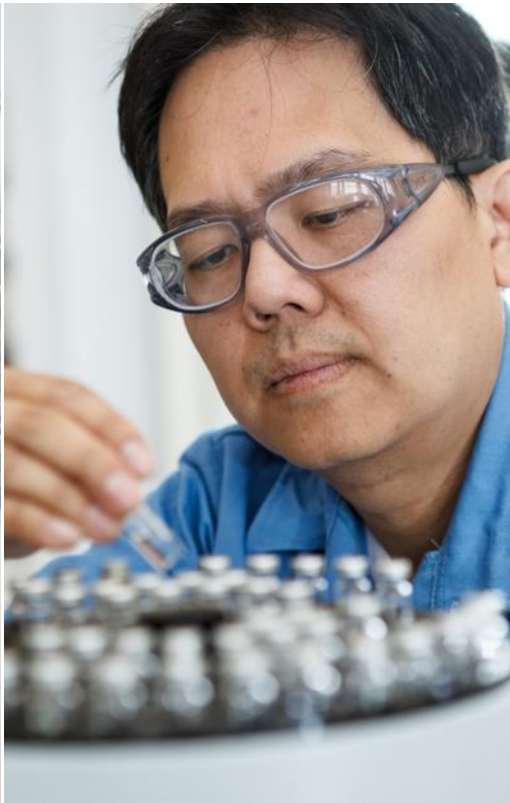
Investor Day

Value-Driven Growth

New York Stock Exchange
April 5, 2017

Building for the Future



Agenda

11:30 – 12:30	Lunch	Management Team
12:30	Welcome and Agenda	Dave Kinney
12:40	Value-Driven Growth	Bob Patel
1:15	Value-Driven Growth	Thomas Aebischer
1:45	Q&A	Bob Patel and Thomas Aebischer
2:00	Break	
2:15	Olefins and Polyolefins – Overview	Bob Patel
2:30	Olefins and Polyolefins - Americas	Paul Augustowski
2:55	Olefins and Polyolefins - Europe, Asia, International (EAI)	Richard Roudeix
3:20	Intermediates & Derivatives	Jim Guilfoyle
3:45	Refining, Manufacturing, Projects	Dan Coombs
4:10	Concluding Remarks	Bob Patel
4:30	Q&A	Management Team
5:00	Reception: Cocktails/Hors d'oeuvres	Management Team

Cautionary Statement

The statements in this presentation relating to matters that are not historical facts are forward-looking statements. These forward-looking statements are based upon assumptions of management which are believed to be reasonable at the time made and are subject to significant risks and uncertainties. Actual results could differ materially based on factors including, but not limited to, the business cyclicality of the chemical, polymers and refining industries; the availability, cost and price volatility of raw materials and utilities, particularly the cost of oil, natural gas, and associated natural gas liquids; competitive product and pricing pressures; labor conditions; our ability to attract and retain key personnel; operating interruptions (including leaks, explosions, fires, weather-related incidents, mechanical failure, unscheduled downtime, supplier disruptions, labor shortages, strikes, work stoppages or other labor difficulties, transportation interruptions, spills and releases and other environmental risks); the supply/demand balances for our and our joint ventures' products, and the related effects of industry production capacities and operating rates; our ability to achieve expected cost savings and other synergies; our ability to successfully execute projects and growth strategies; legal and environmental proceedings; tax rulings, consequences or proceedings; technological developments, and our ability to develop new products and process technologies; potential governmental regulatory actions; political unrest and terrorist acts; risks and uncertainties posed by international operations, including foreign currency fluctuations; and our ability to comply with debt covenants and service our debt. Additional factors that could cause results to differ materially from those described in the forward-looking statements can be found in the "Risk Factors" section of our Form 10-K for the year ended December 31, 2016, which can be found at www.lyondellbasell.com on the Investor Relations page and on the Securities and Exchange Commission's website at www.sec.gov.

The illustrative results or returns of growth projects are not in any way intended to be, nor should they be taken as, indicators or guarantees of performance. The assumptions on which they are based are not projections and do not necessarily represent the Company's expectations and future performance. You should not rely on illustrated results or returns or these assumptions as being indicative of our future results or returns.

This presentation contains time sensitive information that is accurate only as of the date hereof. Information contained in this presentation is unaudited and is subject to change. We undertake no obligation to update the information presented herein except as required by law.

Reconciliations for our non-GAAP measures can be found in the Appendix to this presentation or on our website at www.lyb.com/investorrelations

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Investor Day

Value-Driven Growth

Bob Patel

Chief Executive Officer

New York Stock Exchange
April 5, 2017

Building for the Future

LyondellBasell Today

Financials

$29.2 B
2016 Revenue

$6.6 B
2016 EBITDA Ex. LCM (1)

$9.20
2016 Diluted EPS Ex. LCM

$3.4 B
2016 Free Cash Flow

Segments

Olefins & Polyolefins
Americas

Olefins & Polyolefins
Europe, Asia, International

Intermediates & Derivatives

Refining

Technology

Channelview, TX (Olefins Cracker)

Maasvlakte, NL (Propylene Oxide)

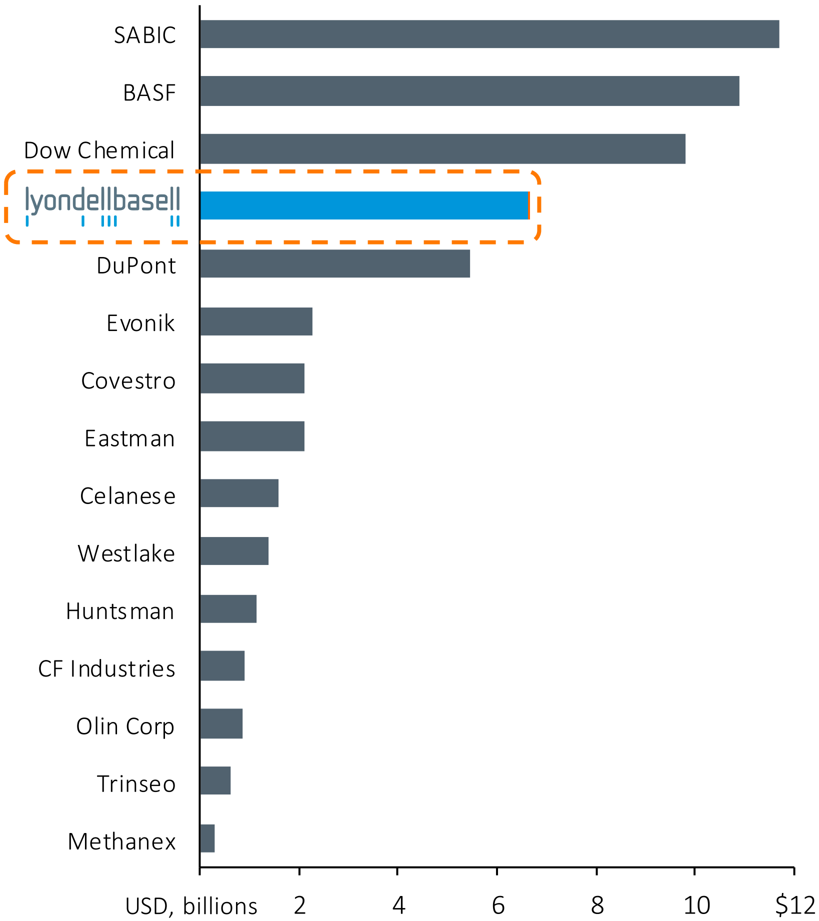
Houston, TX (Refinery)

Catalysts and Licensing

(1) LCM stands for "lower of cost or market." Further detail regarding LCM adjustments can be found in the Appendix.

Leading Scale and Market Positions

2016 EBITDA [1]



Global Market Positions [2]

Chemicals	Ethylene	#5
	Propylene	#6
	Propylene Oxide	#2
Polymers	Polyolefins (PE and PP)	#3
	Polypropylene	#2
	Polyethylene	#6
	Polypropylene Compounds	#1
Oxyfuels	MTBE and ETBE	#1
Technology and R&D	Polyolefins Licensing	#1

(1) LYB EBITDA is ex. LCM. LCM is denoted by the orange section of the LYB bar. Source for others: FactSet.
(2) Source: IHS, LYB. Reflects market positions of chemical-grade and polymer-grade propylene (not refinery-grade).

Significant Global Footprint

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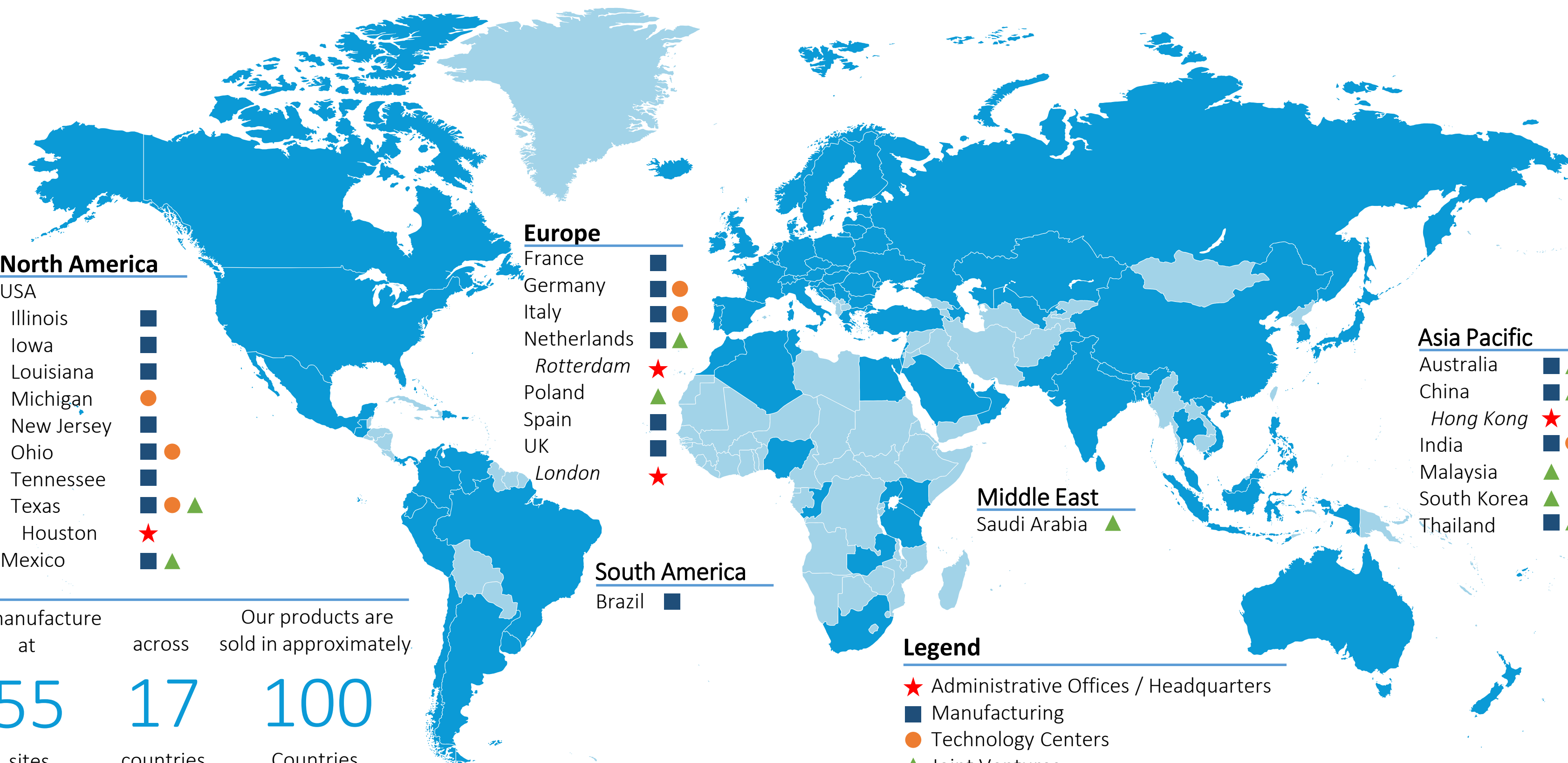


We manufacture at	across	Our products are sold in approximately
55	17	100
sites	countries	Countries *(shaded dark blue)*

More than half of our 13,000 employees are outside the U.S.

Experienced Team

Bob Patel

- Chief Executive Officer and Chairman of Management Board
- 29 years of petrochemical experience

Thomas Aebischer

- Executive Vice President, Chief Financial Officer, Member of Management Board
- 34 years of financial experience

Paul Augustowski

- Senior Vice President, Olefins & Polyolefins, Americas
- 35 years of petrochemical experience

Dan Coombs

- Executive Vice President, Global Manufacturing, Projects, Refining and Technology
- Member of Management Board
- 39 years of petrochemical experience

Jim Guilfoyle

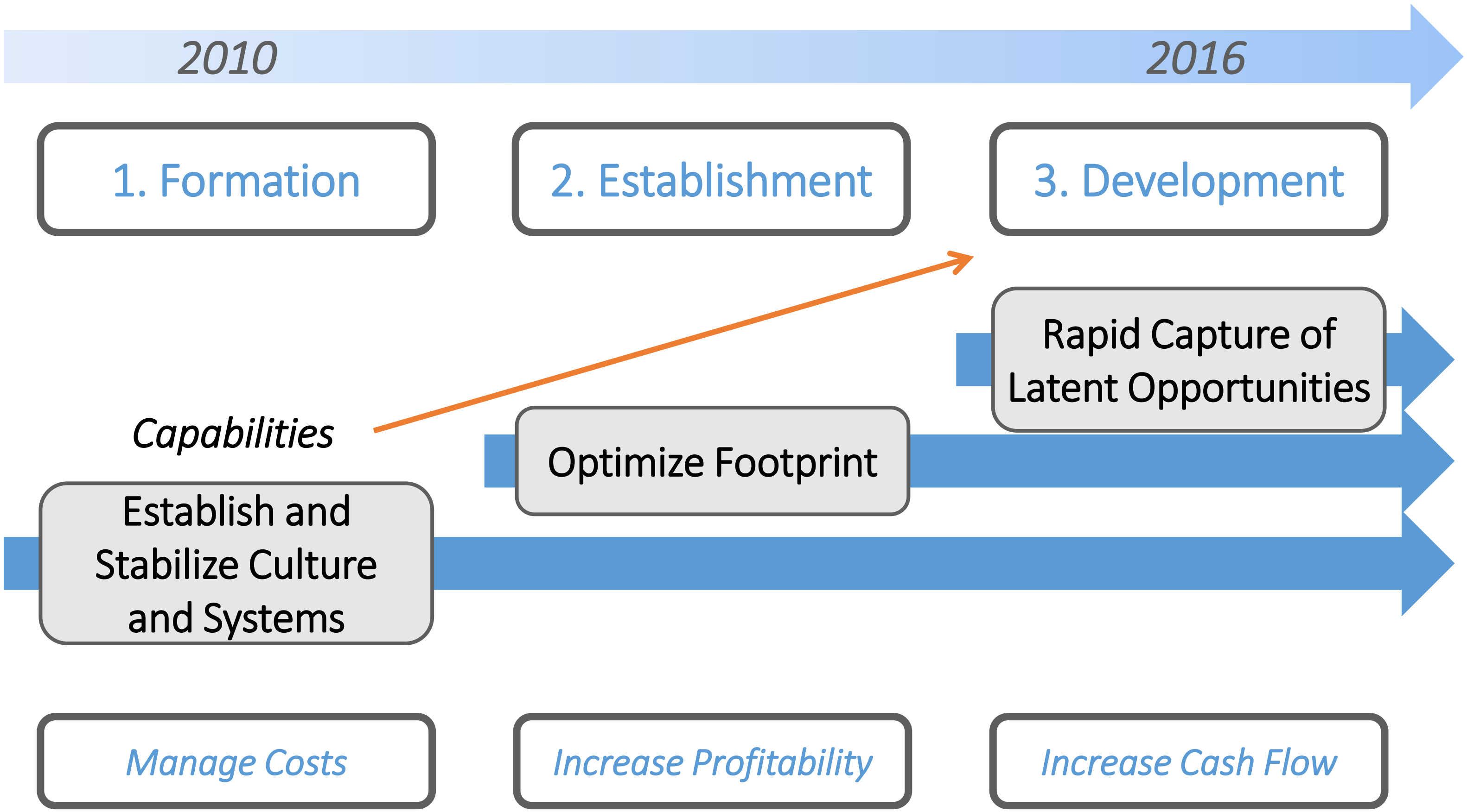
- Senior Vice President, Global Intermediates & Derivatives and Global Supply Chain
- Member of Management Board
- 24 years of petrochemical experience

