Vision 2015

2011 Investor Day New York, NY

May 3, 2011



▲ ALBEMARLE®

Forward Looking Statements

Portions of this presentation constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Although Albemarle Corporation believes its expectations reflected in the presentation are based on reasonable assumptions within the bounds of its knowledge of its business and operations, there can be no assurance that actual results will not differ materially.

Factors that could cause actual results to differ from expectations include, without limitation, the inability to pass through increases in costs and expenses for raw materials and energy; competition from other manufacturers; changes in demand for our products; the gain or loss of significant customers; fluctuations in foreign currencies and increased government regulation of our operations or our products.

Additional factors that could cause Albemarle's results to differ materially from those described in the forward-looking statements can be found under "Risk Factors" in Item 1A of our Annual Report on form 10-K for the year ended December 31, 2010.





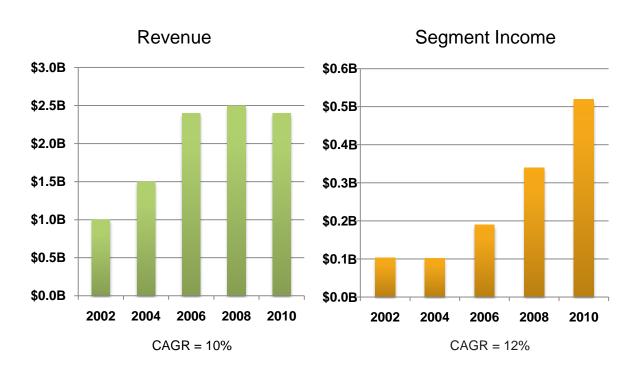


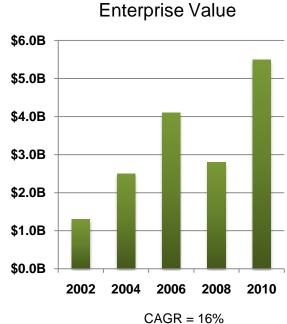
Vision 2015

Mark Rohr,
Chairman and
Chief Executive Officer



A Decade of Strong Growth...









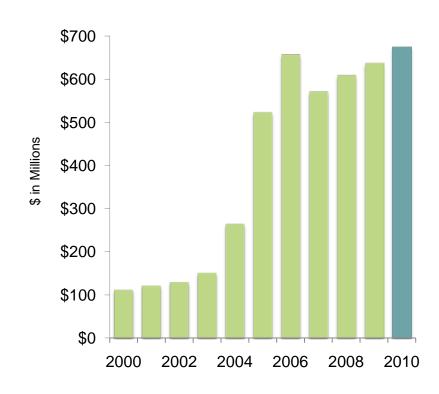


Albemarle's Success is Tied to Innovation

"Research and process development expertise allow us to bring innovative technologies to the market more quickly and at a lower capital cost than our competitors"

"Innovative products enhance customer value and expand margins"

New Product Sales









We Leverage Innovative Capabilities by...

- 1. Building a clear understanding of customer needs and value drivers.
- 2. Working with local market leaders in emerging economies.
- 3. Gaining technology and/or market access with select acquisition and ventures.
- 4. Maintaining value-added pricing initiatives across product portfolios.
- 5. Driving production and transaction efficiencies around the globe.







It All Boils Down to ...







Technology

- Strong base chemistry
- Technological knowhow
- Solving global challenges
- Development and commercialization speed

People

- Culture shaped by strong core values
- Great people, bright ideas
- Global agility
- Understanding of social responsibility

Market Position

- Trend-setting technology
- Market leadership
- Financial strength
- Expanding global reach







We Expect to Stay on Pace Through 2015...

Revenue	\$4.8 - \$5.6B	16% CAGR	\$5B in annual sales
EBIT	\$1.0B +	14% CAGR	Expanding value
EPS	\$8.40 - \$9.75	20% CAGR	Double earnings

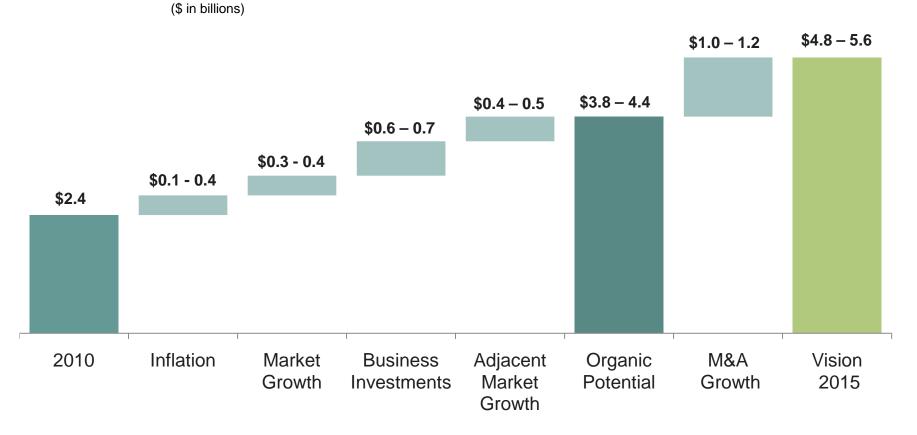






How This Will Happen...











What You Will Hear From Us Today

8:00 a.m.	Introduction/Vision 2015 Mark Rohr, Chairman & CEO	10:30 a.m.	Bromine: Albemarle's Element Tony Parnell, VP Polymer Solutions
8:15 a.m.	Vision 2015: A Strategy for Growth Luke Kissam, President	11:00 a.m.	Organometallics: Albemarle's Foundation Chemistry Amy Motto, Division VP PO Catalysts
8:45 a.m.	Ambition, Execution, Value & Growth John Steitz, EVP & COO	11:30 a.m.	Step-Out Technologies Dave Clary, VP & CSO
9:15 a.m.	Financial Overview and M&A Scott Tozier, SVP &CFO	12:00 p.m.	Q&A and Closing Remarks Mark Rohr, Chairman & CEO
9:45 a.m.	Q&A Mark Rohr, Chairman & CEO	12:30 p.m.	Join Executive Team for Lunch

Break from 10:00 – 10:30



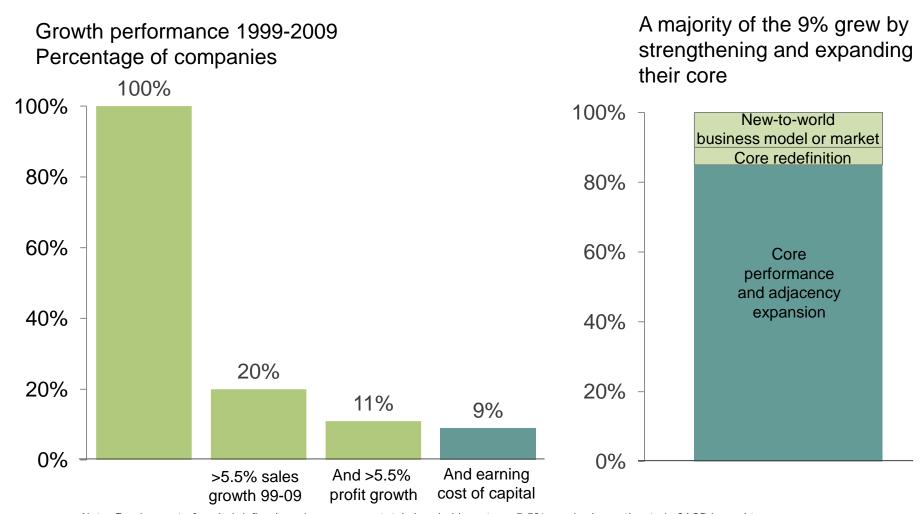


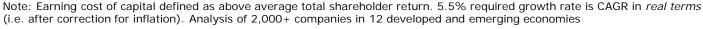


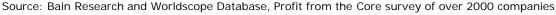
VISION 2015: A Strategy for Growth

Luke Kissam, President

Companies That Grow Profitably Do So by Building Upon Core Strengths













Albemarle's Goal is to Stay on Pace to Double Our Business by 2015

Revenue	\$4.8 - \$5.6B	16% CAGR	\$5B in annual sales
EBIT	\$1.0B +	14% CAGR	Expanding value
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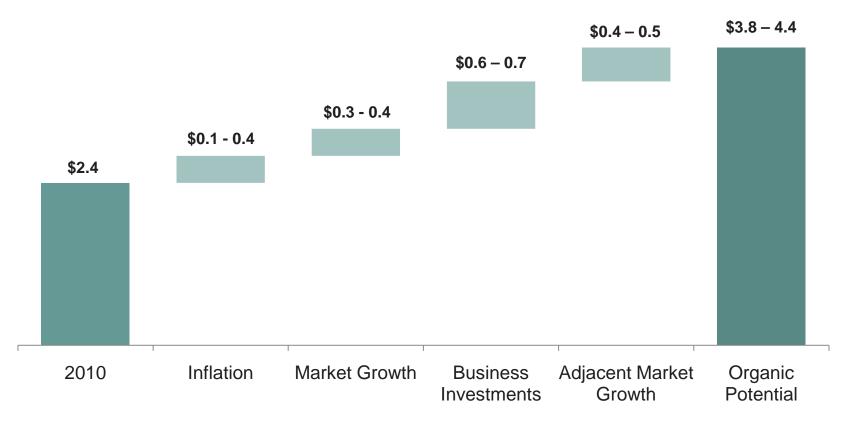






We Will Strengthen and Expand Within and Beyond Our Current Businesses











The Majority of the Markets we Serve Should Grow With or Exceed GDP Growth

GDP-% Growth *	2008	2009	2010	2011E	2012E	2013E	2014E	2015E
World	2.83	-0.56	4.77	4.22	4.54	4.59	4.62	4.62
Advanced Economies	0.24	-3.23	2.71	2.17	2.64	2.59	2.51	2.41
Emerging & Developing Economies	6.01	2.51	7.07	6.44	6.52	6.58	6.65	6.66

- Albemarle's growth over the last decade has exceeded GDP
- GDP is expected to grow by a CAGR of 4.58% from 2010 to 2015
- Emerging and developing economies are projected to outpace rest of world over next 5 years, and Albemarle has plans underway to participate in this growth

