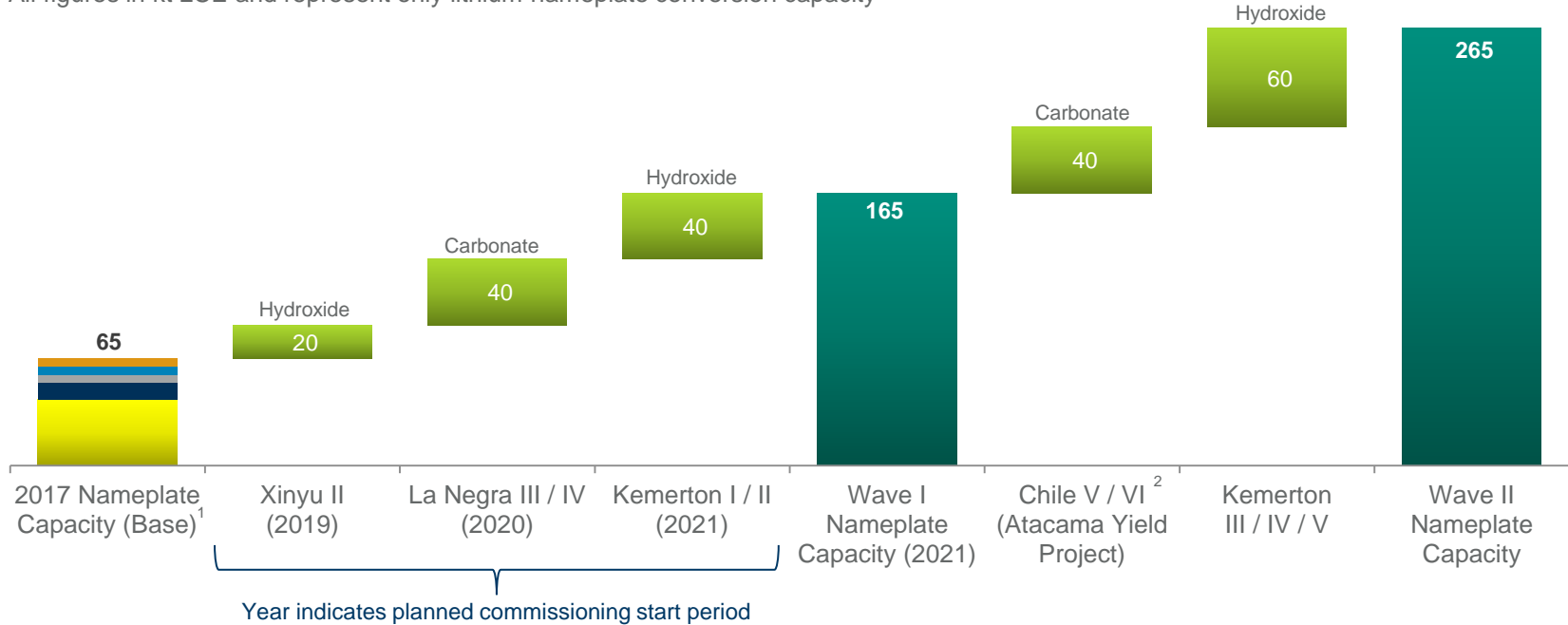
- Minimum volumes that escalate each year
- Pricing floor with pricing upside opportunities
- Fully committed capacity through 2021
- Contracts provides attractive return on capital for Wave 1 expansion investments

Value-added Sale

- Chemical, physical and purity characteristics requiring specialized operating know-how
- Customer specific specifications
- Development of innovative new lithium materials with customers

Expanding Lithium Conversion Capacity in High Quality Resources

All figures in kt LCE and represent only lithium nameplate conversion capacity



Ramping as needed to meet demand of existing customers with ability to reduce spend rate based on 5-year outlook

NOTE: This slide contains the same data that was presented in March 2018 investor presentation with updated project nomenclature as capacity additions are in 20 kt LCE increments.

¹Conversion capacity does not include approximately 10 kt LCE of technical grade spodumene to non-battery applications.

²Conversion site for Atacama Yield Project volume will be in Chile but specific city/location not yet determined.