Richard Roudeix

- Senior Vice President, Olefins & Polyolefins, Europe, Asia and International
- 30 years of petrochemical experience

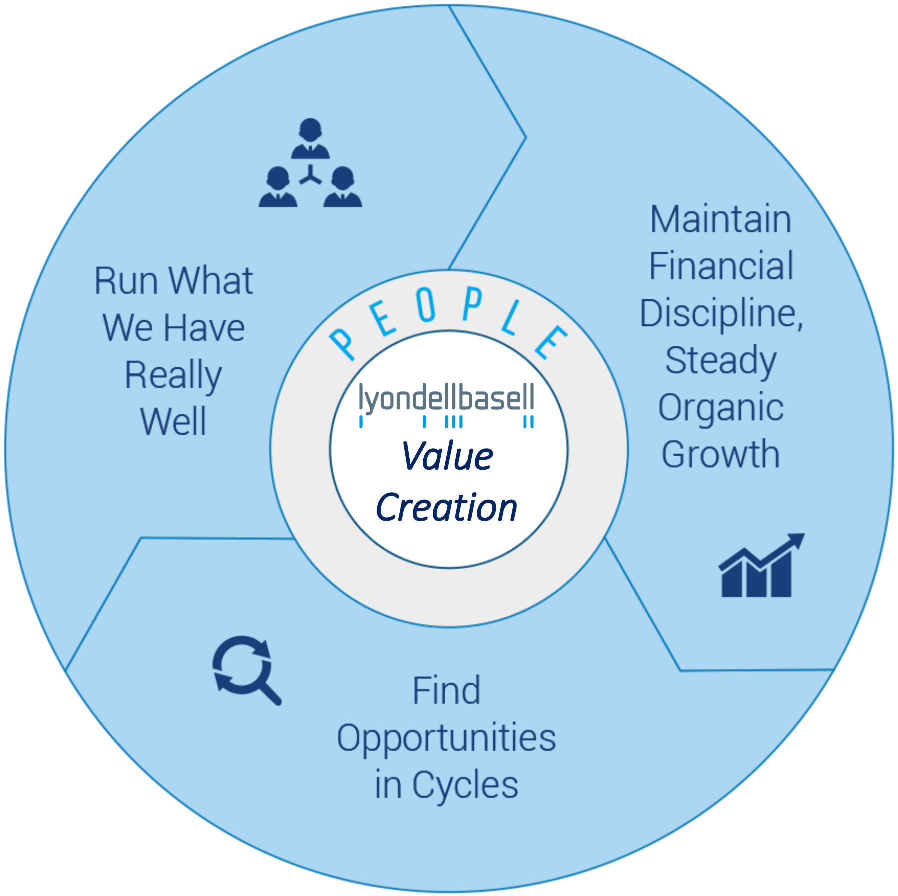
Over 190 years of relevant experience

LyondellBasell Followed a Methodical Path



Guided by a Clear and Value-Oriented Strategy

- Achieve Top Quartile **Operations**
- Practice Relentless **Cost Discipline**
- Prudent **Financial Stewardship**
- Pursue Profitable **Organic Growth**
- **Capture Opportunities** In Cycles



Focus on Safety
Drives Highly Reliable Operations

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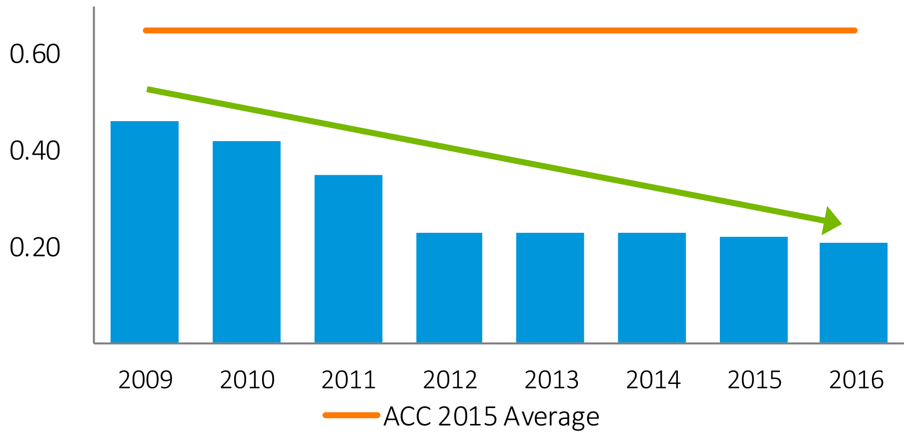
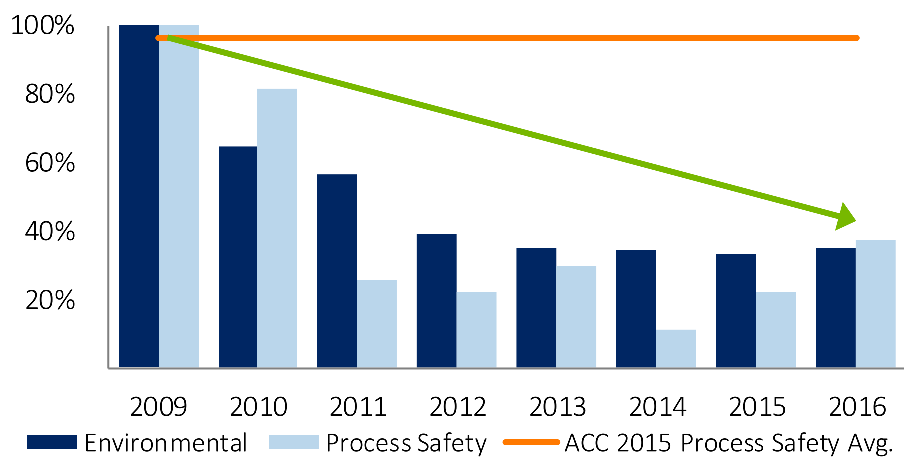
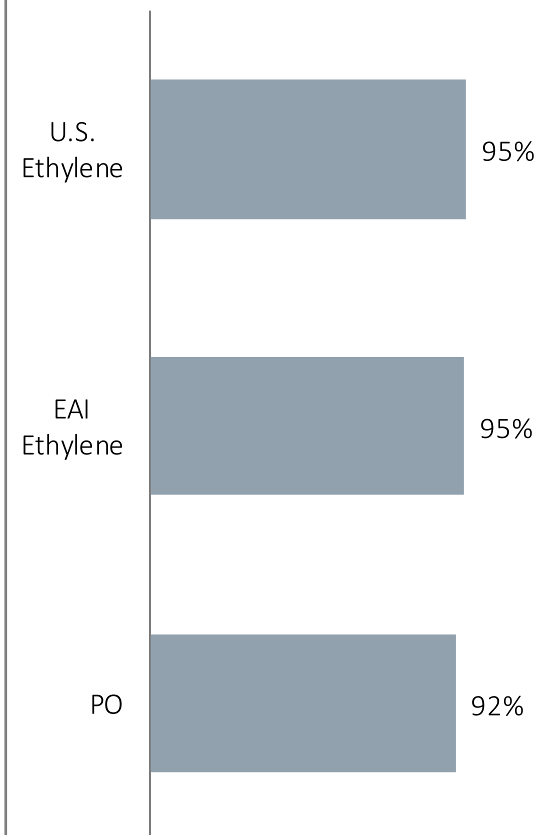
LYB
Total
Recordable
Incident Rate (1)



LYB
Indexed Process
Safety /
Environmental
Incidents



Strong Reliability
2016 Operating Rates (2)

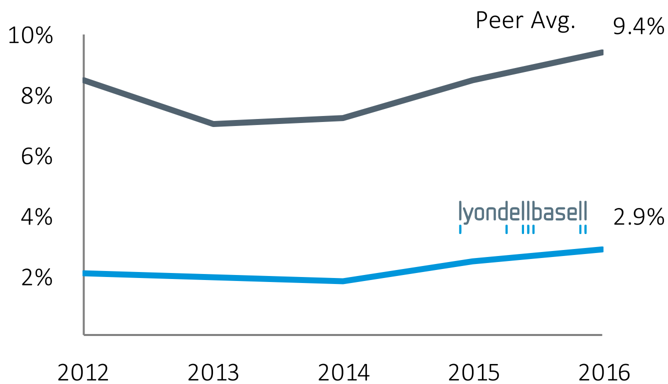


(1) Injuries per 200,000 hours. Includes employees and contractors. ACC is American Chemistry Council.
(2) Excludes the impact of turnarounds.

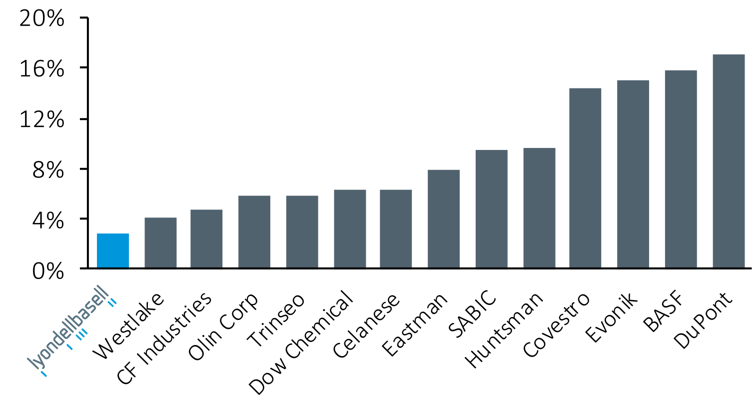
Strong Operations Coupled with Cost Discipline and Productivity

Lowest-Cost Producer

SG&A % of Revenue

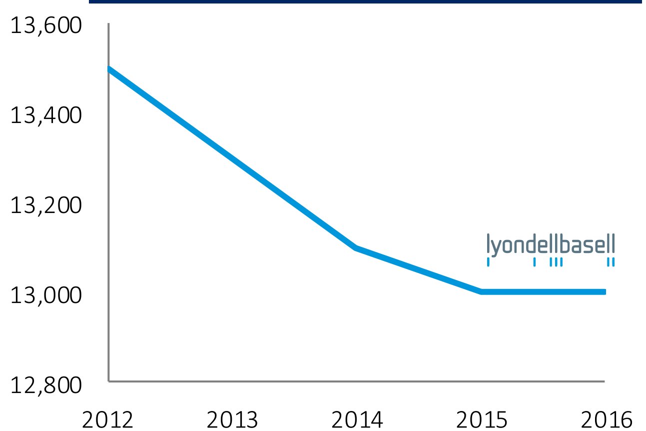


2016 SG&A % of Revenue

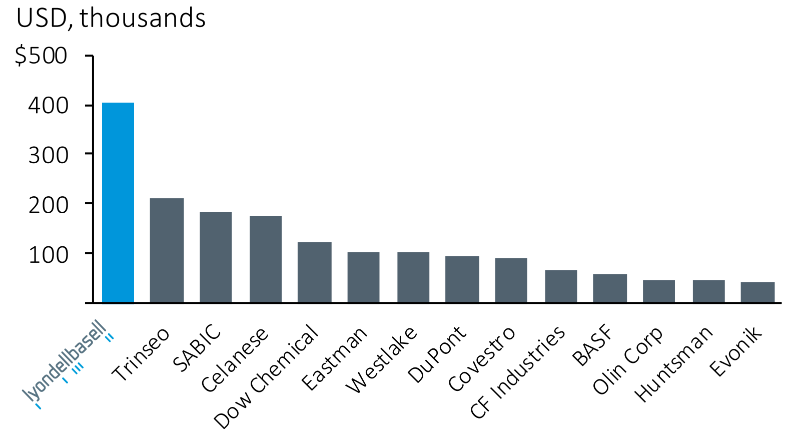


Highest-Efficiency Operator

of Employees



2016 EBIT per Employee(1)

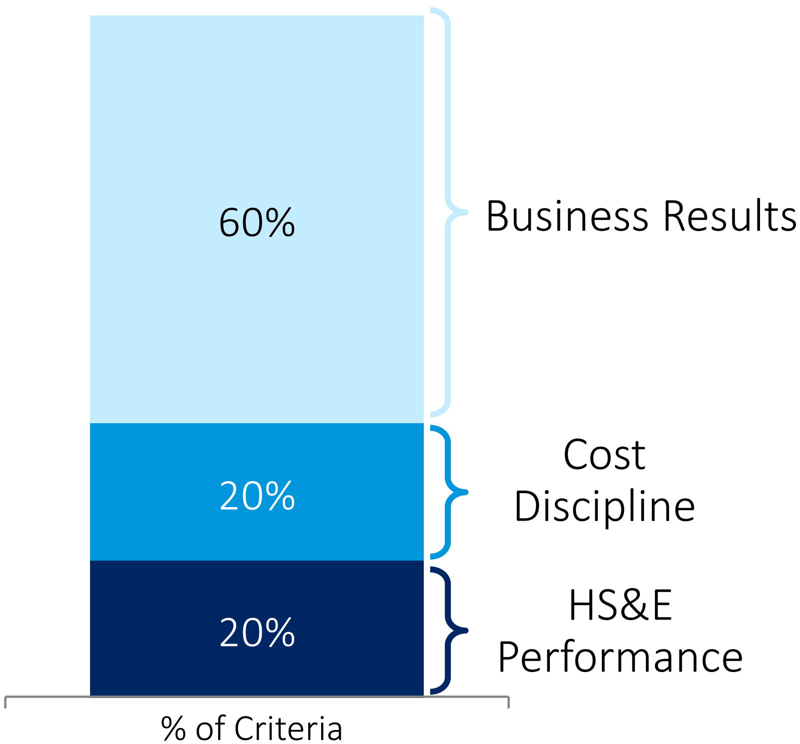


Source: FactSet and LYB.

(1) LYB EBIT is income from continuing operations before income tax.