Shifting of Global Economic Growth				
GDP % Growth *	2010-2015 CAGR			
China	7.00			
India	8.58			
Korea	5.36			
Brazil	4.93			







^{*}Data Sources: IMF, World Bank

Investments in Current Businesses Will Provide Excellent Returns

Strategic

Projects

Currently

Underway

JBC Expansion

- Doubling capacity of bromine, tetrabrom and clear completion fluids
- Will bring Albemarle's total bromine capacity to well over 200,000 MTs
- Starting mid 2012, volume added as needed to meet demand

Saudi JV

- TEA joint venture with SABIC in Al-Jubail
- Will produce products for use in Ziegler-Natta systems and provide a platform for further expansion
- Ground breaking in June with start up scheduled for 2012

HPC in Brazil

- First HPC plant in Brazil in partnership with Petrobras;
 start up anticipated in 2014
 - Will meet growing demand in the region, driven by tighter ULSD specs & new
 HPC units
 - Strengthens R&D collaboration with Petrobras

Polyolefin Catalysts

- Doubled production capacity of TMA in 2011 to meet customer demands and currently planning next expansion
- Breaking ground on multi-purpose facility in Korea to produce single site catalysts for Asian market
- Start up anticipated in 2012



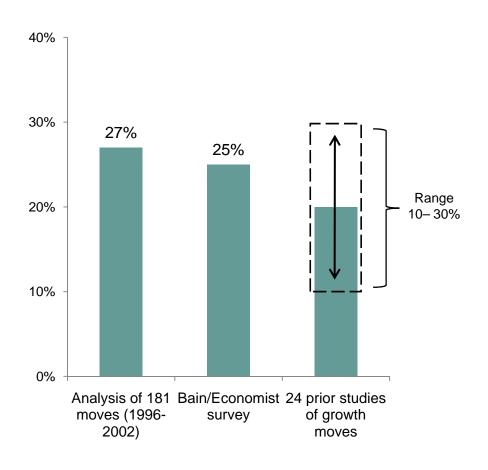




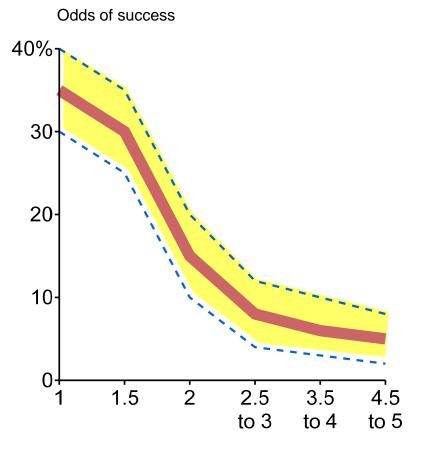


Companies That Successfully Expand Their Business do so by Building Upon Core Strengths

Adjacency success rate: percent of cases



Empirical odds of success in pursuing adjacencies by steps from the core



Steps away from the core







Albemarle's Core is Critical to a Successful Strategy of Expanding Into Adjacent Markets

Albemarle is not dependent on any single franchise customer to provide the majority of profits.

A diverse group of products and services drives profitability.

Albemarle's Core

No single asset's production capacity constitutes a majority of the company's output.

No single technology drives a disproportionate share of revenues or profits.







The Intersection of two Core Capabilities Drives our Competitive Advantage

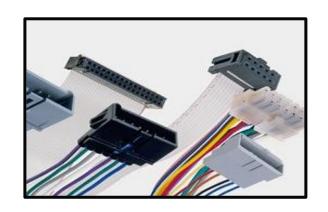
Chemical process innovation

Differentiated technology capabilities to bring complex products to market quicker than others, often utilizing innovative processes that bring cost and quality advantages



Strategic product management

Differentiated capability to understand market dynamics and customer performance requirements in order to execute product strategies

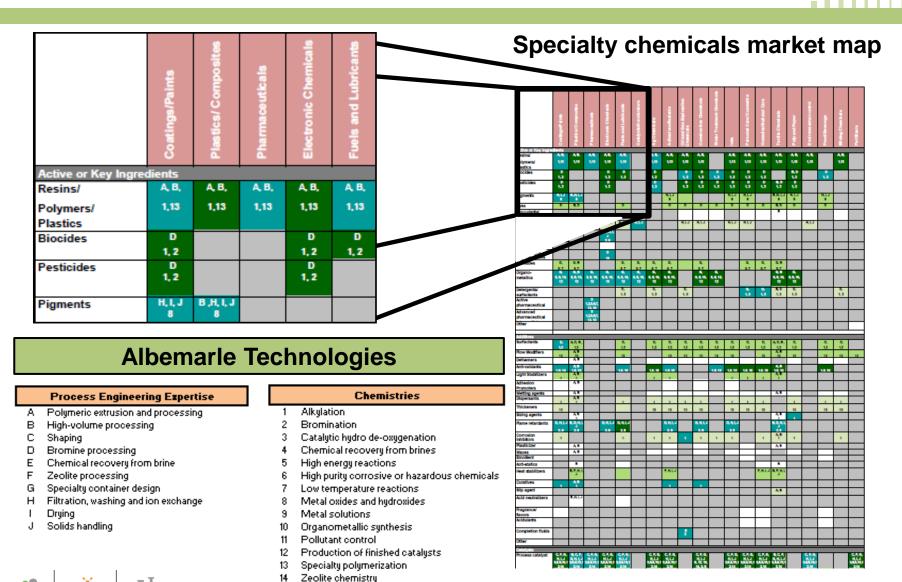








Albemarle Uses its Technology Platform to Prioritize Opportunities That fit our Core Capabilities









Today, Albemarle is Working on Adjacency Opportunities With Potential 2015 Revenue of \$1 Billion

	Adjacency	2015 Revenue Potential (\$MM)	2011 Status	
	Ziegler-Natta Polyolefins	\$75 - \$100	Scale up & Commercialization	
	Electronic Organometallics	\$70 - \$90	Commercialization	
CATALYSTS	Single Site Catalysts \$75 - \$100 Coking Technology \$50 - \$75		Qualification & Scale-up Ideation	
	Specialty Zeolites	\$20 - \$40	Qualification	
	Initial Products in Green Armor	\$40 - \$80	Scale up & Commercialization	
POLYMER	Geographic Expansion in Mineral Flame Retardants	\$50 - \$75	Exploration	
SOLUTIONS	New Fire Safety Solutions for Wiring Board Connectors	[/] \$30 - \$50	Ideation & Qualification	
	New Mineral Fire Safety Solutions for Wire Cable	& \$50 - \$75	Ideation & Qualification	
	Food Safety	\$70 - \$80	Qualification & Commercialization	
FINIF	Lithium	\$50 - \$75	Pilot Plant	
FINE CHEMISTRY	Geographic Expansion for Fine Chemistry Services	\$25 - \$50	Exploration	
	Mercury Rmoval	\$125 - \$225	Qualification, Scale up & Commercialization	
«» I Y I II	Specialty Materials	\$65 - \$85	Ideation & Qualification	

Selective M&A will Allow Albemarle to Complete the Doubling of Our Business



Building Upon Albemarle's Base Technologies



Attractive Markets
That Allow Albemarle
to Utilize its Core
Capabilities



Macro Economic Trends:

Energy

Consumerism

Health & Nutrition

Transportation & Infrastructure

Safety & Security

Clean Air, Water & Fuel

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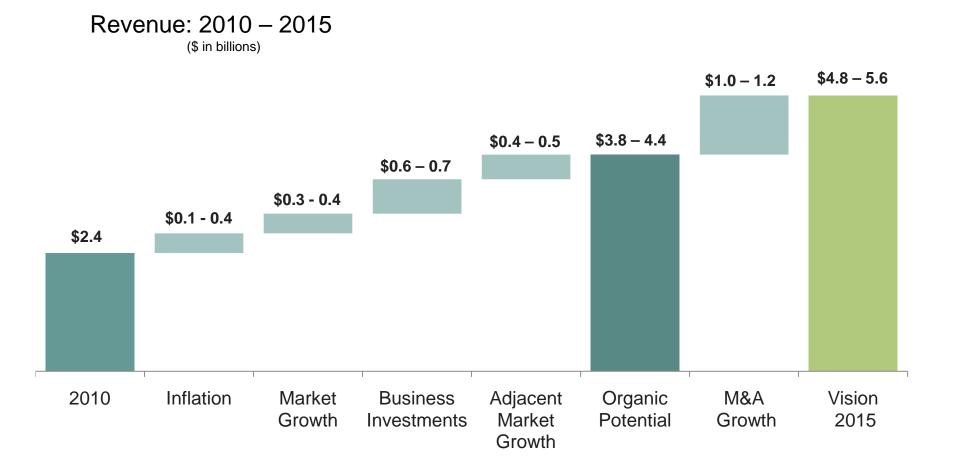
Globalization







Executing This Strategy Will Allow us to Achieve Vision 2015









Ambition, Execution, Value & Growth

John Steitz, Executive Vice President and Chief Operating Officer



Capitalizing on Albemarle's Strengths

Well-Positioned and Investing for Growth

Accelerating **Unlocking Value** Optimizing Intellectual in Established Growth in **Property Emerging Markets Products** Reputation for quality & • Growing presence in Leverage foundation technologies reliability emerging markets State-of-the-art manufacturing Strong and growing tech • Pursue opportunities in "niche" markets processes and technologies service support • Strong portfolio of well- Country-based teams that • Leader in chemical process develop customer innovation established products

relationships

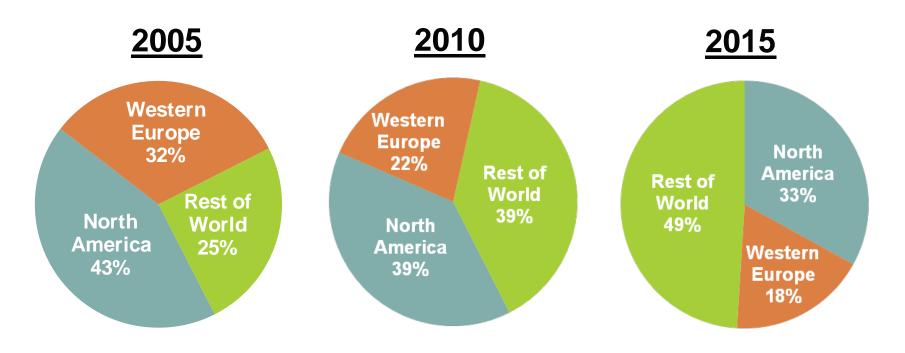






Forces of Globalization Play to our Strength

50% of Sales Outside NA & EU by 2015



Investing in Globalization







Asia:

Organization in Place to Support 2015 Growth Plans



2010

- ✓ Over 500 people focused on building Asia
- √ 4 key manufacturing assets

\$800 Million(est)

2015

- Expanding relationships with new world-class corporations
- Dramatic catalyst expansion in Korea
- ✓ Step-out expansion of exports to support electronics growth
- ✓ Leadership focused on growth



\$130 Million

Meaningful critical mass







Middle East/India: Second Only to Asia in Scope & Size



\$172 Million

<u>2015</u>

\$60 Million

- 2005
- √ Sales handled remotely from Europe

- 2010
- ✓ Regional office in Dubai
- Dramatic growth to support refining shift
- Established Saudi JV to support petrochemical growth

- ✓ Saudi JV operational; drives business leadership in Organometallics
- Ambition to expand asset base in Middle East in rational manner
- ✓ World class Jordan bromine base
- ✓ India asset base to build fine chemistry chassis into life sciences







Latin America:

Strategic; Future Growth Beyond Refinery Catalysts



2010

 ✓ Dramatic expansion of relationship across Latin America

- ✓ Established critical mass of employee base
- ✓ Announcement of HPC investment

\$125 Million(est)



- ✓ HPC Venture with Petrobras operational
- ✓ Increased technology exchange/ collaboration with Petrobras
- ✓ Brazil office creates regional hub and platform for growth
- Development of new core business in region
- Support for dramatic economic expansion in Brazil for World Cup and Olympic Games





√ FCCSA joint venture with Petrobras

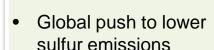




An Established Leader

Catalysts





- Increased specialization of polyolefins
- Cost effective solutions for renewable fuels
- Demand growth in developing regions

Polymer Solutions



- Continued demand for fire safety solutions
- Capturing growth in China
- Eco-friendly products focused on sustainability
- Expanding applications into coatings & construction

Fine Chemistry



- Sustained tightness in global bromine supply
- Rebound of global completion fluids demand
- Expansion of new bromine applications
- New crop protection and life science opportunities

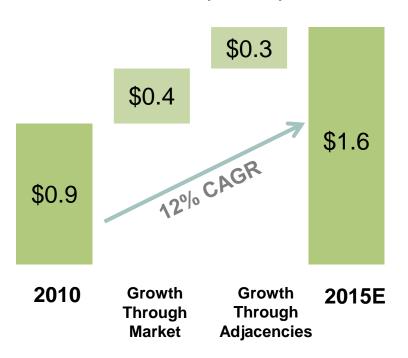


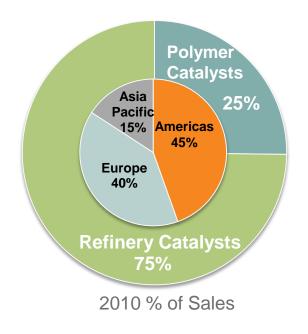




Catalysts Revenue Walk: 2010-2015

Revenue (Billions)





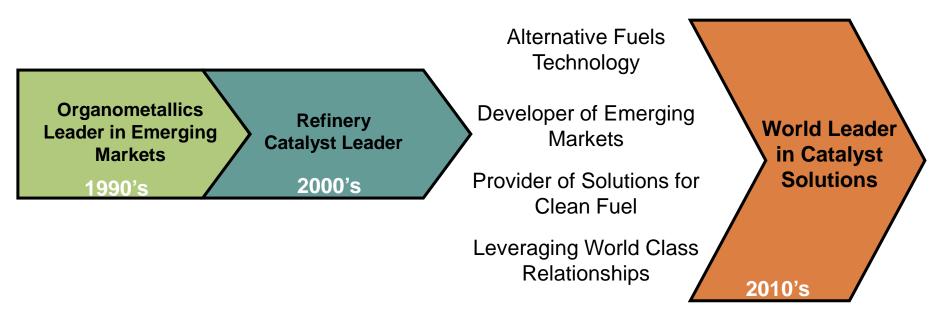
2015 Segment Income Margin Target \implies 28-32%







Become the World's Leading Catalyst Solution Provider



Strong Foundation Technology Continue to Ascend the Value Chain

Catalysis is Future Key to Environmentally Responsible Materials and Energy Development

Continuing on Course Sharper & Sharper Execution







And With a New Generation of Leaders...

























Driving Significant Sales Growth

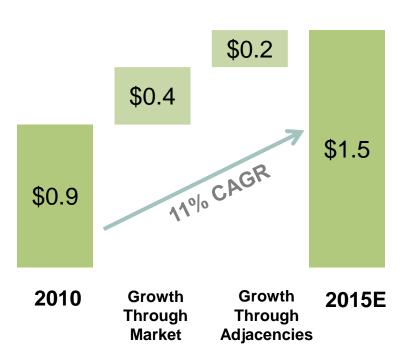






Polymer Solutions Revenue Walk: 2010-2015

Revenue (Billions)





2015 Segment Income Margin Target \implies 28-32%







Excel at Advancing Value of Basic Materials

Base Material

- Polyethylene
- Polypropylene
- Polybutene
- ABS
- Polycarbonate
- Polystyrene
- Base Oils
- Epoxy
- Nylon

ALB Polymer Solutions

- Bromine Flame Retardants
- Aluminum and Magnesium Flame
 - Retardants
- Phosphorus Flame Retardants
- Curatives
- Antioxidants

Mega Trends

- Fire Safety
- Security
- Transportation
- Infrastructure
- Electronics









Increasing Demand for Bromine-Based Fire Safety



Electrical Connectors

- Most complex and fragmented market
- CAGR of 6-7%



Electronic Enclosures

- High growth in TVs and office equip
- CAGR of 5-6%

Printed Wire Board

- High growth in communication servers
- GDP CAGR



Construction

- Bromine used in rigid insulation board
- Energy conservation (insulation) main driver
- GDP CAGR



Wire & Cable

- Infrastructure growth in developing countries
- CAGR of 4-5%



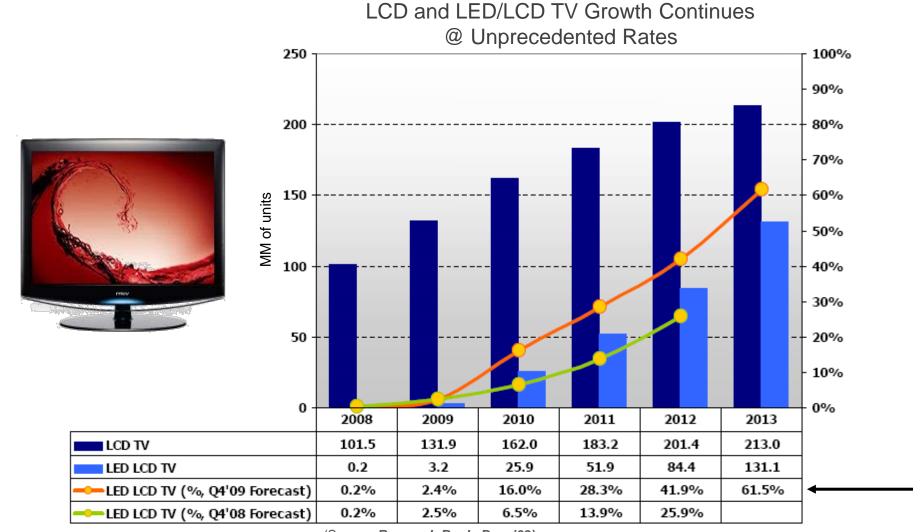








LCD and LED/LCD TV Growth Will Continue Beyond 2015...



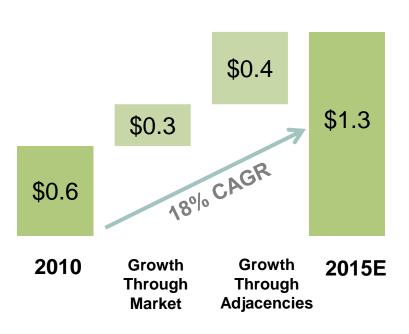


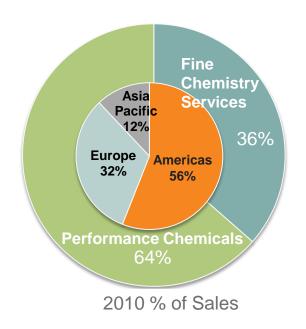




Fine Chemistry Revenue Walk: 2010-2015

Revenue (Billions)





2015 Segment Income Margin Target \implies 20-24%



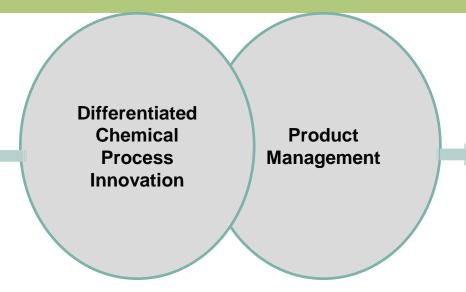




Fine Chemistry: Uniquely Positioned to Leverage Albemarle's Core Strengths

"The very essence of FCS"

Differentiated technology capabilities allow ALB to bring complex products to market quicker than others, often utilizing innovative processes that bring cost and quality advantages.



"We have driven the bromine franchise with this skill set"

Talented business managers have a differentiated capability to understand market dynamics and customer performance requirements in order to execute product strategies.