Cash Flow and Net Debt

Six Months Ended June 30

(\$ in millions)

	<u>2018</u>	<u>2017</u>
Net Cash from Operations	\$224	(\$54)
Less: Capital Expenditures	(281)	(98)
Add Back: Pension Contributions ¹	7	11
Free Cash Flow²	(\$50)	(\$141)
Non-recurring and other unusual cash items	40	59
Cash taxes on repatriation/Chemetal® sale	40	255
Adjusted Free Cash Flow²	\$30	\$173

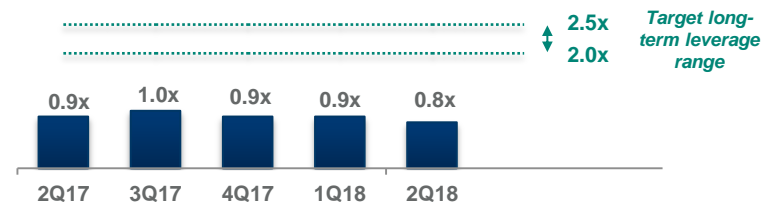
Selected Financial Metrics

(\$ in millions)

(as of 06/30/2018)

Dividends Paid:	\$72
Dividend Growth (Y/Y)³:	5%
Cash Balance:	\$908
Gross Debt⁴:	\$1,615
Net Debt to Adj. EBITDA⁵:	0.8x

Net Debt to Adj. EBITDA⁵



Initiated second \$250 million accelerated share repurchase program on August 9, 2018 (\$500 million total in 2018), to be completed by year end
Expect Net Debt to Adj. EBITDA⁵ to end year at ~1.2x

Disciplined Capital Allocation Strategy – Our Priorities

Invest for Growth, Maintain Flexibility and Deliver Shareholder Value

Invest for Growth in High Return Projects

- Strategically grow Lithium

Disciplined M&A Strategy

- Must support or accelerate our strategy

Maintain Investment Grade Rating

- Long-term Net Debt to Adjusted EBITDA^{1,2} Target: 2.0x – 2.5x
- Short-term target lower to stay flexible for investment

Fund Dividend Growth

- Increase dividend annually: 24 consecutive years since going public in 1994

Repurchase Shares

- When excess balance sheet capability available

¹ Non-GAAP measure. See Appendix for definition and Non-GAAP reconciliations of historical measures.

² Based on the bank covenant definition.

Continued Portfolio Assessment to Drive Value

2014

2018

Acquired Rockwood ('15)
Entered high growth lithium market

Acquired Jiangxi Jiangli New Materials ('16)
Chinese lithium conversion capacity

Divested AOX ('14) and exited Phosphorus ('12) business
Non-core assets

Divested Minerals, Metal Sulfides and Chemetall® Surface Treatment ('16)
Used proceeds to reduce debt and strengthen balance sheet

Divested Polyolefin Catalysts & Components ('18)
Non-core assets

Committed to evaluating the portfolio

Albemarle Is Well Positioned to Maximize Long-Term Shareholder Value Creation

- 1 Multi-year journey has resulted in a more focused and growth-oriented portfolio underpinned by energy efficiency macro drivers
- 2 Clear strategy with the people, cash generation and resources necessary to execute the strategy
- 3 Experienced and focused management team with clear deliverables
- 4 Actively managing our portfolio in a disciplined and focused manner to drive shareholder value
- 5 Strong balance sheet and disciplined approach to capital allocation with focus on highest returns (reinvestment, strategic acquisitions and returns to shareholders)