Performance Rigorously Benchmarked
Employees Aligned with Shareholders

Short-Term Incentive Program aligned with annual performance goals…



…Long-Term Incentive Program tied to differentiated performance over 3-year horizon

Prior to 2016

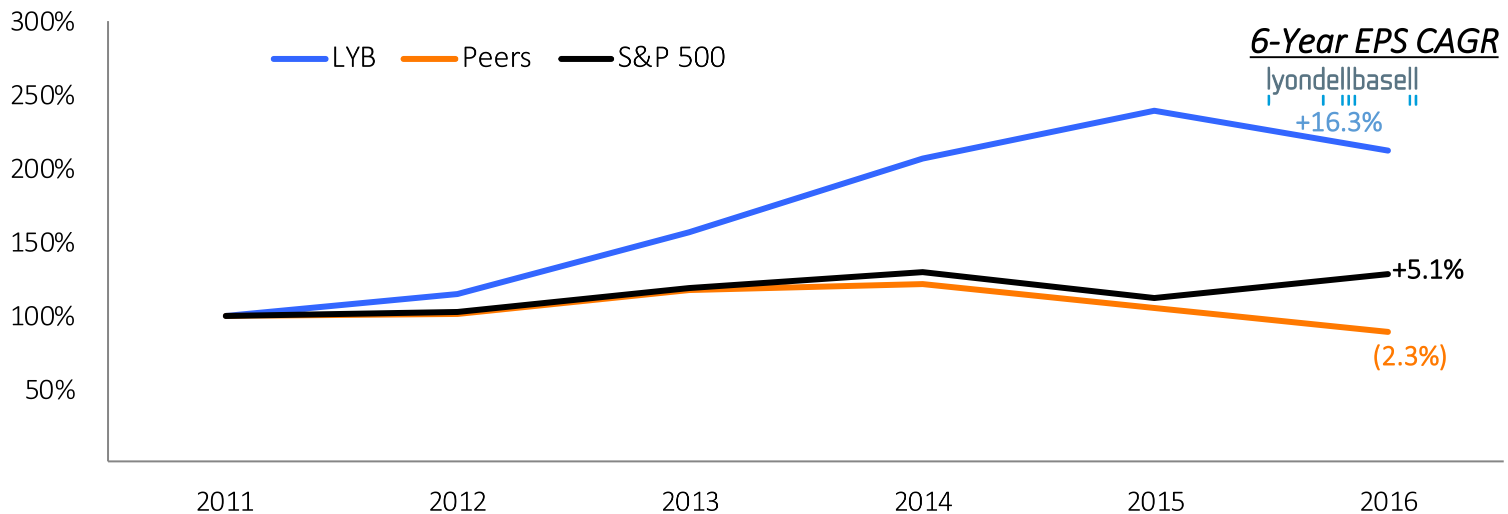
- *Cost discipline*
- *Return on assets*

2017 - Forward

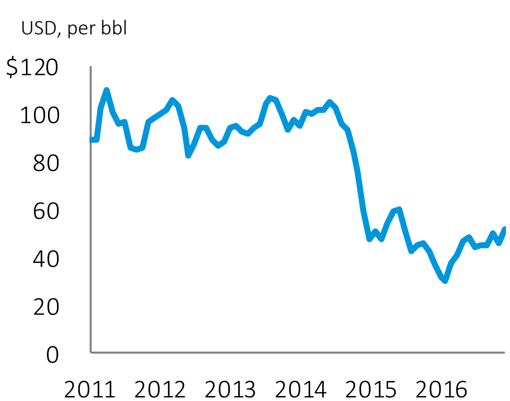
- *Total shareholder returns*

Our Approach Delivers Strong Results Under a Range of Conditions

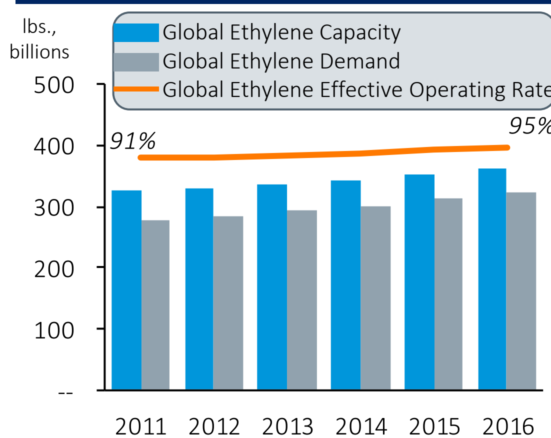
Earnings Per Share [1]



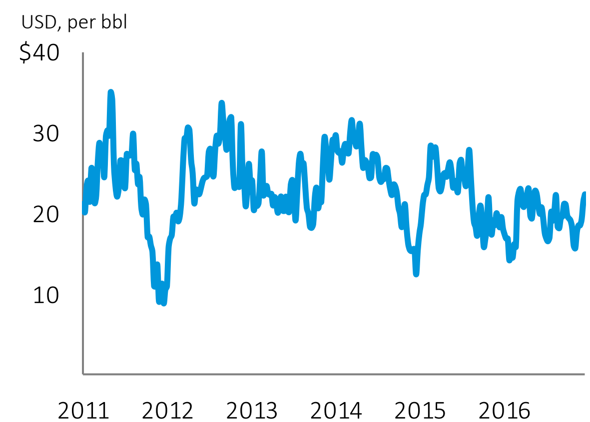
WTI Oil Price



Ethylene Supply / Demand [2]



Maya 2-1-1 Refining Spreads

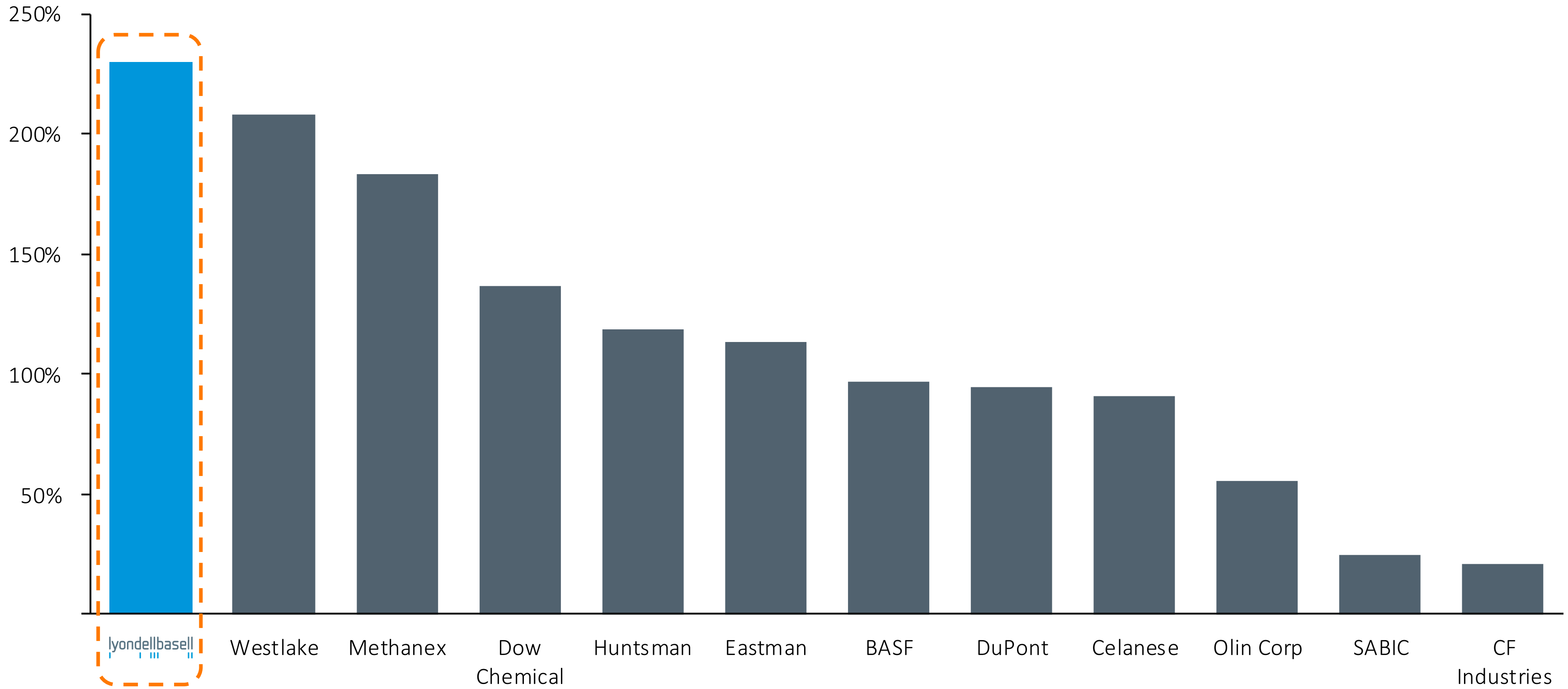


(1) Source: Factset. Peers are BASF, Celanese, CF Industries, Dow, DuPont, Eastman, Huntsman, Methanex, Sabic, Westlake. LYB is ex. LCM. Pees and S&P 500 rebased to LYB 2011 EPS ex. LCM of $4.32 per share. CAGR is the compound annual growth rate of EPS from 2011 to 2016.

(2) Source: IHS and LYB.

Delivering Leading Total Shareholder Returns

5-Year Total Shareholder Return vs. Peers (1)



TSR outperformance vs. peers underpinned by **strong cash flows**, **robust dividends** and **share repurchases**

(1) Total shareholder return over period from Jan 1, 2012 to Dec. 31, 2016. Source: Factset.

Reached a Point in the Road Where Options Begin To Broaden

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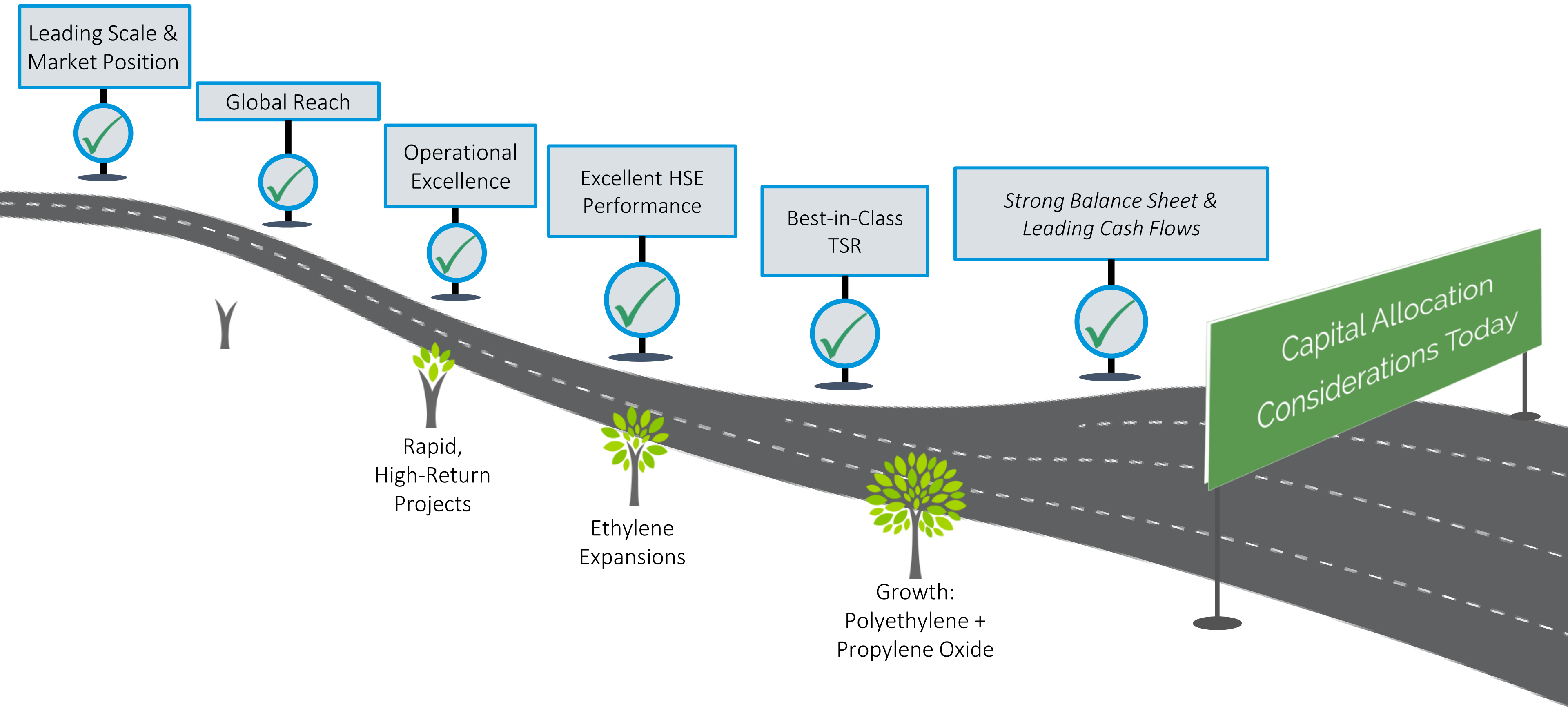
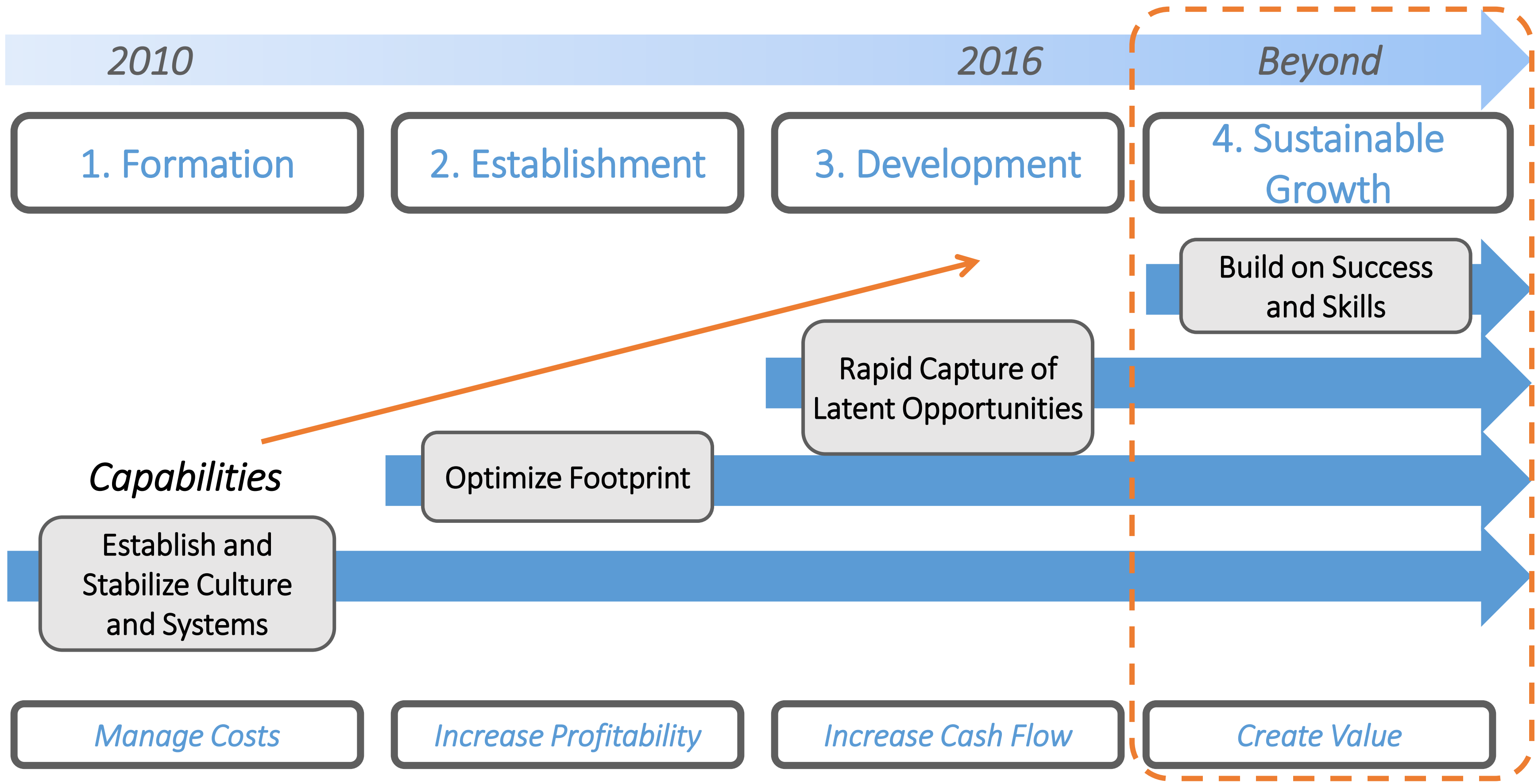
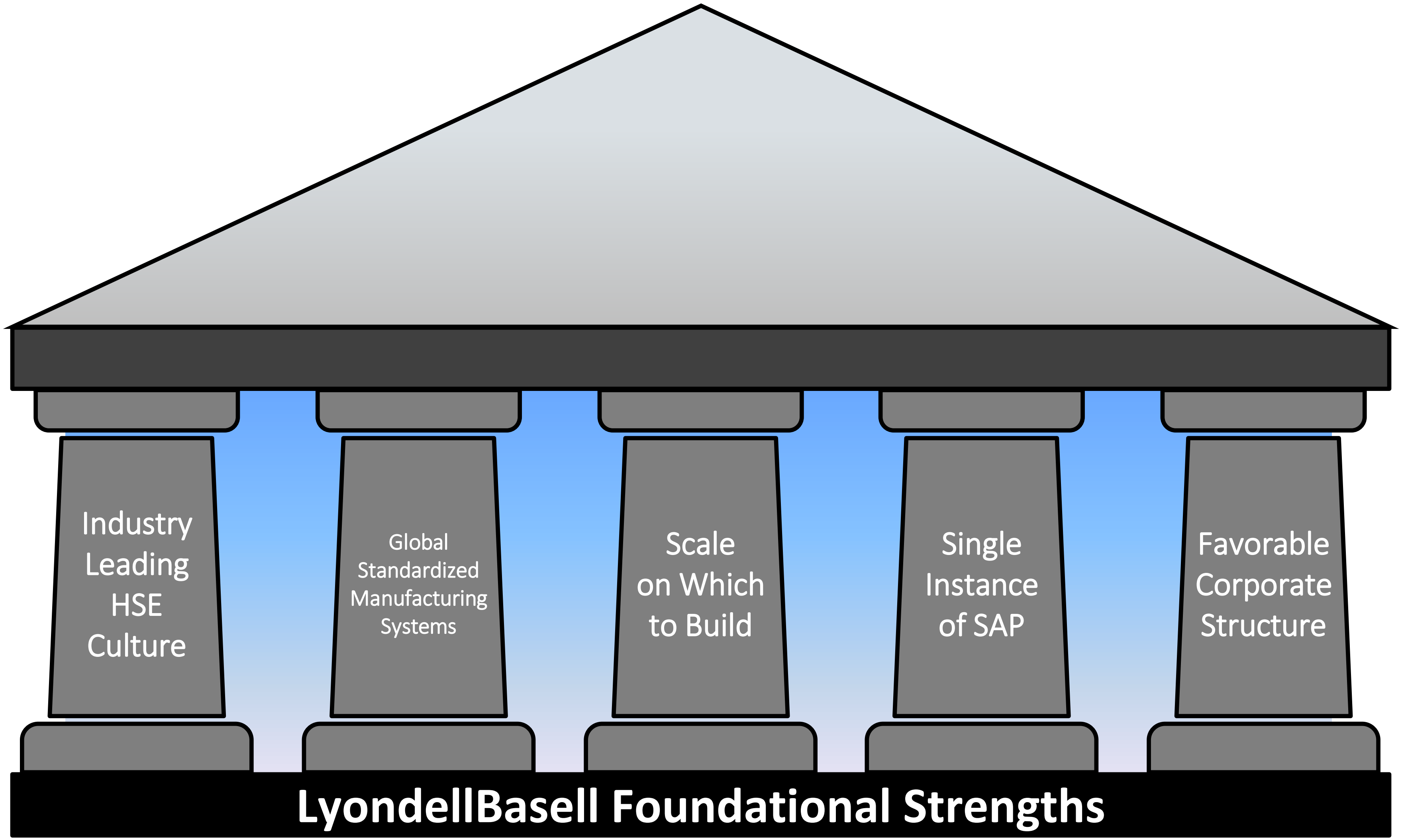
Where We've Been → *Where We Are Going*