Successfully applying our strengths

Leveraging engineering expertise to innovate on processes, including:

- Adapting processes to fit existing assets
- Producing at scale more quickly than others
- Utilizing deep understanding of chemistries towards unique processes and market leading quality
- Improving processes to reduce costs



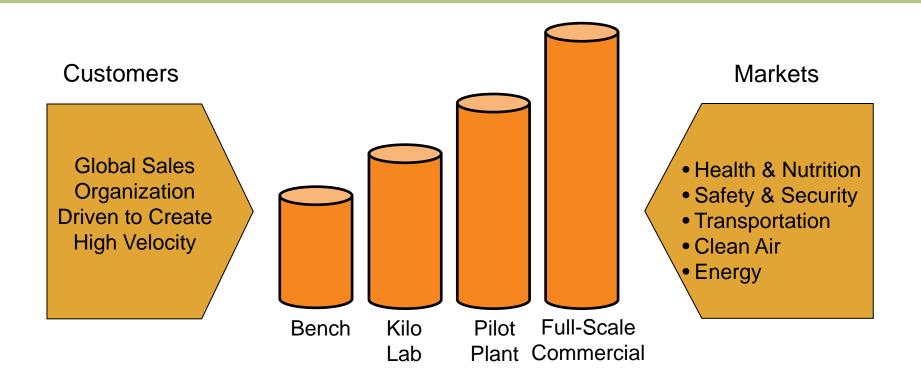




Analyzing markets, trends and position to develop winning strategies, including:

- Performing demand / supply analyses
- Executing pricing strategies & tactics
- Identifying actions required to drive profitability in-period and aligning resources to capture
- Leveraging partnerships to take advantage of market opportunities

Handling Today's Toughest Chemistry Challenges



Low-Cost, Fast and Reliable Asset Base

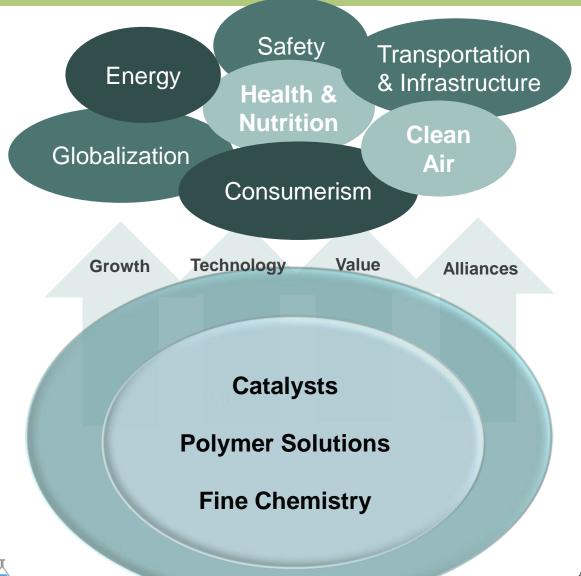
- Innovative chemistry to tackle challenging customer problems
- Flexible asset base allowing fast customer access to high-growth markets







Albemarle in Motion...Our Future has Begun









Financial Overview and M&A

Scott Tozier,
Senior Vice President and
Chief Financial Officer



Albemarle is Poised for Growth

- Q1 points to a strong 2011
- Vision 2015 outlook is based on sound fundamentals.
- Generating cash with no pension headwind
- Cash allocation will be disciplined
- M&A will deliver incremental earnings growth







Q1 Points to Strong 2011

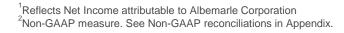
	Q1 2011 Year-Over-Year (in millions, except EPS)		Sequential	
Net Sales	\$ 697	↑ 20%	1 15%	
Segment Income ²	\$ 172	↑ 58%	↑ _{26%}	
Net Income ¹	\$ 107	↑ _{68%}	↑ _{25%}	
EBITDA ²	\$ 171	1 46%	1 22%	
Diluted EPS ²	\$ 1.15	1 55%	1 25%	
Free Cash Flow ²	\$ 67	179%	↓ 22%	

- Continued end-market growth; strength in all segments
- Strategic expansions start to benefit
- Raw material volatility in the short-term
- Focus on working capital to generate incremental cash









Vision 2015 Financial Outlook

	2010	2015 Organic		2015 incl M&A [*]	
Revenue	\$2.4b	\$3.8b	\$4.4b	\$4.8b	\$5.6b
5 yr CAGR	3%	10%	13%	15%	18%
Segment Income Margin	19%	22%	23%	22%	23%
EBITDA	\$0.5b	\$1.0b	\$1.1b	\$1.2b	\$1.4b
EPS	\$3.56	\$6.75	\$7.75	\$8.40	\$9.75
5 yr CAGR	24%	14%	17%	19%	22%
FCF	\$0.26b	\$0.57b	\$0.61b	\$0.66b	\$0.71b
5 yr CAGR	21%	17%	19%	21%	22%

*2015 outlook are estimates







Vision 2015 – Planning Framework

Double Digit Revenue Growth

- GDP growth in end markets: ~3%
- Organic investment and adjacency growth: 7-10%
- Sustained 2011 pricing gains

Double Digit EPS Growth

- Ability to cover increased raw material costs: 0-7% cost inflation
- Fixed Cost leverage on higher volumes: 4-6% growth in R&D & SG&A
- Interest cost flat at \$9-10M per year
- Tax rate flat at 25%

Double Digit Cash Flow Growth

- Effective use of working capital: <20%
- Capital investment at 5% of revenue
- Return on capital >20%

Disciplined Capital Allocation

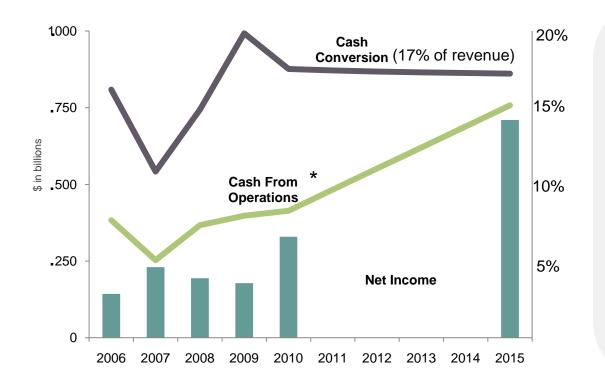
- Maintain investment grade credit rating
- Dividends growth: ~10-15%
- Share count flat
- Accretive M&A activity of ~\$1B







Generating Cash From Earnings



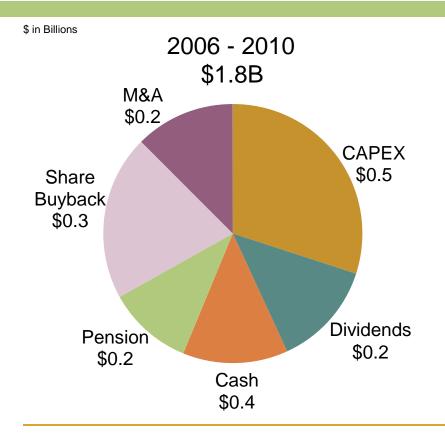
- Generating \$3B in cash 2011-2015
- 67% higher than prior 5 years
- Organic growth only
- Consistent with historical average cash conversion on revenue
- Working capital <20%
- No pension headwind through 2015

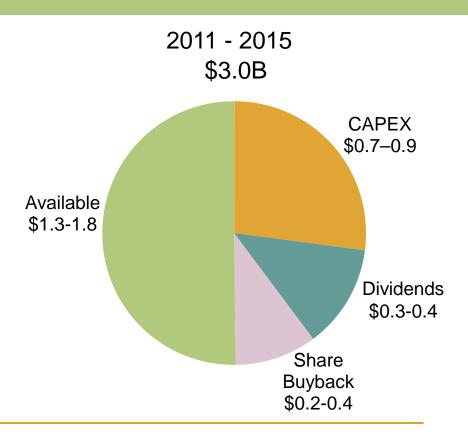






Disciplined Cash Allocation





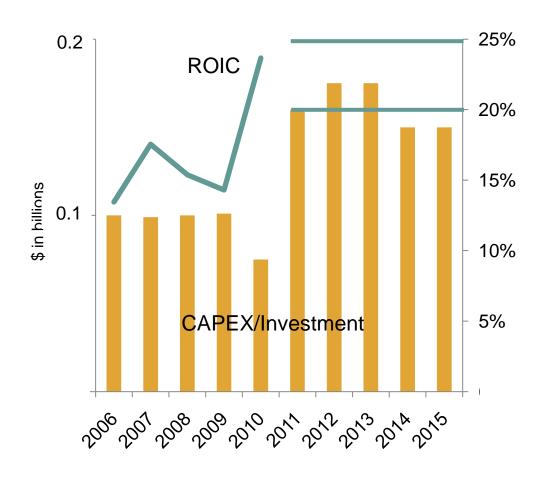
- Invest for organic growth
- CAPEX 5% of revenue
- Maintain investment grade credit
- Continued dividend growth ~10-15%
- Strategic M&A \$2B+
- Share buyback \$0.2 0.4B
- Pension fully funded through 2015







Organic Investments Deliver Above Historical Returns



- \$0.7-0.9B 2011-2015
 CAPEX and Investments
- Funds available for all current investments and adjacencies
- ROIC target at 20-25%







Thoughtful Approach to M&A



Focus

- Core business
- Nearby adjacencies
- Expanding technologies



Scope

- Geographic breadth
- Customer penetration
- Technology toolbox



Financial Criteria

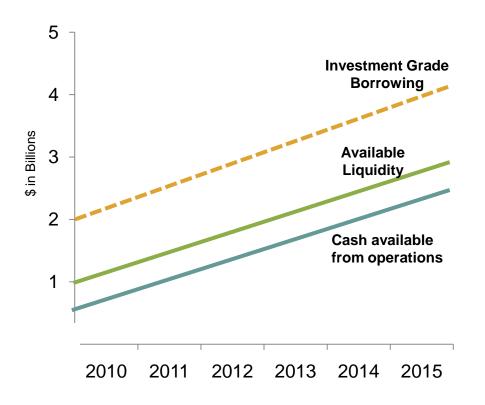
- Near-term accretion
- Retain margin strength
- Top line velocity improving
- Maintain investment grade rating







Cash Expectations for M&A



- M&A targets with quality earnings and cash flow
- Liquidity grows to ~\$2.5B in 2015
- Investment grade status will be maintained