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Appendix A

Guidance as per Q2 2018 Earnings Released
August 7th, 2018

Full Year 2018 Business Guidance vs 2017

Business Unit	Prior Outlook	Updated Outlook	Business Environment
Lithium			<ul style="list-style-type: none"> FY 2018 Adj. EBITDA¹ expected to increase low-to-mid 20's on % basis vs prior year Expect 1H 2018 to be similar to 2H 2018; Q3 similar to Q1 and Q4 similar to Q2 Favorable outlook driven by strong volume and price improvements, primarily in battery grade product portfolio
Bromine Specialties			<ul style="list-style-type: none"> FY 2018 Adj. EBITDA¹ expected to be up high single-digit vs prior year Improved outlook driven by solid demand for flame retardants and higher pricing in some derivatives, partially offset by higher raw material and freight costs
Catalysts ²			<ul style="list-style-type: none"> FY 2018 Adj. EBITDA¹ expected to increase high single-digit vs prior year on pro-forma² basis driven by higher volume, favorable product mix and higher pricing in FCC Q4 2018 expected to be stronger than Q3 2018 Now expect ~\$5 million (vs \$10 million previously) unfavorable impact to Adj. EBITDA¹ in FY2018 due to raw material shortage in Curatives product line Anticipate favorable benefit of \$5 million from Hurricane Harvey insurance settlements with \$2 million already received in Q2 2018

 Better than 2017

 Better than 2017 and Prior Outlook

¹Non-GAAP measure.

²Catalysts 2017 pro-forma adjusted EBITDA¹ is \$253 million and excludes financial contribution of Polyolefin Catalysts & Components business the final nine months of 2017, which closed April 3, 2018.

Full Year 2018 Guidance

	FY 2017	FY 2017 Pro Forma ³	Prior FY 2018 Guidance ⁴		Updated FY 2018 Guidance ⁴	Updated 2018 Guidance vs FY 2017 Pro-Forma ³
Net Sales	\$3.07B	\$3.00B	\$3.2 – \$3.4B	▲	\$3.3 – \$3.5B	10% – 17%
Adjusted EBITDA¹	\$885M	\$859M	\$955 – \$1,005M	▲	\$990 – \$1,020M	15% – 19%
Adjusted EBITDA Margin¹	29%	29%	29% – 30%	=	29% – 30%	
Adjusted Diluted EPS¹	\$4.59	\$4.40	\$5.10 – \$5.40	▲	\$5.30 – \$5.50	20% – 25%
D&A	\$197	\$192	N/A		\$195 – \$205	
Net Cash from Operations²	\$304M	\$278M	\$660 – \$730M	=	\$660 – \$730M	
Capital Expenditures	\$318M	\$313M	\$800 – \$900M	=	\$800 – \$900M	
Adjusted Free Cash Flow²	\$354M	\$333M	(\$150) – \$50M	=	(\$150) – \$50M	

¹Non-GAAP measure. See Non-GAAP reconciliation in Appendix for 2017 figures.

²Free Cash Flow is a non-GAAP measure defined as Net Cash from Operations, add back pension and post-retirement contributions and subtract capital expenditures. See slide 15 for details.

³The FY 2017 Pro Forma calculation excludes the financial contribution from Polyolefin Catalyst & Components for the final nine months of 2017 because Albemarle closed the sale by the end of 1Q 2018. Pro Forma FY 2017 Net Cash from Operations is calculated by subtracting the Adjusted EBITDA associated with the Polyolefin Catalysts & Components. Pro Forma FY 2017 Adjusted Free Cash Flow calculated by subtracting the Adjusted EBITDA and adding back the Capital Expenditures associated with the Polyolefin Catalysts & Components.

⁴FY 2018 Guidance includes financial contribution from Polyolefin Catalysts & Components during Q1 2018 only.

Appendix B

Non-GAAP Reconciliations and
Supplemental Information

Adjusted EBITDA - Continuing Operations (*twelve months ended*)