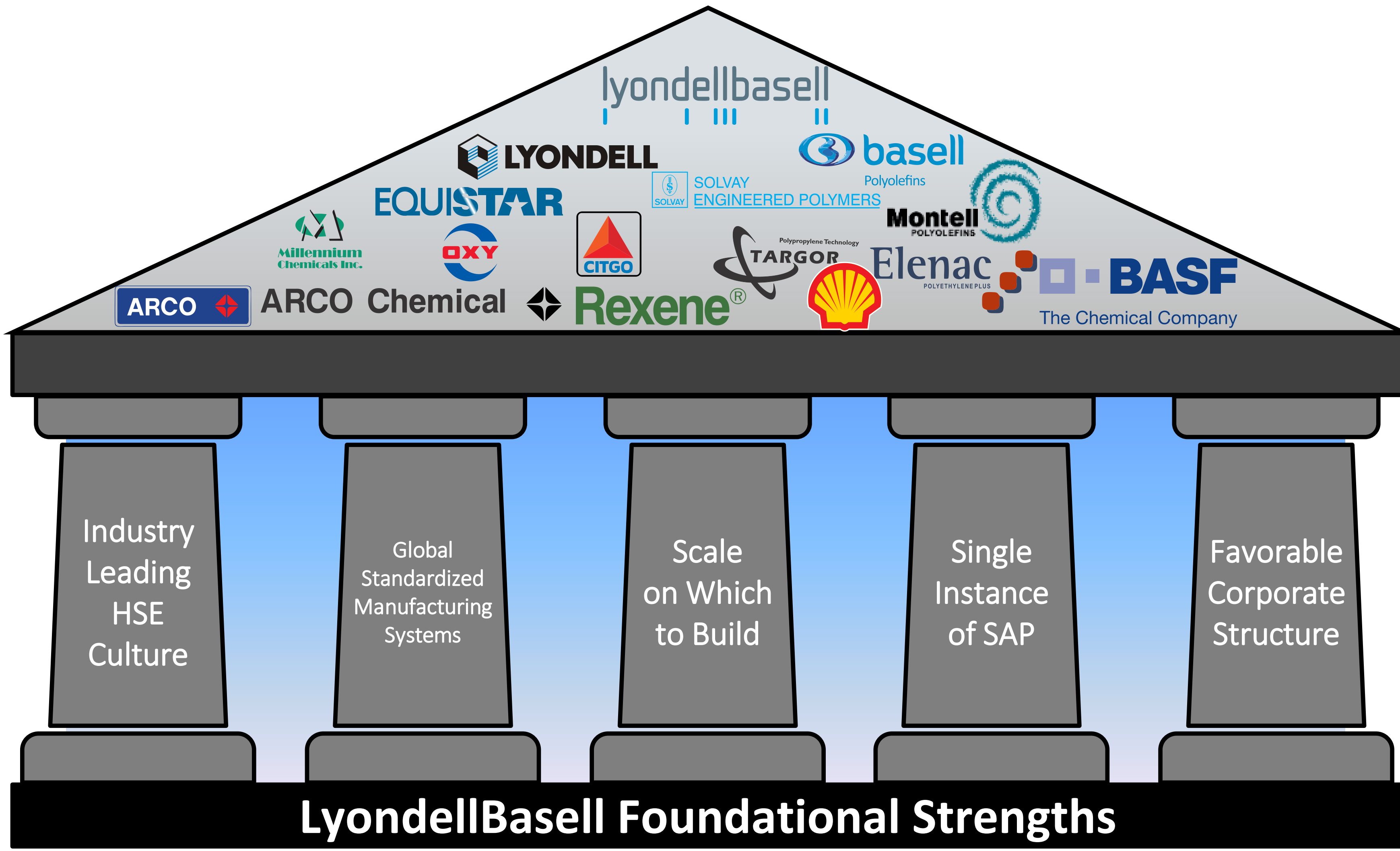
We Can Generate Value by Leveraging Skills and Strategy



Foundation in Place to Support Growth . . .



. . . With a Demonstrated Heritage of Integrating Businesses



Our Foundation Is in Place: Value Can Be Generated by Leveraging Our Approach

Strive to Build on Our Strengths and Skills

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	Well Head	Midstream	Refining	Olefins & Aromatics	Intermediates & Polymers	Performance & Eng. Resins	Electronic & Specialty	Bio & Pharma
Products	Crude Oil Natural Gas	Handling Fractionation Storage Shipping	Gasoline Diesel Fuel Jet Fuel	Ethylene Propylene Butadiene	PE, PP, PO, PVC, Isocyanates, Acetyls	Polycarbonate PP Compounds *Catalloy* Nylon Acetal	Seeds Pharmaceuticals Fragrances Herbicides Catalysts	
Industry Characteristics	Capital-Intensive Geology	Capital-Intensive Pipelines	Capital-Intensive Process Industry		Capital-Intensive Process Industry Tech Support	Process Industry Tech Support Design Support	Small Volumes Multiple Grades Unique End Use Expertise	R&D Intensive Consumer Safety Long Development Cycle
Success Characteristics	Exploration Development	Logistics Contracting	High Operating Rates/Reliability Lean Cost Structure Process Expertise Increasing Technical Service Support				Proprietary Technology Continuous Innovation	

World-Class Operator with Broad Options

- ☑ Leading scale and market position
- ☑ Best-in-class operator
- ☑ Leading cash flow generation
- ☑ Strong capital return
- ☑ Safe, strong, and sustainable dividend
- ☑ Strong balance sheet

Multiple paths to **shareholder value** with a **balanced capital allocation strategy** and **proven track record of success**

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Investor Day

Value-Driven Growth

Thomas Aebischer

Chief Financial Officer

New York Stock Exchange
April 5, 2017

Building for the Future

Strong Foundation on Which to Build

Past Success

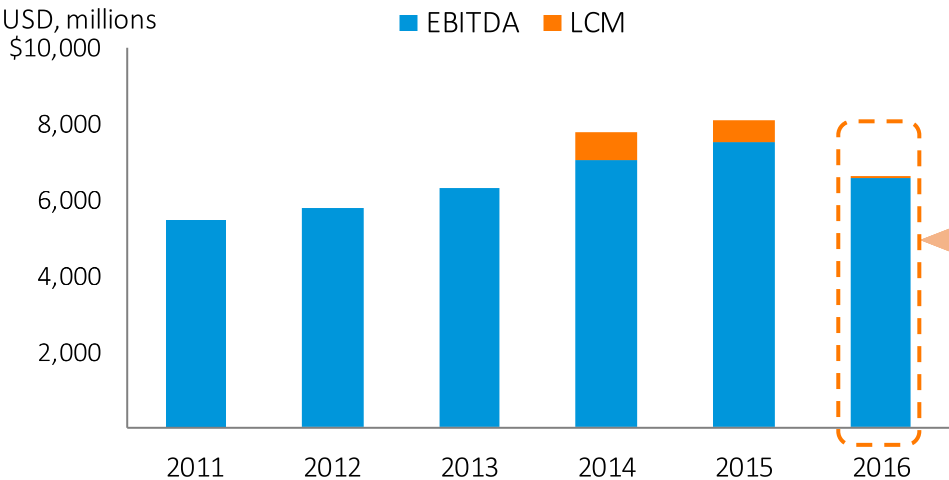
- ✓ Strong financial foundation with upside
- ✓ Continue to be a thoughtful industry leader
  - ✓ Excellent track record delivering EBITDA and EPS
  - ✓ Peer-leading total shareholder return
  - ✓ Strong and sustainable dividend yield
  - ✓ Leading ROIC

Future Drivers

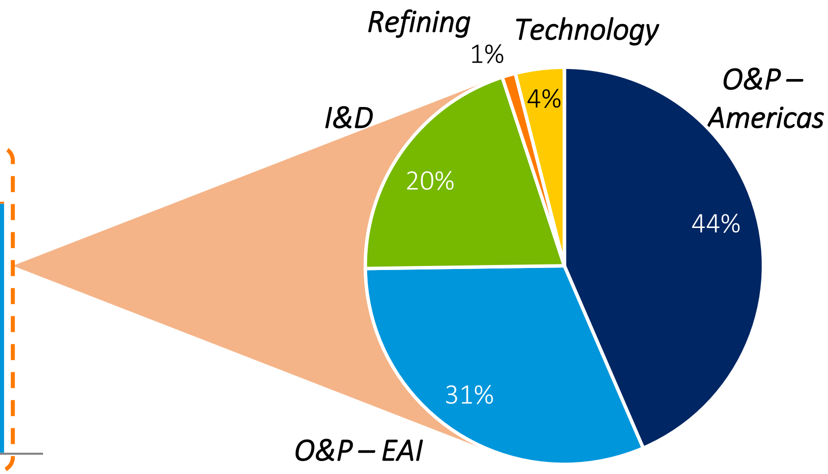
- ✓ Future capital allocation driven by shareholder value
  - ✓ Investing through organic growth
  - ✓ Committed to strong capital returns
  - ✓ Disciplined M&A criteria
  - ✓ Many opportunities to drive value

LYB's Methodical Approach Established a Record of Strong Results

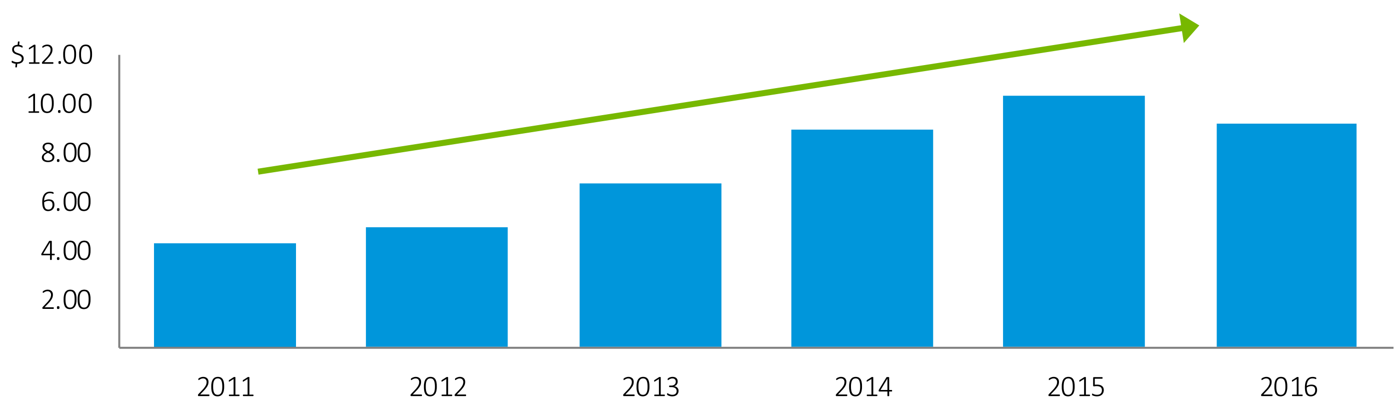
LYB EBITDA (ex. LCM)



2016 EBITDA (ex. LCM)



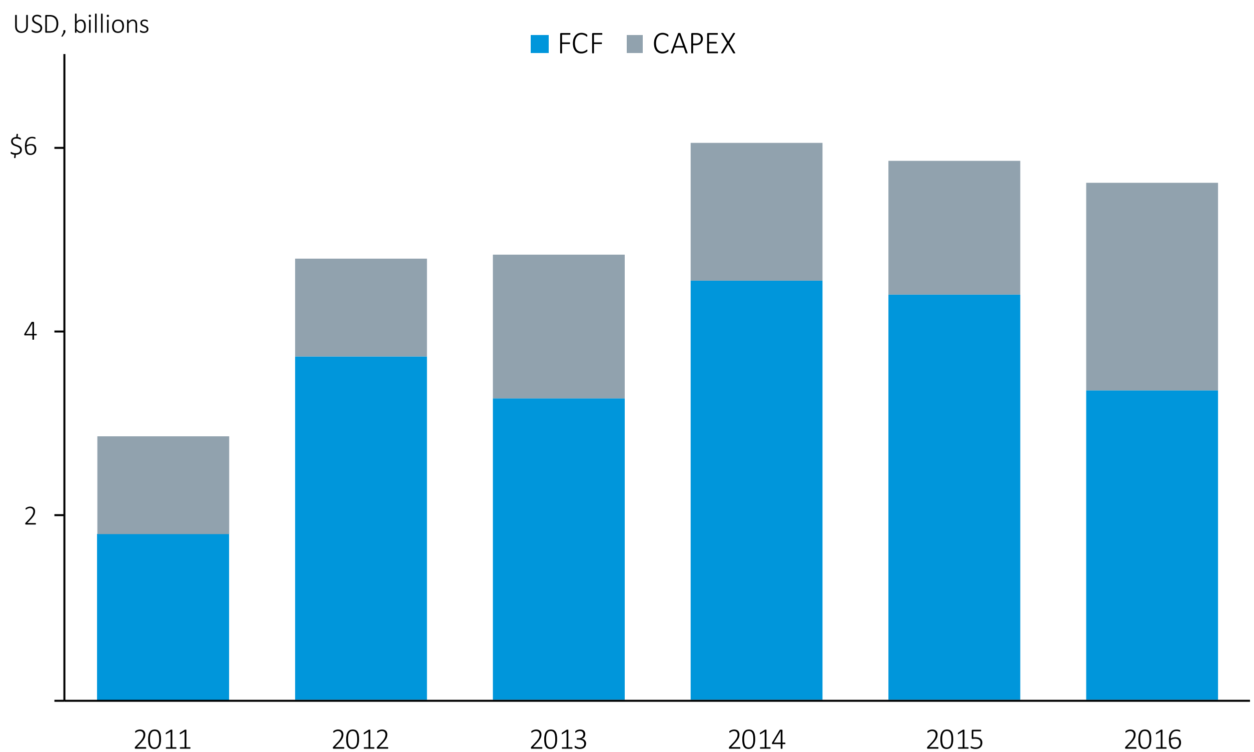
Earnings Per Share [1] (ex. LCM)