Leadership Commitment to Deliver

We Will

- Invest in organic adjacencies
- Leverage fixed cost base
- Drive efficient working capital
- Grow revenues, EPS and cash flow

We Will Not

- Lose investment grade
- Reduce dividend
- Restrict accretive organic growth
- Destroy value through M&A







BROMINE: Albemarle's Element

Tony Parnell, Vice President Polymer Solutions



Bromine: The "LIQUID" Halogen; "Just Right" Reactivity







Chlorine gas





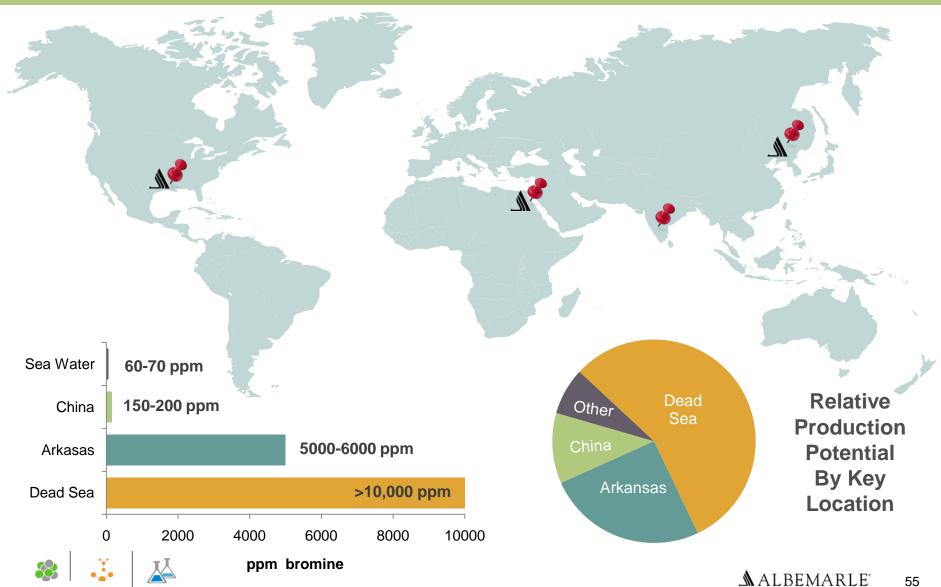
- Halogens are a family of HIGHLY reactive chemical elements
 - so reactive they cannot exist as a single atom, must have a mate!
- Bromine is the "liquid" halogen...less reactive than fluorine and chlorine but more so than lodine....bromine's reactivity is "just right" for hundreds of chemical reactions!
 - only 2 elements are liquid @ room temperature
- Bromine is 62nd most abundant element. It permeates the sea at low concentrationbut highly concentrated in certain areas of the world...let's see where...



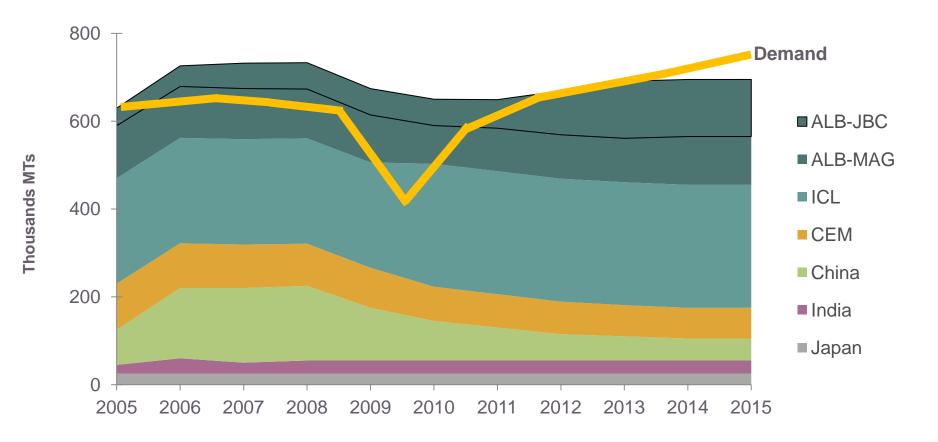




Bromine: Albemarle Commands the Geography



Bromine: Snapshot of Global Capacity vs. Demand



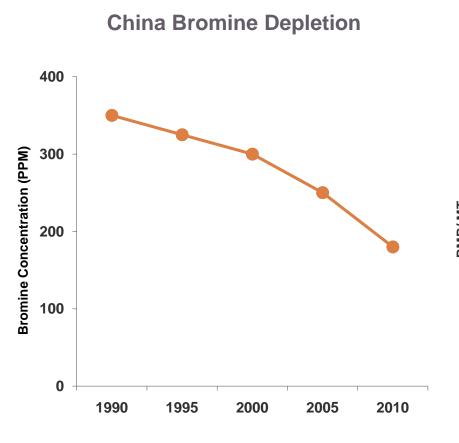




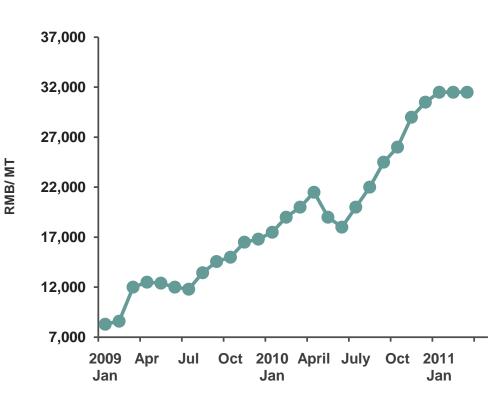




Bromine: China Source is Depleting



China Bromine Price



Source: management estimates and market research





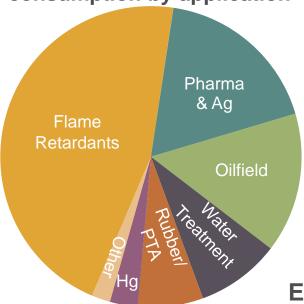


Albemarle's Bromine: The Cornerstone of Our Growth

2011 Global Market

(\$2.75B derivatives value)

Relative bromine consumption by application



Classic Markets:

- Brominated flame retardants for fire safety
- Completion fluids for oil drilling
- Ag/Pharma intermediates
- Bromobutyl rubber for tires, hoses, etc.

Emerging Markets:

- Mercury removal pollution control
- Biocides for Food Safety







Increasing Demand for Bromine-Based Fire Safety



Electrical Connectors

- Most complex and fragmented market
- CAGR of 6-7%



Electronic Enclosures

- High growth in TVs and office equip
- CAGR of 5-6%

Printed Wire Board

- High growth in communication servers
- GDP CAGR



Construction

- Bromine used in rigid insulation board
- Energy conservation (insulation) main driver
- GDP CAGR



Wire & Cable

- Infrastructure growth in developing countries
- CAGR of 4-5%



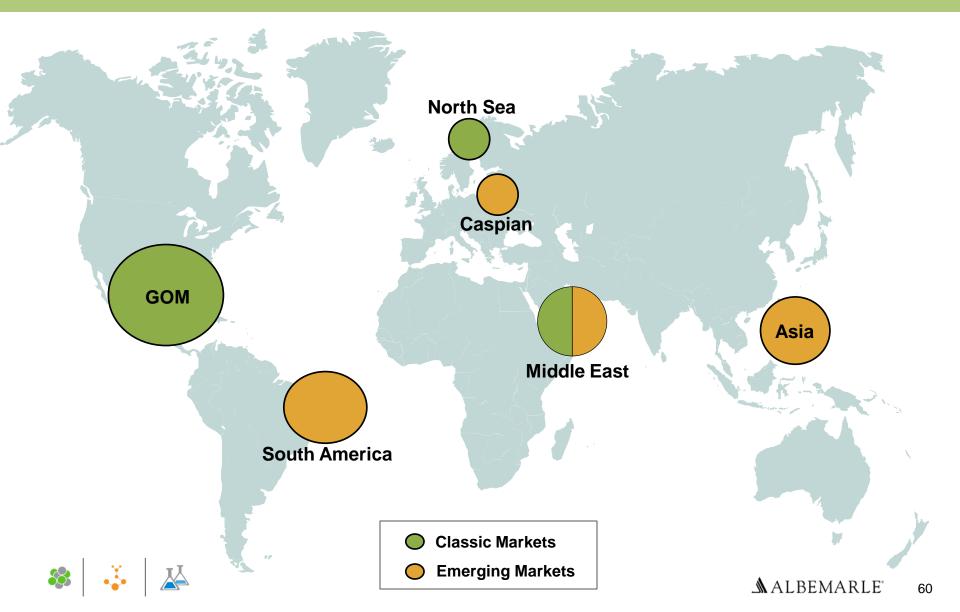






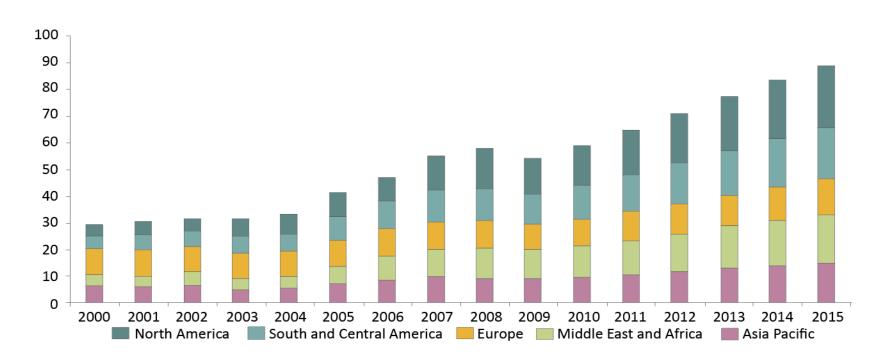


Higher Oil Prices Drive Increased Demand for Bromine-Based Well Completion Fluids



Offshore Drilling Will Resume its Prior CAGR...