(\$ in thousands)	Twelve Months Ended				
	Jun 30, 2017	Sep 30, 2017	Dec 31, 2017	Mar 31, 2018	Jun 30, 2018
Continuing Operations					
Net income attributable to Albemarle Corporation	\$ 884,856	\$ 875,306	\$ 54,850	\$ 135,397	\$ 334,525
Depreciation and amortization	191,853	193,774	196,928	202,188	203,540
Non-recurring and other unusual items (excluding items associated with interest expense)	88,866	89,214	102,660	101,914	(113,484)
Interest and financing expenses	117,370	117,216	115,350	60,375	59,093
Income tax expense	82,223	88,324	431,817	440,207	497,179
Income from discontinued operations (net of tax)	(583,159)	(559,974)	—	—	—
Non-operating pension and OPEB items	24,021	23,224	(16,125)	(17,259)	(18,410)
Adjusted EBITDA	\$ 806,030	\$ 827,084	\$ 885,480	\$ 922,822	\$ 962,443
Pro-forma: Net impact of adjusted EBITDA from divested business	(31,186)	(32,798)	(37,123)	(41,287)	(31,521)
Pro-forma Adjusted EBITDA	\$ 774,844	\$ 794,286	\$ 848,357	\$ 881,535	\$ 930,922
Net Sales	\$ 2,809,986	\$ 2,910,842	\$ 3,071,976	\$ 3,171,542	\$ 3,288,158
Pro-forma: Net impact of Net Sales from divested business	(94,545)	(97,595)	(99,491)	(106,013)	(80,282)
Pro-forma Net Sales	\$ 2,715,441	\$ 2,813,247	\$ 2,972,485	\$ 3,065,529	\$ 3,207,876
Pro-forma Adjusted EBITDA Margin	29%	28%	29%	29%	29%

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. EBITDA is defined as Net income attributable to Albemarle Corporation before interest and financing expenses, income taxes, and depreciation and amortization. Adjusted EBITDA is defined as EBITDA before discontinued operations and the non-recurring, other unusual and non-operating pension and OPEB items as listed below. Pro-forma adjusted EBITDA is defined as adjusted EBITDA before the net impact of EBITDA from the divested business.

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. Pro-forma net sales is defined as net sales before the net impact of net sales from the divested business.

Adjusted EBITDA - by Segment *(three months ended June 30)*

(\$ in thousands)

	Lithium	Bromine Specialties	Catalysts	Reportable Segments Total	All Other	Corporate	Consolidated Total
Three months ended June 30, 2018:							
Net income (loss) attributable to Albemarle Corporation	\$ 117,292	\$ 59,673	\$ 280,887	\$ 457,852	\$ (2,079)	\$ (153,312)	\$ 302,461
Depreciation and amortization	24,325	9,694	12,920	46,939	1,978	1,557	50,474
Non-recurring and other unusual items	—	—	(218,705)	(218,705)	—	33,126	(185,579)
Interest and financing expenses	—	—	—	—	—	13,308	13,308
Income tax expense	—	—	—	—	—	80,102	80,102
Non-operating pension and OPEB items	—	—	—	—	—	(2,204)	(2,204)
Adjusted EBITDA	\$ 141,617	\$ 69,367	\$ 75,102	\$ 286,086	\$ (101)	\$ (27,423)	\$ 258,562
Three months ended June 30, 2017:							
Net income (loss) attributable to Albemarle Corporation	\$ 81,819	\$ 51,739	\$ 53,994	\$ 187,552	\$ 152	\$ (84,371)	\$ 103,333
Depreciation and amortization	21,460	10,336	13,433	45,229	2,292	1,601	49,122
Non-recurring and other unusual items	11,921	—	—	11,921	—	17,898	29,819
Interest and financing expenses	—	—	—	—	—	14,590	14,590
Income tax expense	—	—	—	—	—	23,130	23,130
Non-operating pension and OPEB items	—	—	—	—	—	(1,053)	(1,053)
Adjusted EBITDA	\$ 115,200	\$ 62,075	\$ 67,427	\$ 244,702	\$ 2,444	\$ (28,205)	\$ 218,941
Pro-forma: Net impact of adjusted EBITDA from divested business	—	—	(9,766)	(9,766)	—	—	(9,766)
Pro-forma adjusted EBITDA	\$ 115,200	\$ 62,075	\$ 57,661	\$ 234,936	\$ 2,444	\$ (28,205)	\$ 209,175

See above for a reconciliation of adjusted EBITDA on a segment basis, the non-GAAP financial measure, to Net income attributable to Albemarle Corporation ("earnings"), the most directly comparable financial measure calculated and reporting in accordance with GAAP. EBITDA is defined as earnings before interest and financing expenses, income taxes, and depreciation and amortization. Adjusted EBITDA is defined as EBITDA before the non-recurring, other unusual and non-operating pension and OPEB items as listed above.