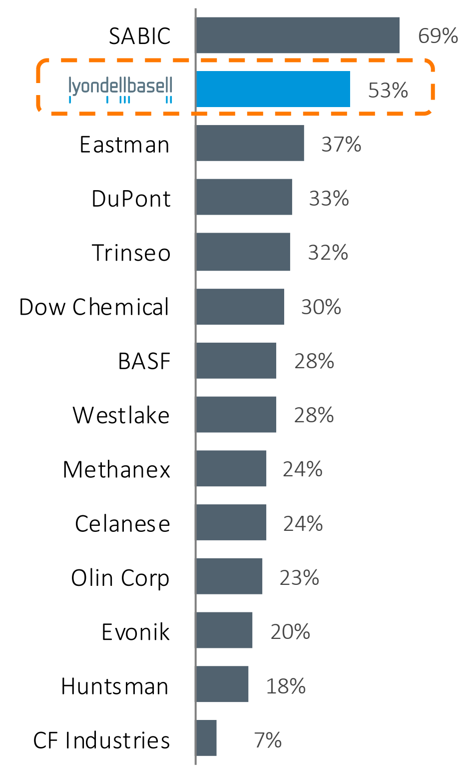
(1) Diluted earnings per share from continuing operations ex. LCM.

Industry-Leading Cash Flow Under a Broad Range of Industry Conditions

2011 – 2016 LYB Cash Flows [1]



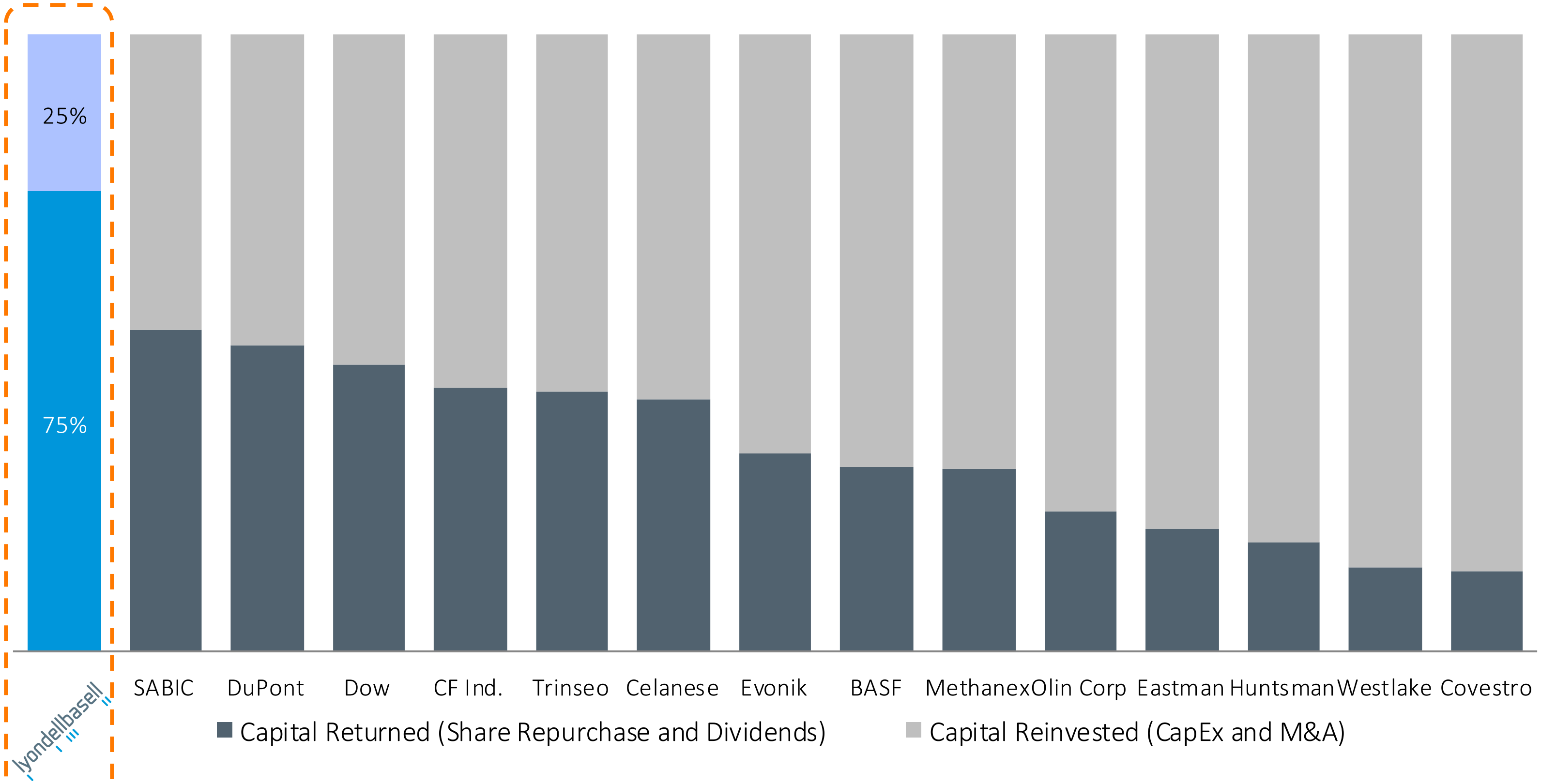
Avg. FCF as % of EBITDA ex. LCM (2011-2016) [2]



(1) Free cash flow (FCF) based on cash from operating activities less total capital expenditure (CAPEX).
(2) Source: CapitalIQ. Reflects average FCF as % of EBITDA from 2011-2016 except for peers with more recent IPOs.

Shareholders Benefitted from Peer-Leading Dividends and Share Repurchases

Uses of Capital 2011 – 2016



Dividends and Share Repurchases as % of Average Market Capitalization [1]

74%	16%	57%	24%	30%	31%	19%	23%	13%	26%	20%	17%	26%	2%	8%

Source: Company filings, Factset and Capital IQ as of March 2017.
Note: Reflects uses of capital from 2011-2016 except for peers with more recent IPOs.
(1) Reflects cumulative 2011-2016 dividends and share repurchases as a % of average market capitalizations from Dec. 2011 to Dec. 2016, except for peers with more recent IPOs.

Capital Deployment Hierarchy

		2016	Comments
Foundation	Base CapEx	~$1.1 bn	First priorities for cash
	Interest Expense	~$0.3 bn	
	Dividend	~$1.4 bn	Fund through the cycle with cash flow from operations
Discretionary Opportunities	Growth CapEx	~$1.1 bn	High-return in advantaged businesses
	Special Dividends / Acquisitions / Share Repurchases	~$2.9 bn of share repurchases	Discretionary cash returned to shareholders M&A if value-creating and strategic

Debt Restructuring Generated Significant Value

LyondellBasell Cost of Debt

9.6%

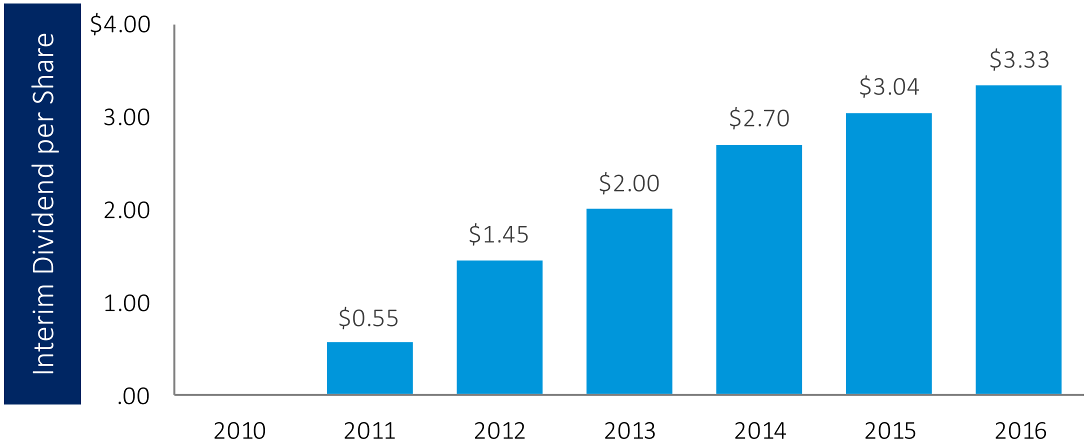
2010 Average Interest Rate of Debt

490 bps
Improvement

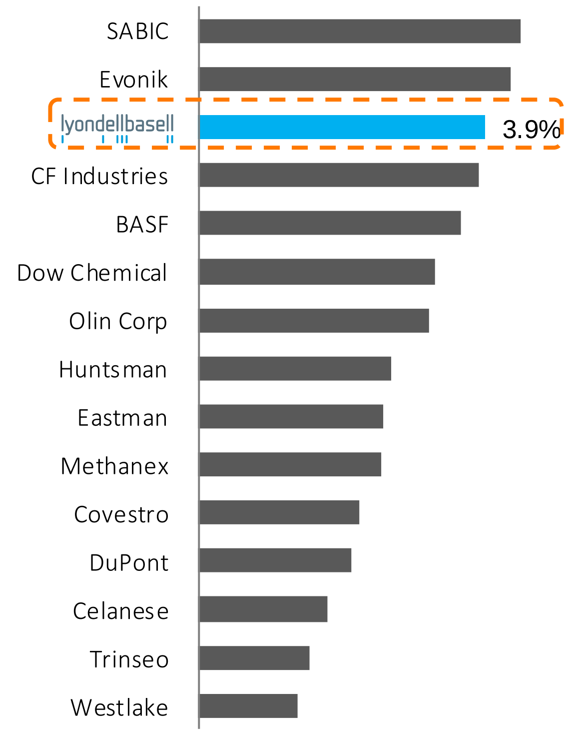
4.7%

2016 Average Interest Rate of Debt

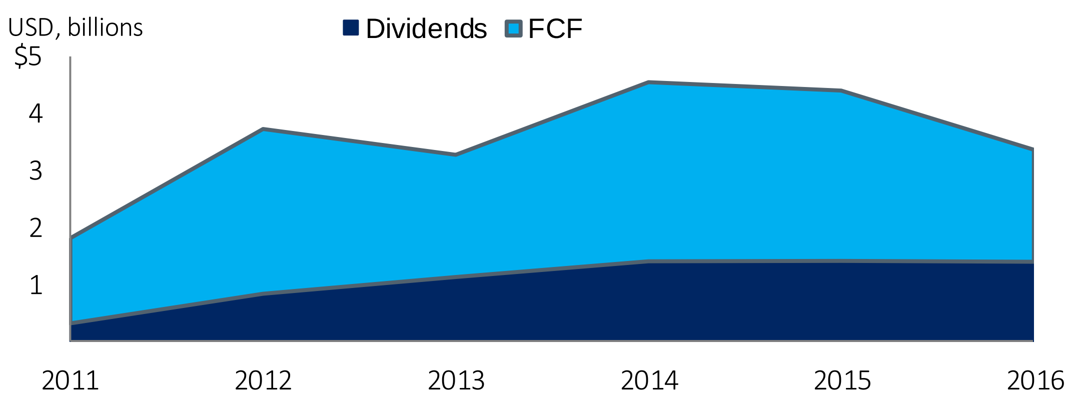
We Are Committed to a Strong, Growing and Sustainable Dividend



2016 Dividend Yield [2]



Interim Dividends and Incremental Free Cash Flow [1]



(1) FCF based on cash flow from operating activities less total capital expenditure.
(2) Source: FactSet as of March 17, 2017.

More Organic Growth in Pipeline

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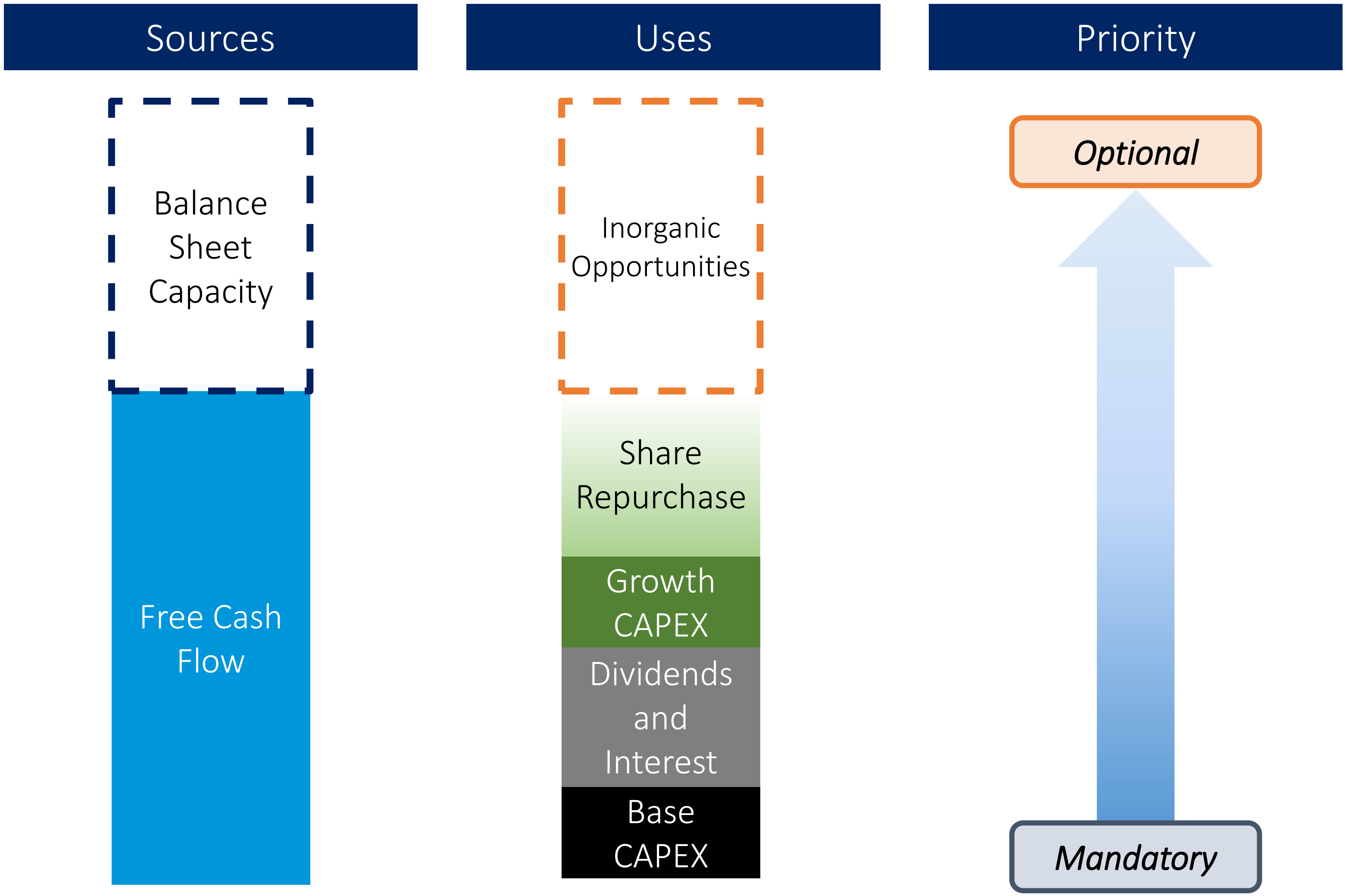
		Scope (MM lbs.)	Start-Up	CAPEX ($MM)	Potential EBITDA ($MM/year) '11-'16 Avg. Margins	CAPEX / EBITDA(1)
Completed Projects	Increase Ethane Capability	500	2012	~$25	$50 - $70	
	EU Butadiene Expansion	155	2013	~$100	$40 - $50	
	Methanol Restart	250 MM Gal.	2013	~$180	$190-210	
	Matagorda PE Debottleneck	220	2014	~$20	$10 - $20	
	U.S. Ethylene Expansions	~ 2,000	2012 - 2016	$1,825	$450 - $600	
	TOTAL			**~$2,150**	**$740 - $950**	**2.5x**

		Scope (MM lbs.)	Start-Up	CAPEX ($MM)	Potential EBITDA ($MM/year) 2016 Avg. Margins
Future Projects	*Hyperzone* HDPE	1,100	2019	~$700 - $750	$150 - $200
	New PO/TBA Plant	1,000 PO	2021	~$2,000 - $2,500	$300 - $400

(1) EBITDA is average potential EBITDA using 2011 – 2016 average margins.