Global Offshore Drilling Expenditure (\$B), 2005-2015



Source: GBI Research, Publication Date: May 2010







Multiple Regulatory Drivers Aimed at Controlling Mercury Emissions

US Utility

 Proposed MACT standards released 3/2011



US IRS Section 45

 Placed in service date extended to 12/2011

BRIC (esp China)

- High growth rate of coal-fired utilities
- UNEP goal is binding Hg agreement by 2013
- China MEP directive for 16 trial sites in 2011

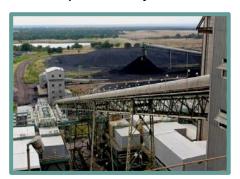
US Industrial Boilers

Compliance by 2/2014



US Cement

Compliance by 9/2013



- Main source of mercury emissions is burning of coal
- All U.S. coal dependent industry will be forced to lower emissions via regulations
- International concern on mercury emissions also increasing



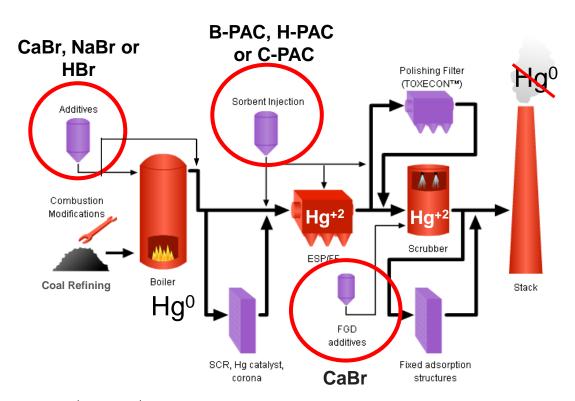




Bromine-Based Mercury Control: Most Timely and Cost Effective Approach to the Mercury Challenge

What is bromine doing and where can it be added?

Oxidizing Hg° to Hg⁺², which is more easily removed from the gases in the combustion stack by adsorption onto solids.



- Bromine-based chemicals (such as CaBr2) added to coal or to flue gas
- Bromine containing activated carbon sorbents and Hg can be absorbed onto Fly Ash surfaces
- Brominated AC injection can reduce Hg emissions from coalfired power plant by more than 90%







Bromine – Albemarle's Element

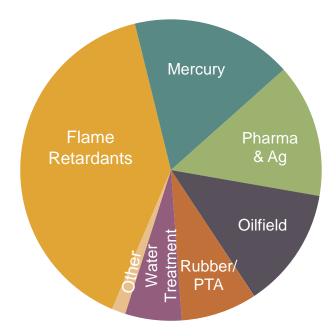
Well Positioned for Growth Because Albemarle......

- Holds a major position in three "high concentration" bromine locations
- Is the market and innovation leader in the major bromine application: Fire Safety
- Holds the #2 position in bromine Ag and Pharma markets
- Owns diverse and proprietary technology in mercury control
- Has logistical advantage in servicing oilfield markets (Jordan, NA and China)

2015 Global Market

(>\$4B derivatives value)

Relative bromine consumption by application









ORGANOMETALLICS: Albemarle's Foundation Chemistry

Amy Motto, Vice President Polyolefin and Chemical Catalysts



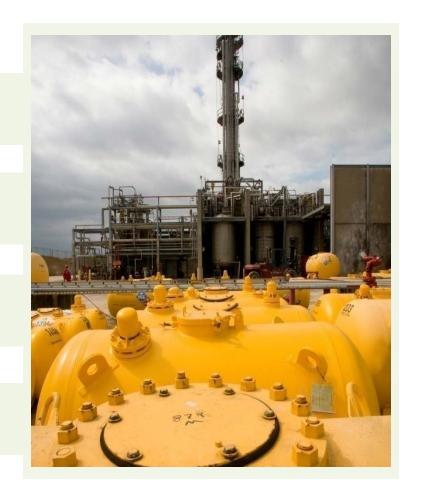
Key Ingredients in Diverse and Growing Markets

Albemarle is the global leader in Organometallics

Long history, continuous innovation and new investments

Expanding into developing regions and new markets

Multiple barriers to entry due to complex chemistry and handling

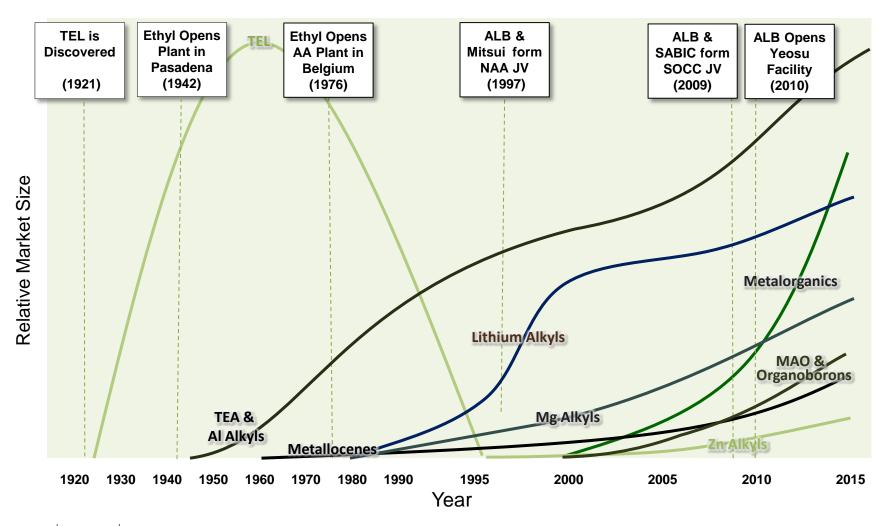








Albemarle Built its Current Polyolefin Catalyst Business on the Strength of its Innovative Chemistries









Albemarle's Organometallics Have a Global Footprint

Existing Facilities

Baton Rouge, LA

Pasadena, TX

Orangeburg, SC

Feluy, Belgium

Osaka, Japan (JV)

Nanjing, China

New Facilities

Jubail, KSA (JV)

Yeosu, Korea

Legend



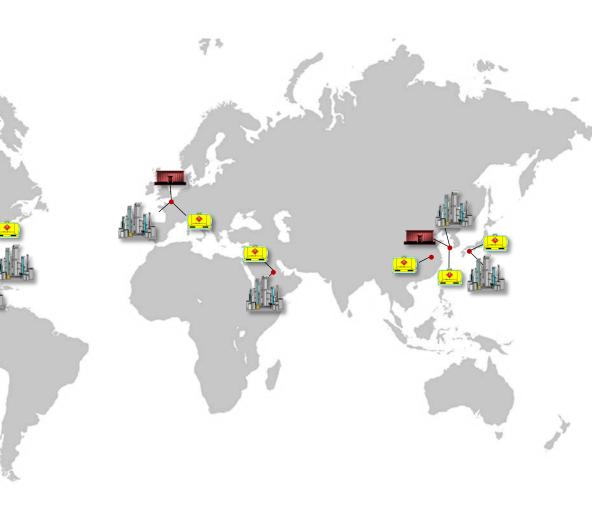
R&D Facility











Major Growth Markets for Organometallics





- Opto electronics: LED
- Photo Voltaic: solar panels



Polyolefin Catalysts

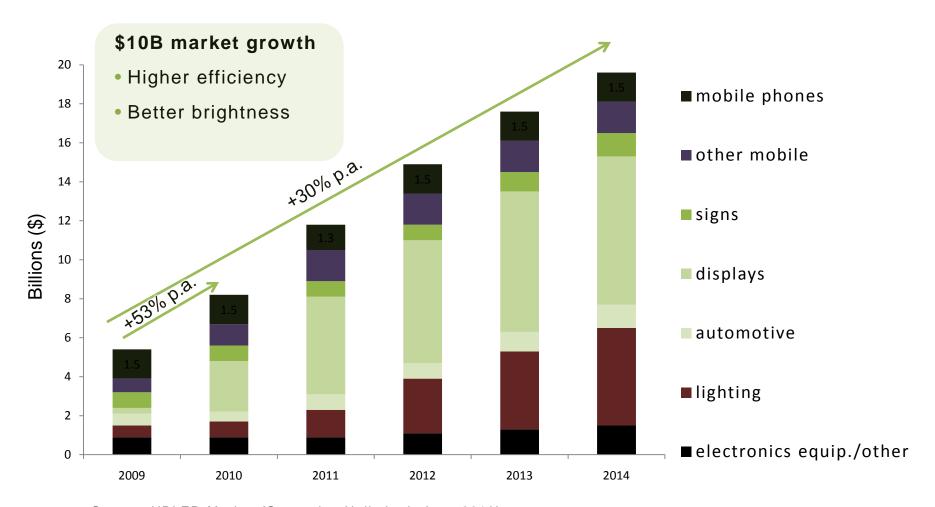
- Co-catalysts
- Single Site
- Ziegler-Natta







Electronics: High Brightness Light Emitting Diode (HBLED)











Electronics: HBLED Technology Depends on Organometallics

Albemarle launches **Pure Growth™** line in 2010

Family of ultra high purity, 99.9999% organometallics

- TriMethyl Aluminum (TMA)
- TriMethyl Gallium (TMG)
- TriEthyl Gallium (TEG)
- TriMethyl Indium (TMI)

Investing in Pure GrowthTM Production

- Baton Rouge, LA
- Orangeburg, SC
- Pasadena, TX
- Yeosu, Korea

Albemarle is integrated in the basic building blocks that service this sector.