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

(\$ in thousands)	Twelve Months Ended				
	Jun 30, 2017	Sep 30, 2017	Dec 31, 2017	Mar 31, 2018	Jun 30, 2018
Lithium					
Net income attributable to Albemarle Corporation	\$ 271,810	\$ 314,707	\$ 342,992	\$ 373,712	\$ 409,185
Depreciation and amortization	85,882	86,409	87,879	92,879	95,744
Non-recurring and other unusual items	15,094	15,977	15,781	11,223	(698)
Adjusted EBITDA	372,786	417,093	446,652	477,814	504,231
Net Sales	834,629	937,461	1,018,885	1,100,688	1,174,430
Adjusted EBITDA Margin	45%	44%	44%	43%	43%
Bromine Specialties					
Net income attributable to Albemarle Corporation	\$ 189,197	\$ 201,336	\$ 218,839	\$ 219,681	\$ 227,615
Depreciation and amortization	40,122	40,112	40,062	40,701	40,059
Adjusted EBITDA	229,319	241,448	258,901	260,382	267,674
Net Sales	812,145	830,572	855,143	861,591	878,160
Adjusted EBITDA Margin	28%	29%	30%	30%	30%
Catalysts					
Net income attributable to Albemarle Corporation	\$ 243,858	\$ 216,405	\$ 230,665	\$ 229,359	\$ 456,252
Depreciation and amortization	52,105	53,160	54,468	53,855	53,342
Non-recurring and other unusual items	—	(1,250)	(1,250)	(1,250)	(219,955)
Adjusted EBITDA	295,963	268,315	283,883	281,964	289,639
Pro-forma: Net impact of adjusted EBITDA from divested business	(30,425)	(33,323)	(37,123)	(41,287)	(31,521)
Pro-forma Adjusted EBITDA	265,538	234,992	246,760	240,677	258,118
Net Sales	1,039,470	1,019,593	1,067,572	1,074,731	1,101,442
Pro-forma: Net impact of net sales from divested business	(95,015)	(97,595)	(99,491)	(106,013)	(80,282)
Pro-forma Net Sales	944,455	921,998	968,081	968,718	1,021,160
Pro-forma Adjusted EBITDA Margin	28%	25%	25%	25%	25%

See above for a reconciliation of adjusted EBITDA and pro-forma 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. EBITDA is defined as earnings before interest and financing expenses, income taxes, and depreciation and amortization. Adjusted EBITDA is defined as EBITDA before the non-recurring, other unusual and non-operating pension and OPEB items as listed above. Pro-forma adjusted EBITDA is defined as adjusted EBITDA before the net impact of EBITDA from the divested business.

See above for a reconciliation of pro-forma net sales on a segment basis, the non-GAAP financial measure, to net sales, the most directly comparable financial measure calculated and reported in accordance with GAAP. Pro-forma net sales is defined as net sales before the net impact of net sales from the divested business.

Adjusted EBITDA supplemental¹

(\$ in thousands)

	Twelve Months Ended	Three Months Ended			
	Jun 30, 2018	Jun 30, 2018	Mar 31, 2018	Dec 31, 2017	Sep 30, 2017
Adjusted EBITDA	\$ 962,443	\$ 258,562	\$ 248,718	\$ 245,780	\$ 209,383
Net income attributable to noncontrolling interests	38,208	8,225	7,165	11,295	11,523
Equity in net income of unconsolidated investments (net of tax)	(87,914)	(18,969)	(20,677)	(29,224)	(19,044)
Dividends received from unconsolidated investments	60,977	4,583	25,462	27,486	3,446
Consolidated EBITDA	\$ 973,714	\$ 252,401	\$ 260,668	\$ 255,337	\$ 205,308
Total Long Term Debt (as reported)	\$ 1,615,405				
Off balance sheet obligations and other	61,800				
Consolidated Funded Debt	\$ 1,677,205				
Less Cash	908,144				
Consolidated Funded Net Debt	\$ 769,061				
Consolidated Funded Debt to Consolidated EBITDA Ratio	1.7				
Consolidated Funded Net Debt to Consolidated EBITDA Ratio	0.8				

¹ This supplemental is for net-debt-to-adjusted EBITDA ratio based on the bank covenant definition.