Our Balance Sheet Provides Capacity for Value-Driven Growth

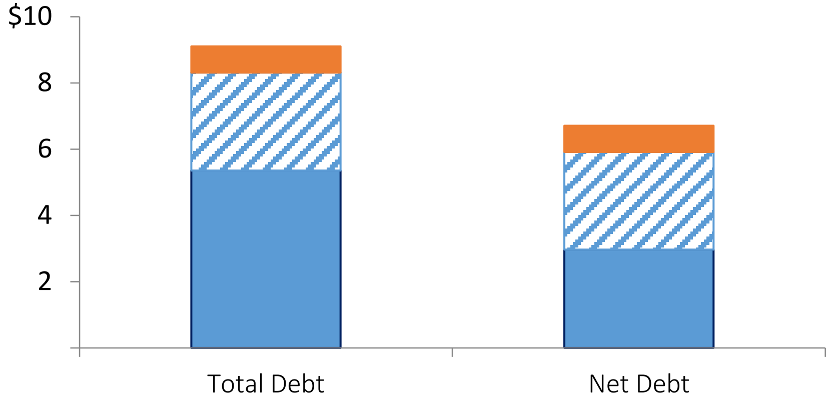


Debt Portfolio Characteristics

(As of 12/31/2016; Adjusted for Q1 Financing Activities)

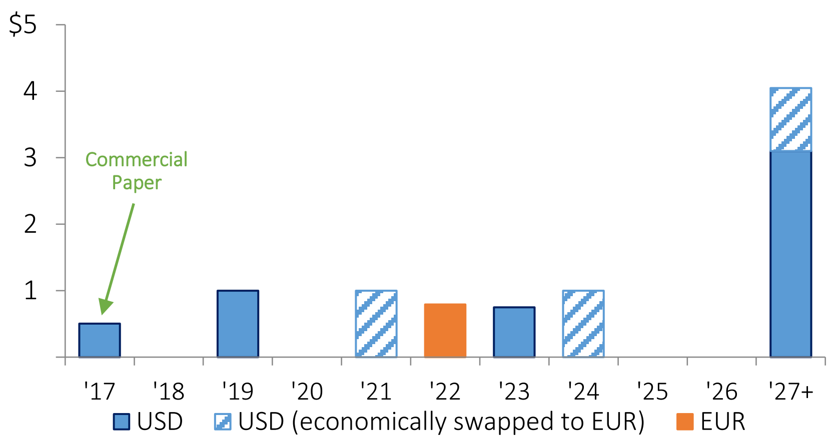
Total and Net Debt [2,5]

USD, billions



Maturity Profile

USD, billions



Liquidity

- Over $5 bn of liquidity [1]

Debt Characteristics [2]

Total Debt	$9.1 bn
Fixed to Floating Ratio [3]	74% to 26%
Weighted Average Maturity [4]	13.2 years
Weighted Average Cost of Debt	4.51%
Total Funded Debt / EBITDA ex. LCM	1.4x

Currency Composition

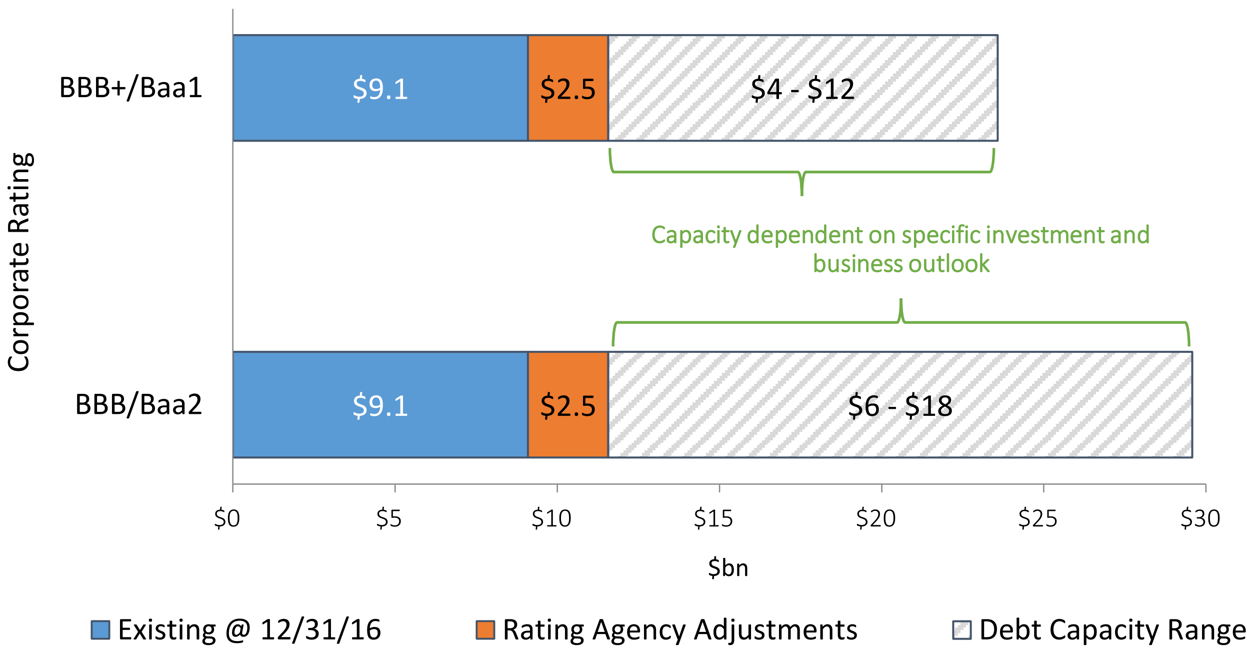
- 59% USD Debt
- 41% EUR Debt, including ~$2.95 bn economically swapped to EUR

(1) ~$2.4 bn of Cash, Short-Term Investments and Repurchase Agreements + ~$2.7 bn of Undrawn Credit Facilities.
(2) Debt is at par value, excludes capital leases and differs from reported figures.
(3) Fixed to floating ratio based on a net debt basis and assuming a target cash balance of $1.5 bn.
(4) Weighted average maturity as of March 15, 2017.
(5) Net Debt is total debt less cash and cash equivalents, short term investments and repurchase agreements.

Balance Sheet Capacity for Strategic Objectives

- M&A as a use of proceeds could temporarily enhance leverage capacity
- Requires commitment to pay down portion of debt within 24 months

For Illustrative Purposes Only



Corporate Rating	Total Debt / EBITDA (@ Close)	Cost of Incremental 10-Year Debt
BBB+/Baa1	~3.0x	~3.8%
BBB/Baa2	~3.5x	~4.3%

Note: Incremental debt capacity based an a range of underlying business forecasts. M&A scenarios assume incremental temporary leverage of 0.5x and factor in acquired EBITDA and synergies. Indicative cost of incremental 10-Year debt as of March 7, 2017. Agency adjustments reflect additional items S&P and Moody's include for leverage analysis, most notably pension and lease obligations. Figure above is an approximation based on each agency's calculation.

A Process to Consider Inorganic Opportunities Focused on Value

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M&A Considerations and Process

- Build on leading positions and technologies in core strengths
- Disciplined approach and process
- Strive to generate value, not just scale

Strategic Fit

- Strong fit with our core competencies
- Large-scale assets
- Leverages our corporate structure

Rigorous Financial Criteria

- **Balance Sheet**
  - Maintain investment grade
- **Income Statement**
  - Strengthen growth and margin profile
  - Improve earnings stability
  - Accretive to EPS within 2 years
- **Return Expectations**
  - IRR in excess of 12%
- **Significant synergy potential**

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Investor Day

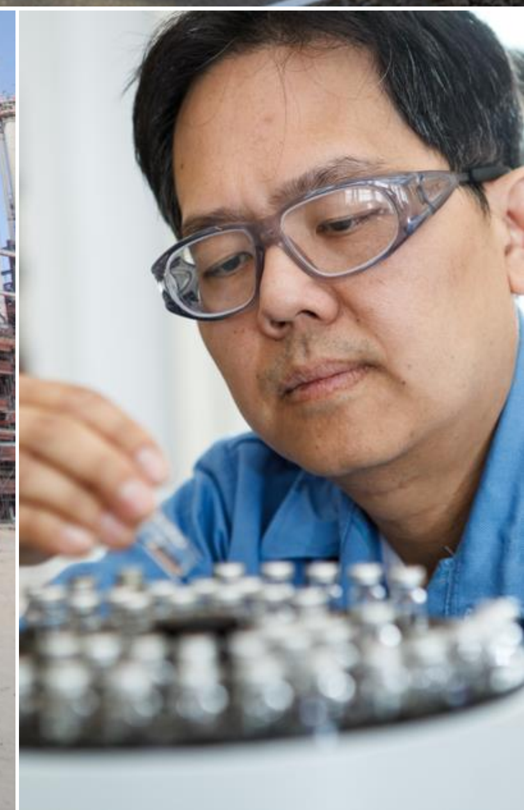
Value-Driven Growth

Bob Patel
Chief Executive Officer

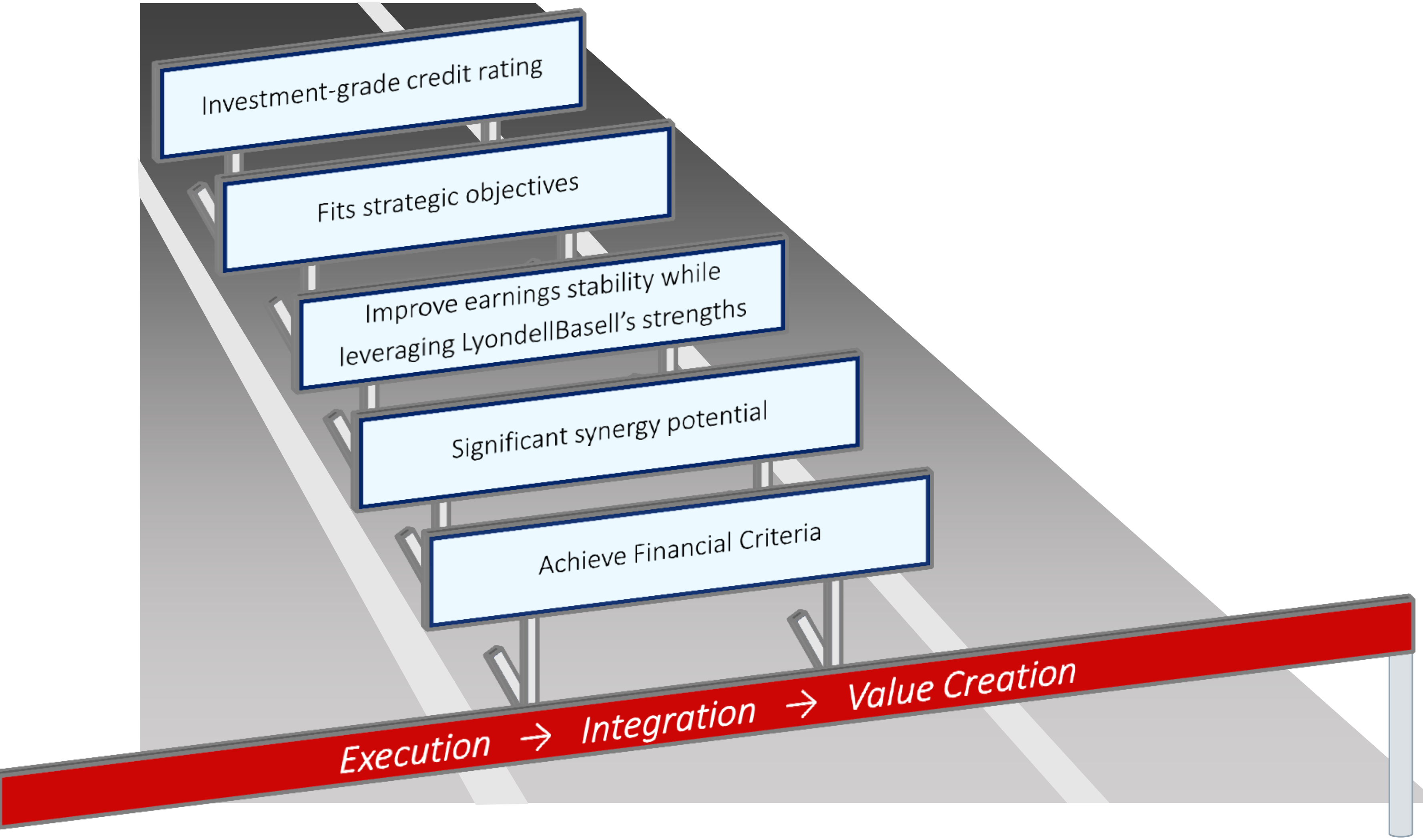
Thomas Aebischer
Chief Financial Officer