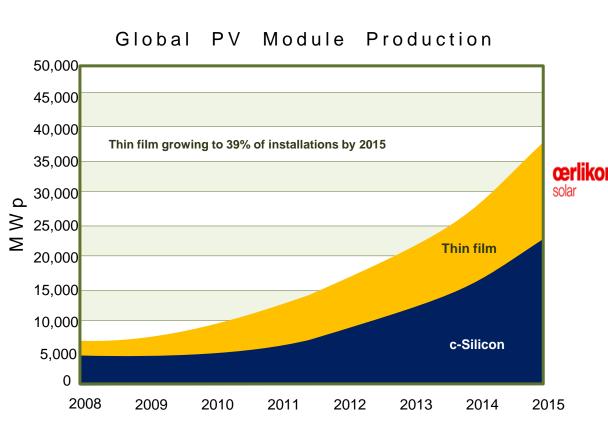








Electronics: Photo Voltaic Technology Dependent on Organometallics



Albemarle is integrated in the basic building blocks that service this sector

Thin Film

- œrlikon Amorphous Silicon uses DiEthylZinc (DEZ)
 - Developing technologies likely to use Organometallics such as CIGS and Organo Photovoltic

Crystalline Silicon uses TEA

Source: Linx-AEI Base-Case Market Forecast - PV Group







Growth Markets for Organometallics





- Opto electronics: LED
- Photo Voltaic: solar panels



Polyolefin Catalysts

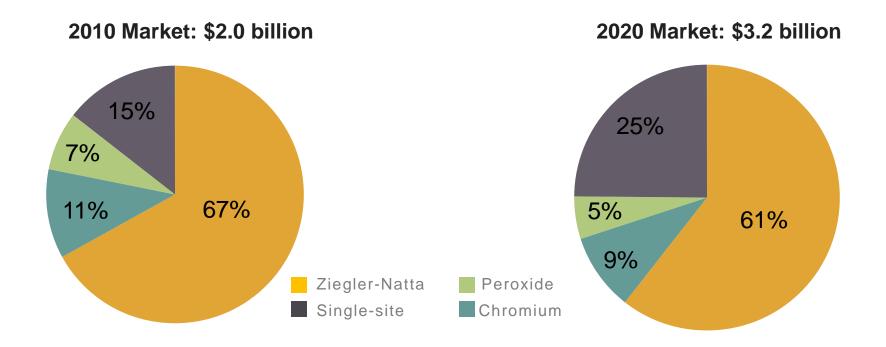
- Co-catalysts
- •Single Site
- •Ziegler-Natta







Polyolefin Catalysts



Polyolefins Represent the Largest Commodity Chemicals in the World

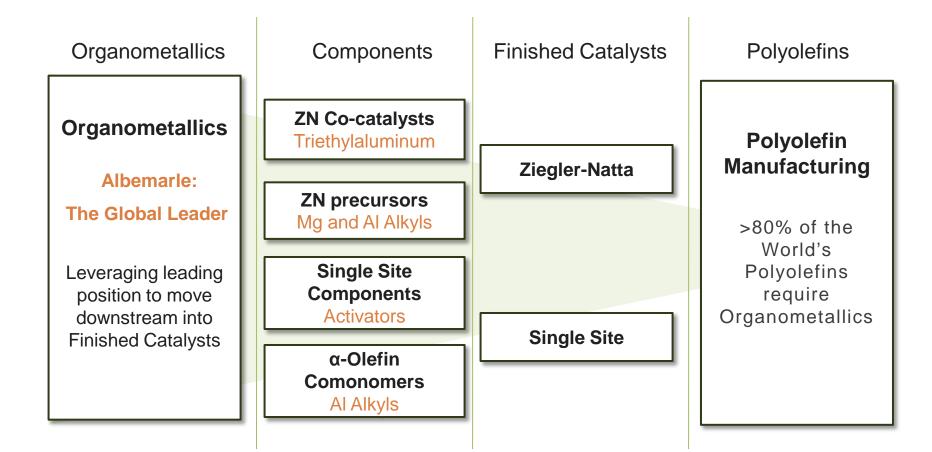
Source: CMAI, MAACK







Albemarle Organometallics Play Key Role in Polymerization



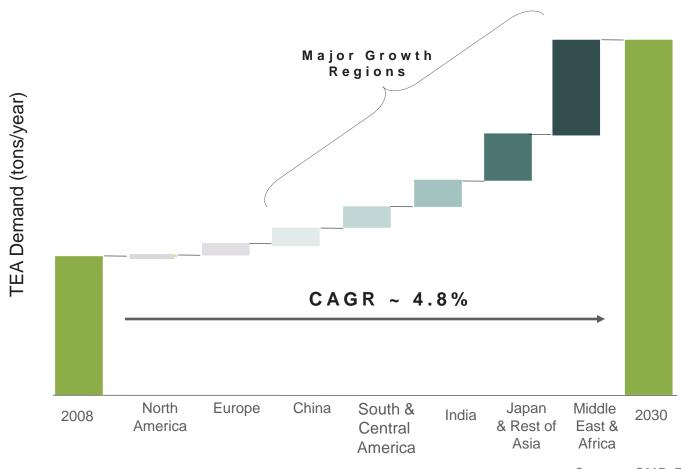






Co-catalyst –TEA: Investing to Lead in Developing Markets

ALB addressing ME growth by JV project with Sabic









Source: CMR Feasibility Study

Albemarle in Ziegler-Natta Polyethylene Catalysts

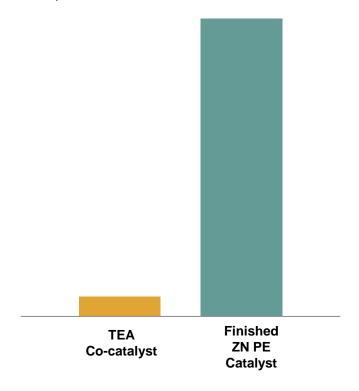
Albemarle begins shift from components supplier to finished catalysts supplier building upon our strong organometallics leadership

Component vs. Finished Catalyst \$ Value / MT PE resin

Advantage[™] ZN PE Catalysts

- AdvantageTM LL series for solution processes
- Advantage[™] HD series for slurry processes











Delivering Innovative Technology for Single Site Finished Catalysts

Components:

Experience with >100
 Metallocenes

Albemarle: The Global Leader

Activators:

Methyl Aluminoxane (MAO)

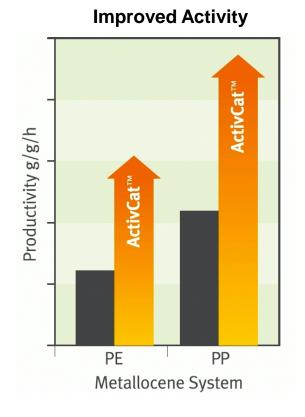
Organoborons

Albemarle: The Global Leader

Finished Single Site Catalysts:

- Custom SSC
- ActivCat TM

Transformational Productivity Improvements with ActivCatTM Technology









Expanding to Meet These Growth Needs

2012

Building Jubail, KSA

SOCC JV to produce TEA

Expanding Baton Rouge

• Single Site Catalysts 2011

Ziegler Natta Catalysts 2012

Metal Organics on going

Building Yeosu, Korea

Single Site Catalysts
 2012

Metal Organics 2012

Expanding Orangeburg & Pasadena

• Organometallics 2012



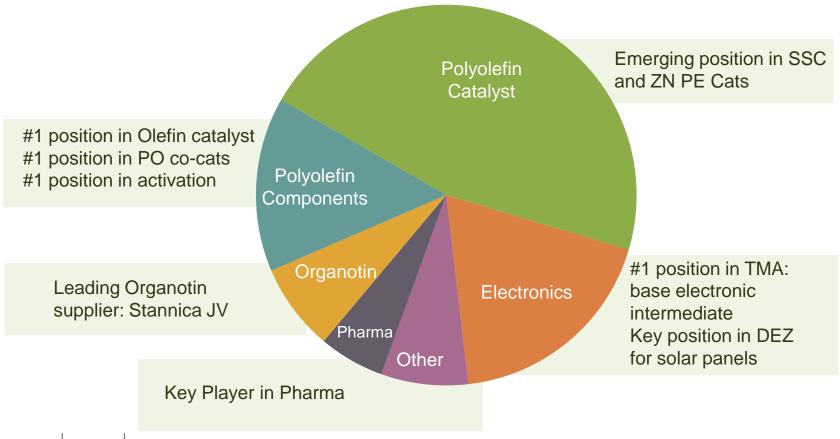






Organometallics: Major Growth Component of Vision 2015

Market for Organometallics will Exceed \$5B in 2015









Step-Out Technologies

Dave Clary,
Vice President and
Chief Sustainability Officer



Albemarle's Technologies

High-energy reactions

Chemical recovery from brine

Specialty polymerizations

Metal solutions

... and many others



Albemarle's palette of chemistry and engineering technologies allows us to create many possibilities







Albemarle's Technology Sweet Spot

- We own the tough problems
 - Complex or multi-step processes
 - Products that are dangerous to handle or make
- We create innovative manufacturing processes
 - Getting complex products to market quickly
 - Cost advantages
 - Quality advantages
- Our customers value our products for what they do, not what they are
 - Tight integration with customers and Albemarle's business groups during development is essential

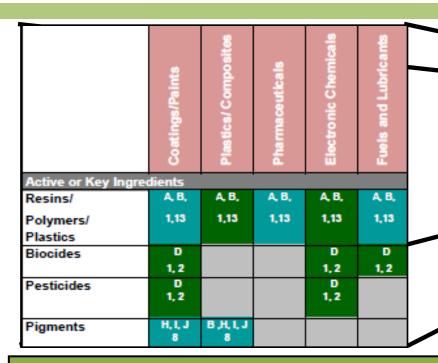








Technology Platform is Used to Prioritize Opportunities



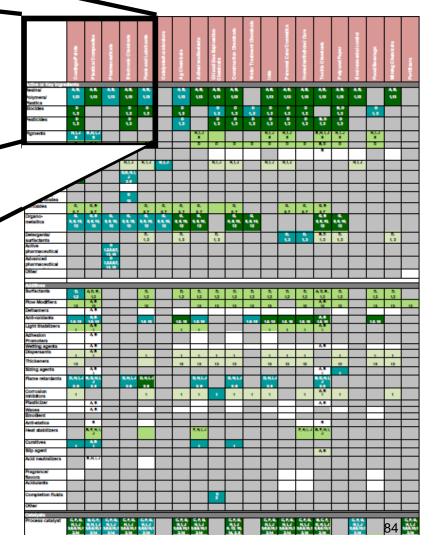
ALB technologies

Process Engineering Expertise

- A Polymeric extrusion and processing
- B High-volume processing
- C Shaping
- D Bromine processing
- E Chemical recovery from brine
- F Zeolite processing
- G Specialty container design
- H Filtration, washing and ion exchange
- I Drying
- J Solids handling