New York Stock Exchange
April 5, 2017

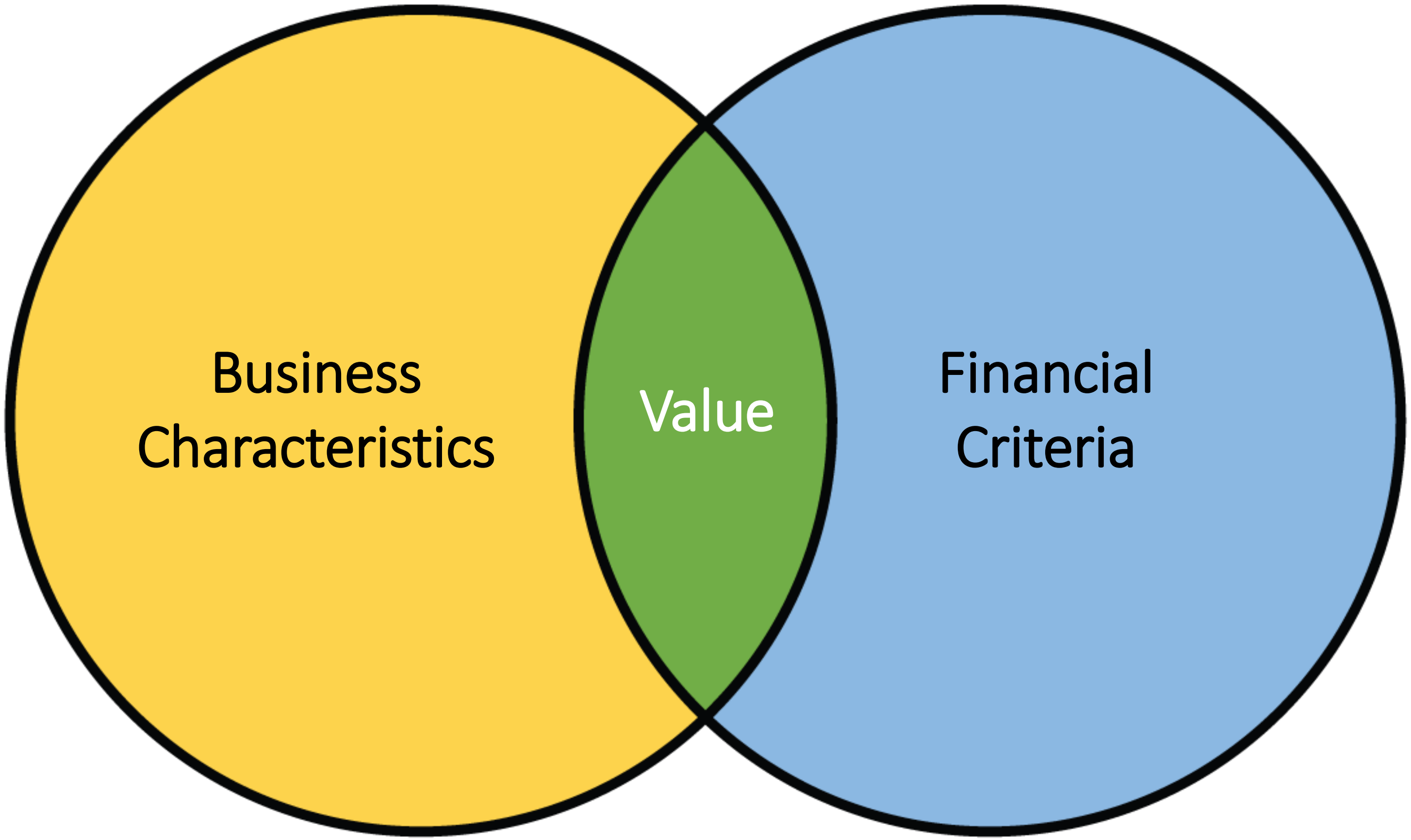
Building for the Future



Rigorous Strategic and Financial Criteria



Driven by Value Generation



- Our business and financial structures are built to support inorganic growth
- Prepared to act on opportunity that meets our criteria
- Remain disciplined

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Investor Day

Global O&P

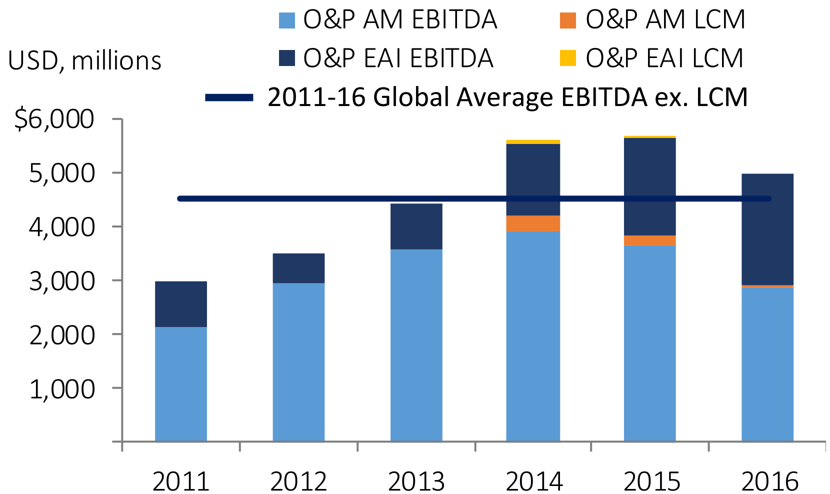
Bob Patel

Chief Executive Officer

New York Stock Exchange
April 5, 2017

Global O&P Overview

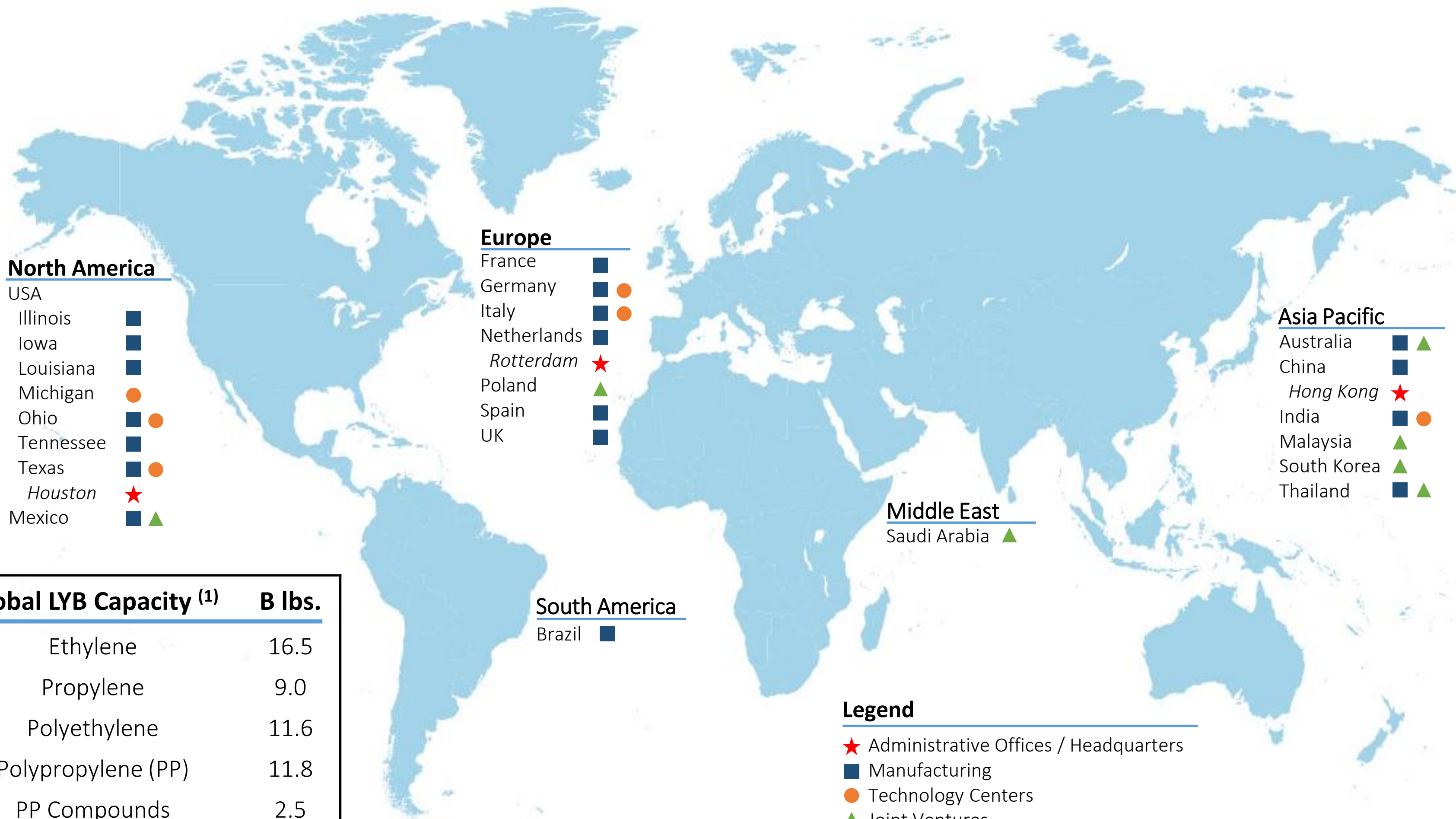
EBITDA (ex. LCM) History



Key Messages

- LYB O&P is a strong earnings and cash generator
- Strong global presence
- Global trends favor continued demand growth
- Favorable global operating rates
- U.S. remains feedstock advantaged

We Have a Substantial Global Footprint . . .



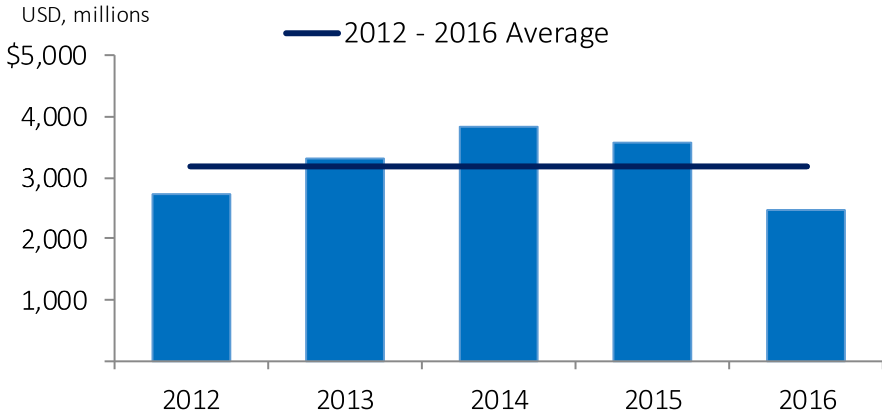
Global LYB Capacity (1)	B lbs.
Ethylene	16.5
Propylene	9.0
Polyethylene	11.6
Polypropylene (PP)	11.8
PP Compounds	2.5

(1) LYB wholly-owned capacity and proportional share of JV capacity as of December 31, 2016.

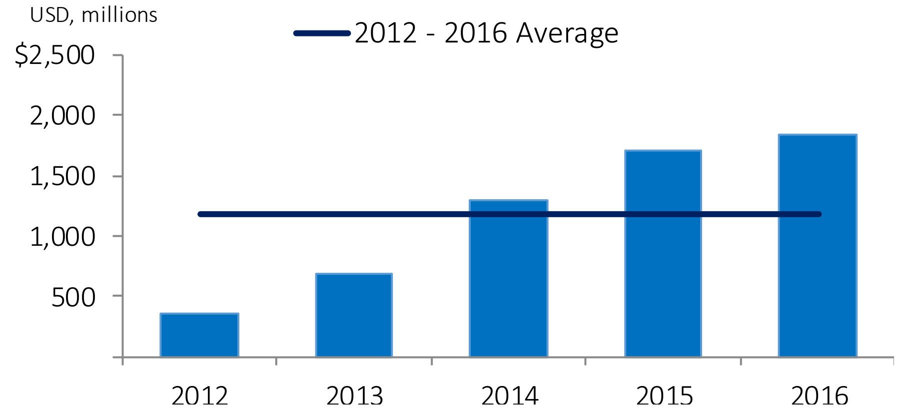
. . . Which Generates Strong EBITDA and Cash Flow

(EBITDA ex. LCM less Base CAPEX)

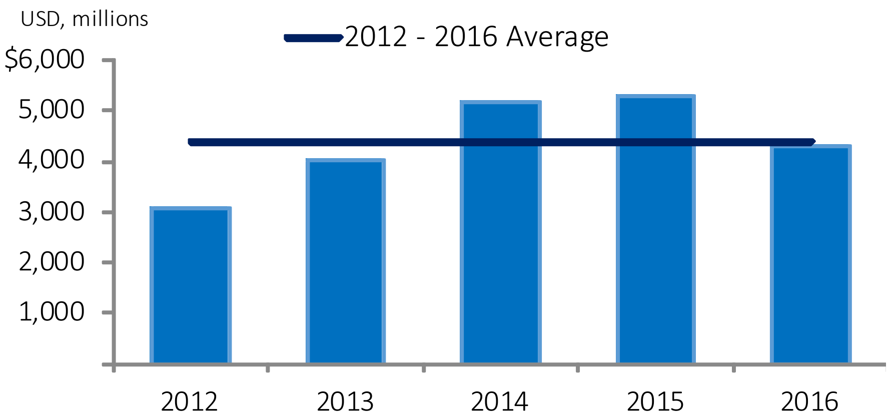
O&P Americas Cash Flow (1)



O&P EAI Cash Flow (1)



Global O&P Cash Flow (1)



(1) Cash Flow is defined here as EBITDA ex. LCM less base capital expenditures.

- Excellent cash flow under a broad range of market conditions
- Operating focus and steady investment drive high asset reliability and cash flow

Global Macro Trends
Demographics Driving Demand

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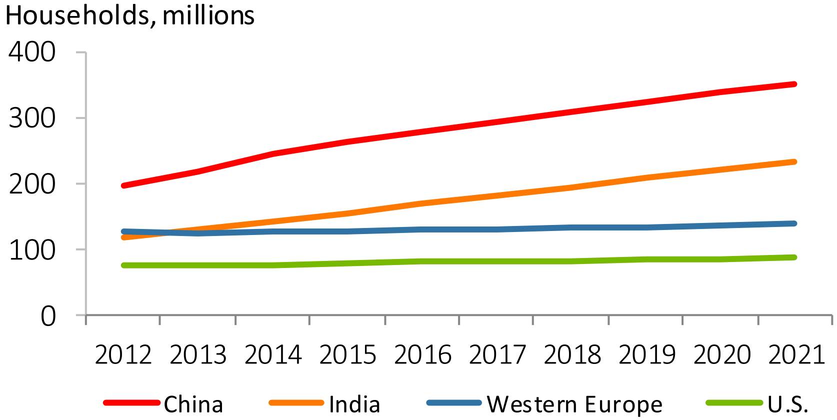
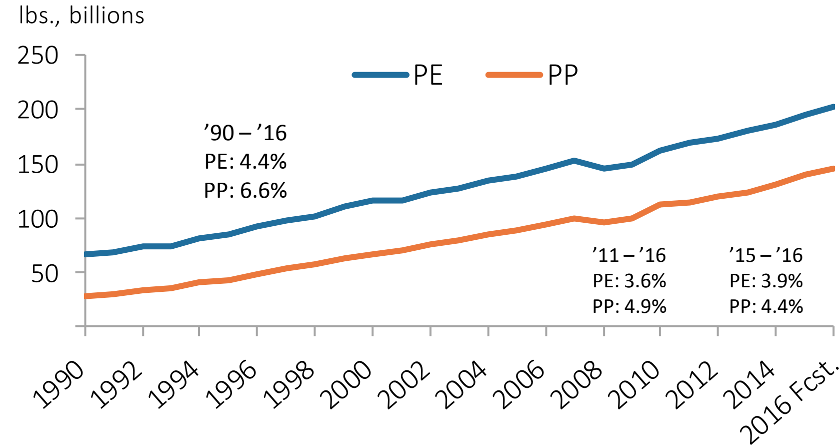
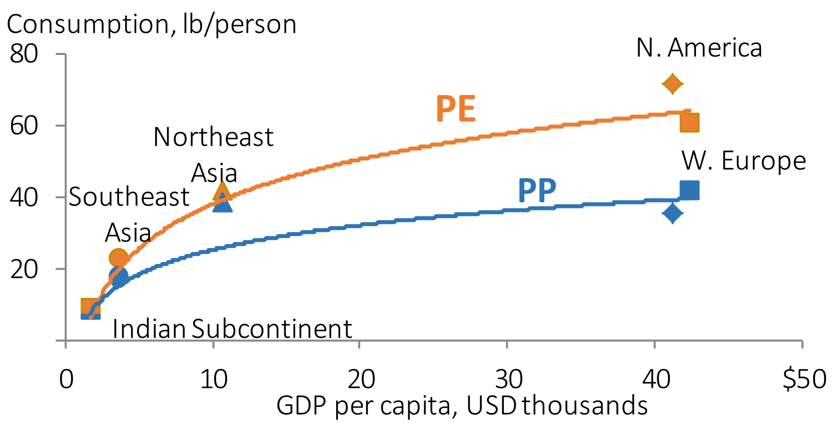
Upper/Middle Class Households