Chemistries

- Alkylation
- 2 Bromination
- 3 Catalytic hydro de-oxygenation
- 4 Chemical recovery from brines
- 5 High energy reactions
- 6 High purity corrosive or hazardous chemicals
- 7 Low temperature reactions
- 8 Metal oxides and hydroxides
- 9 Metal solutions
- 10 Organometallic synthesis
- 11 Pollutant control
- 12 Production of finished catalysts
- 13 Specialty polymerization
- 14 Zeolite chemistry



Specialty chemicals market map







Examples of Current Opportunities Built on Selected Technology Platforms

Finished Catalysts & Organometallics

Metal Oxides & Hydroxides

Bromination & Bromine Processing

Organometallics for Electronics

New Mineral FRs

Mercury Removal

Single Site Catalysts

Catalytic Pyrolysis

Fire Safe Polyurea

New Chemical Catalysts

Specialty Zeolites

Polymeric Flame Retardants

Ziegler-Natta PE Catalysts Heterogeneous FAME Catalysts

Food Safety

Syngas Downstream Conversion

Hydrotalcites

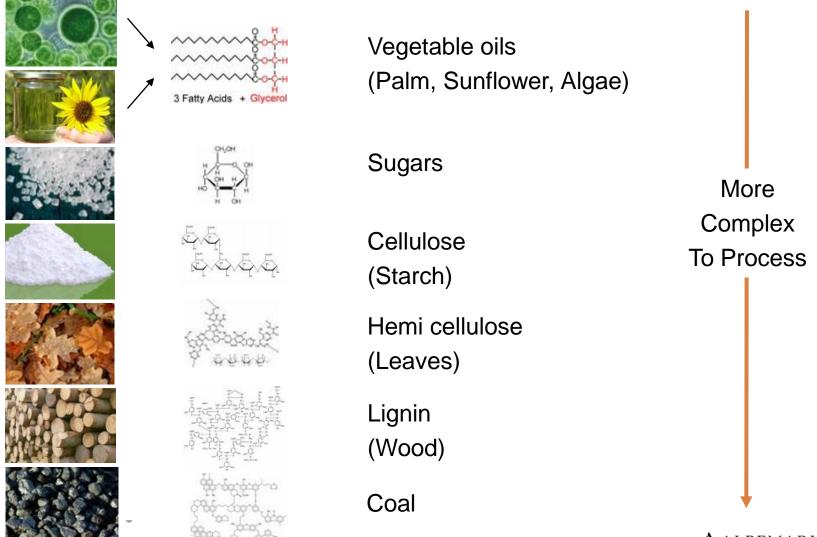
Lithium



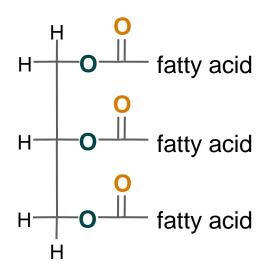


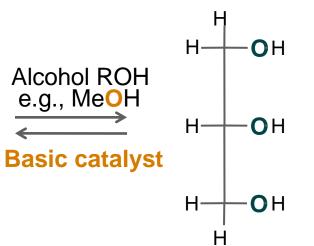


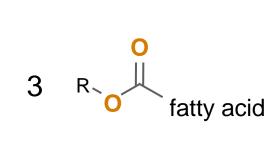
Biodiesel From Vegetable Oils



Fatty Acid Methyl Ester (FAME)



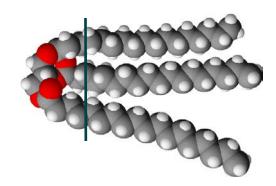




Triglycerides



Glycerol/glycerine



FAME = biodiesel











The FAME Market Today

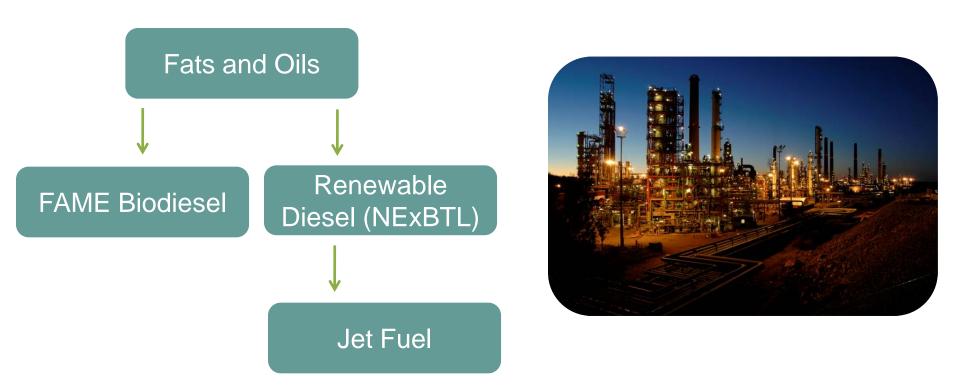
- Several issues with today's commercial process:
 - Catalyst cost
 - Purity requirements for feedstock
 - Product clean-up requirements
 - Limitation to methanol
- We saw the potential to apply our know-how to solve these problems
- Our solution was to replace the standard homogenous catalyst (NaOMe) with a heterogeneous catalyst







Another Possibility From our Technology Palette... Solid Catalysts for FAME Biodiesel



Albemarle supplies catalyst for NExBTL, helping make us the world's largest producer of heterogeneous catalysts for biofuels production

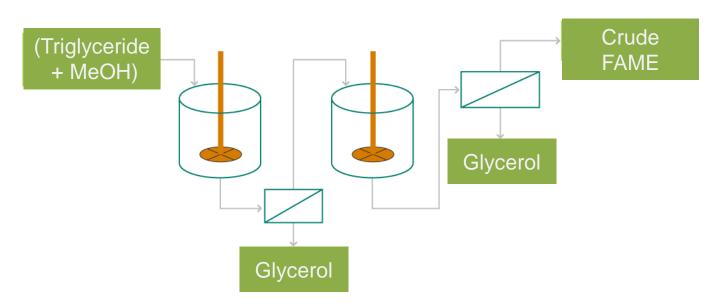






Albemarle's Technology Solution

- Solid catalyst TS-15 developed
- ~30% reduction of cost-in-use versus current standard catalyst
- Gives customers the ability to process lower quality feedstocks or use ethanol instead of methanol
- Retrofits of existing FAME plants need only modest capital

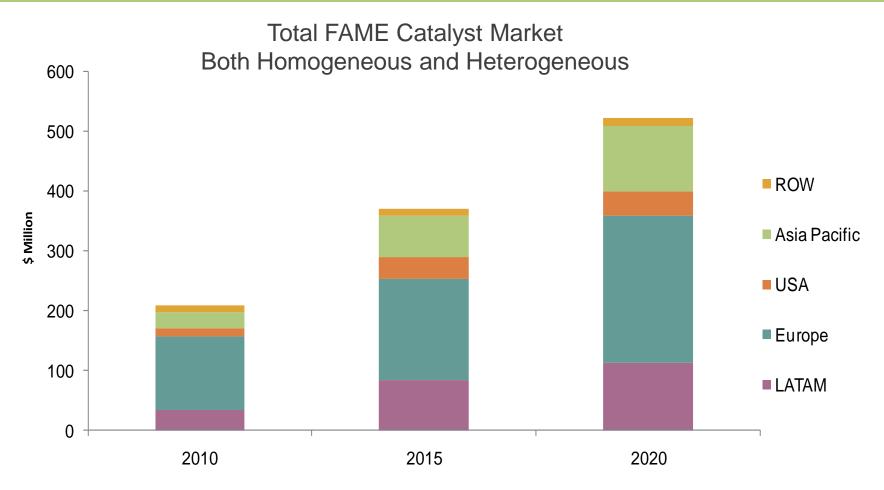








Albemarle's Technologies



Source: Hart Energy Study 2010 for total veg. oil market, translated to catalyst revenue

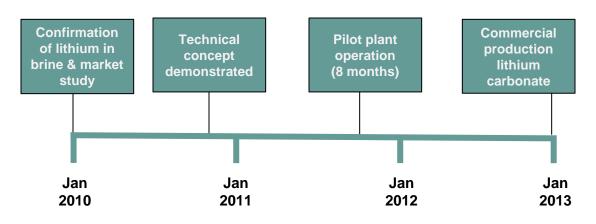






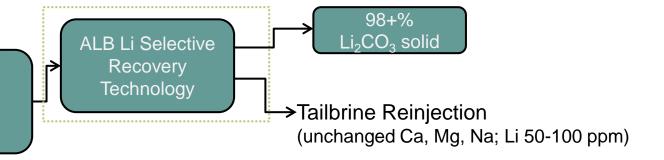
Another Opportunity Using our Technologies... Lithium From our Arkansas Brine





Tailbrine (For Reinjection)

- Ca: 30,000 ppm
- Na: 60,000 ppm
- Mg: 3,000 ppm
- Li: 100-300 ppm









An Attractive Opportunity...









Attractive Markets

- \$800+ million globally with expected 10% global CAGR due to increased demand for batteries in electrical vehicles
- Industry enjoying very good profit margins

Competitors

- Three large brinebased competitors in South America have 70% market share
- Smaller, ore-based suppliers have high costs

Customers

- U.S., Japan and Korea are 50% of global market today
- U.S. imports 75% of lithium needs; Japan and Korea import 100% of lithium needs

Our Criteria

- We must approach market leaders' cost position
- Ability to offer security of supply to customers is a plus







...Which Opens the Door to Other Markets

PRODUCTS

SELECTED MARKETS

Lithium **Carbonate**

80,000 MT/Yr



Li-Ion-Batteries



Glass & Ceramics



Aluminum

Lithium **Hydroxide**

9,000 MT/Yr



Grease



Li-Ion-Batteries

Lithium **Specialties**

6,000 MT/Yr



Absorption Chillers



Agrochemicals



Li-Ion-Batteries

Lithium Metal & Butyl Lithium

1,000 MT/Yr



Elastomers



Lithium Batteries



Pharmaceuticals



Al - alloys







... And Creates a Solid Foundation for Growth

Our structured approach to growth:

... based on a tight fit with our technology base

... giving us speed-to-market and cost advantages

... continuously improving our success rate

Every step broadens our technology foundation and introduces us to new market opportunities