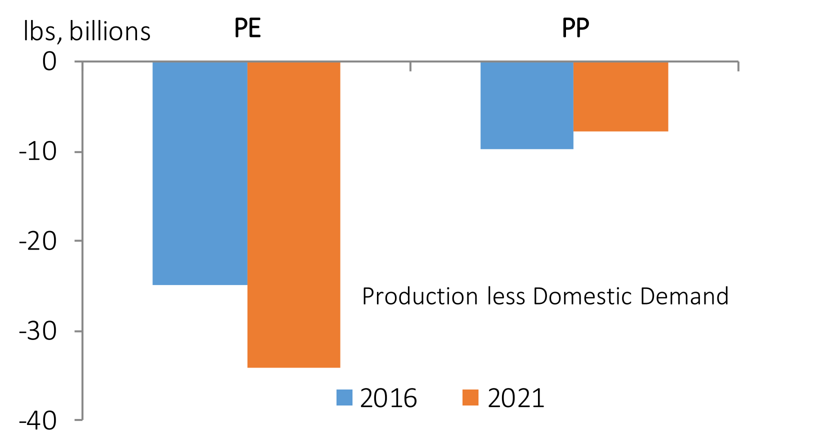
World PE and PP Demand



2016 Polyolefins Consumption



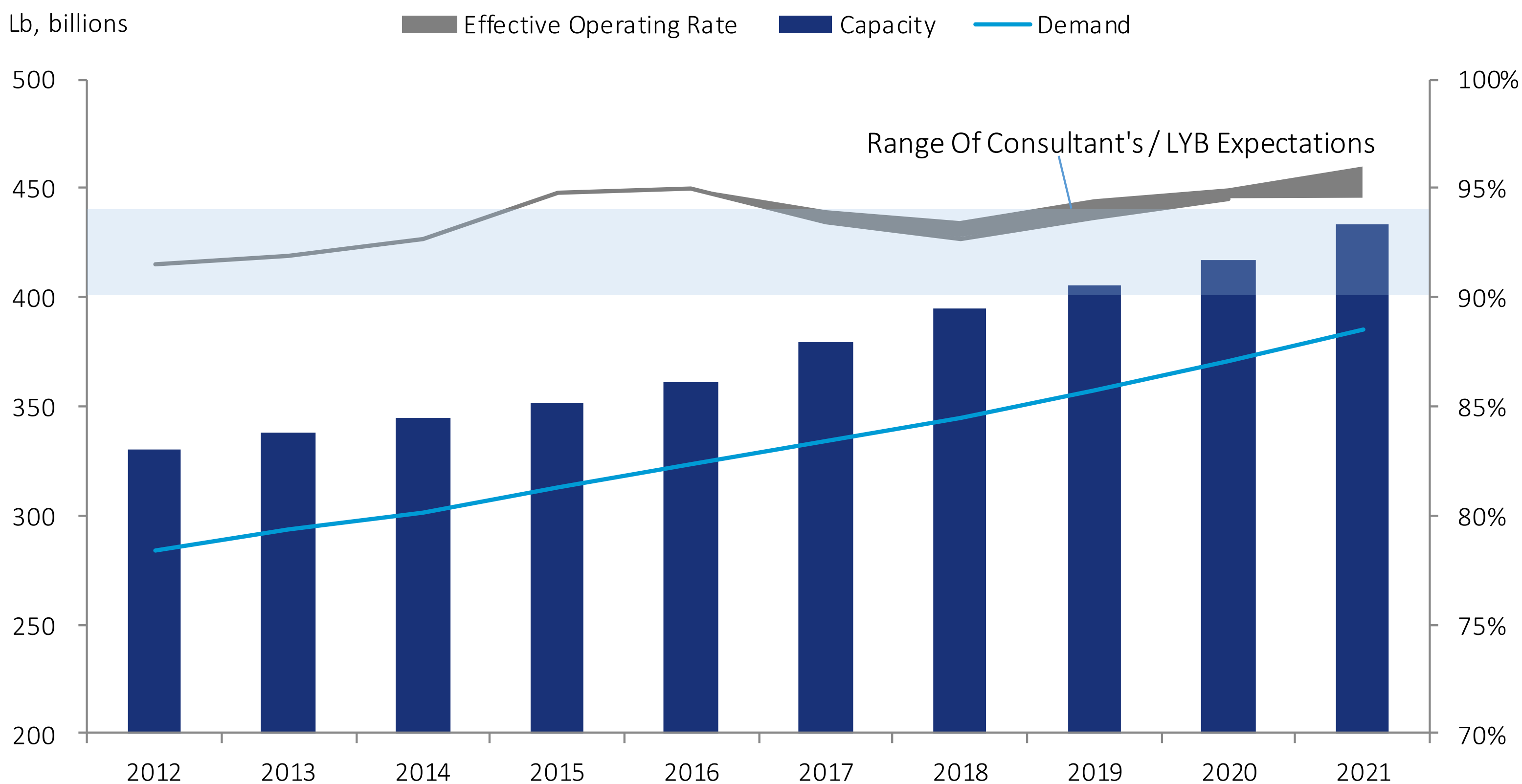
China Polyolefin Trade Deficit



Source: IHS.

Building for the Future

Global Ethylene Operating Rates Remain Strong Despite New Capacity

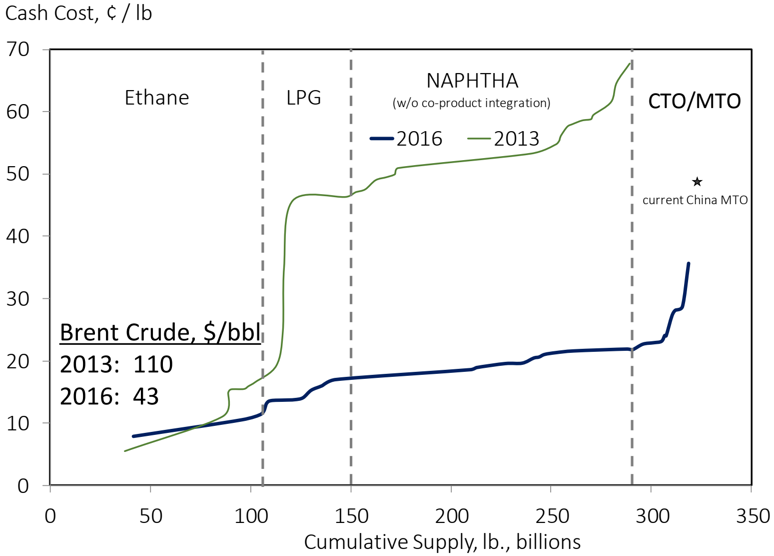


2017 – 2021 global ethylene operating rates average above 2010-2016 rates

Source: IHS, LYB estimates, effective operating rate assuming 6% industry downtime. Based on 2017 updated balances.

Ethylene Cost Curve Favors U.S. Ethane in Both High and Low Oil Scenarios

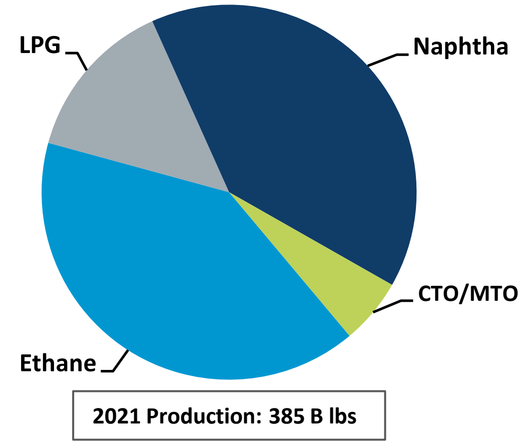
Global Ethylene Cost Curve



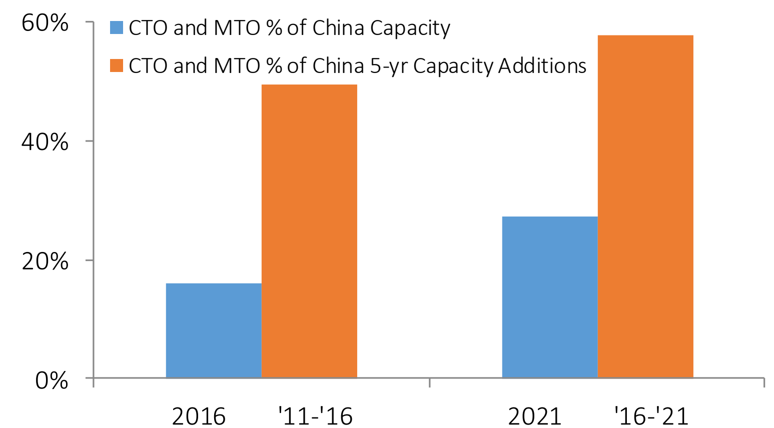
- High cost MTO has become a significant source of supply in China
- At low crude oil prices and high operating rates, we believe MTO is a baseline supporting global PE prices

Source: IHS, LYB estimates..

2021 Ethylene Supply by Feedstock



CTO and MTO Ethylene Capacity in China



Global Polyolefins Supply and Demand Forecasts Remain Favorable

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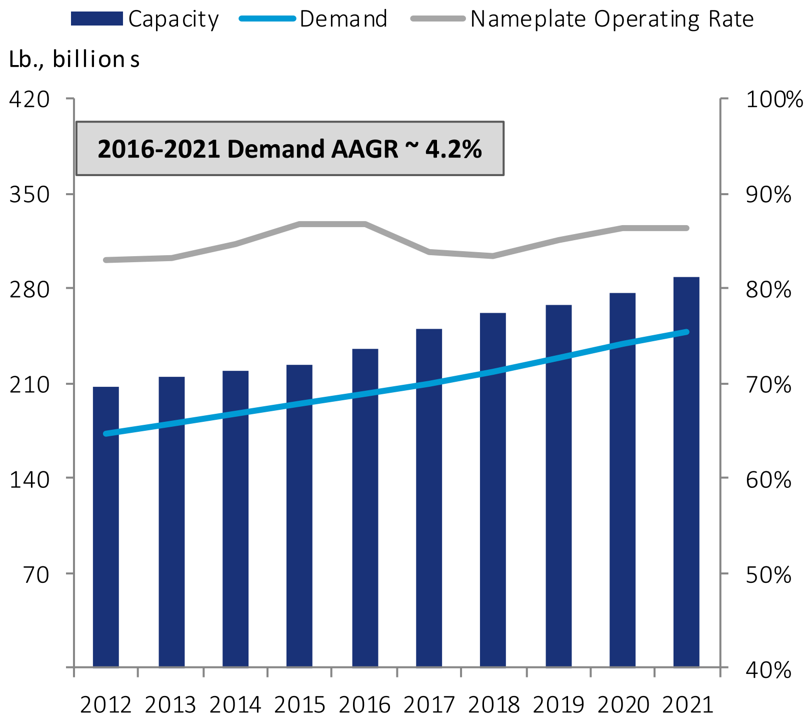
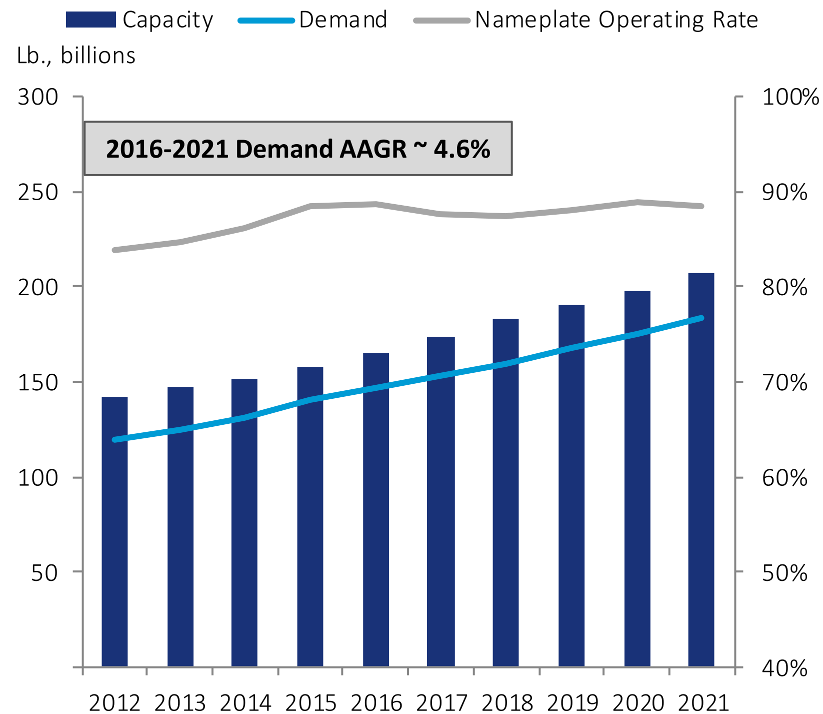
Polyethylene



Polypropylene



- Rates in the upper 80 - 90% range reflect a tight market
- Polyethylene tracking ethylene operating rates
- Polypropylene continues to be balanced to tight

Source: IHS, LYB estimates.

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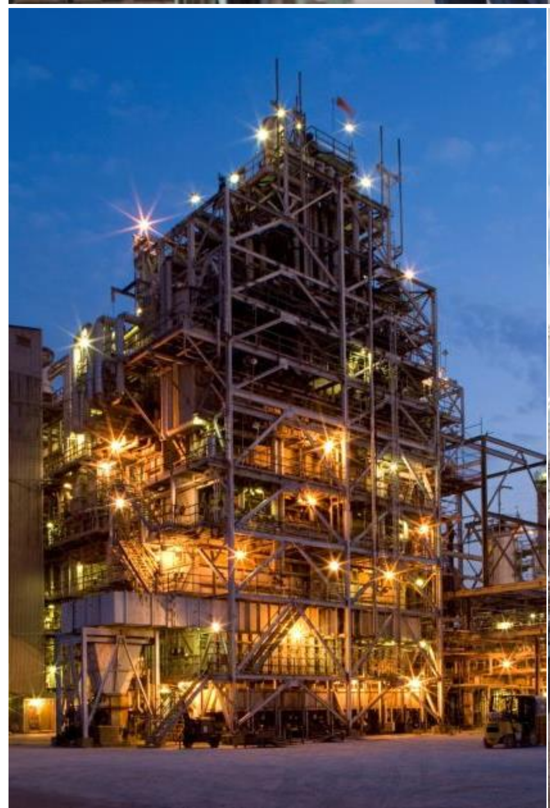
Investor Day



O&P-Americas

Paul Augustowski

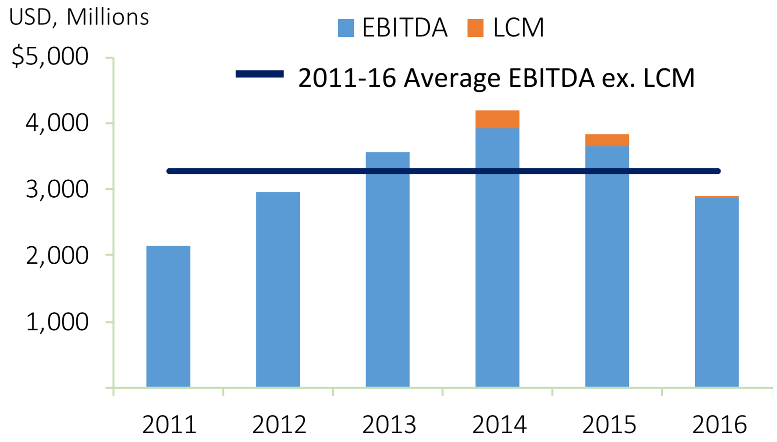
Senior Vice President

New York Stock Exchange
April 5, 2017

Building for the Future

O&P-Americas Segment Overview

EBITDA (ex. LCM) History



Product Capacities and Positions (1)

Product	Capacity (B lbs)	NA ranking
Ethylene	11.7	2
Polyethylene	6.4	3
Polyproylene	3.9	1

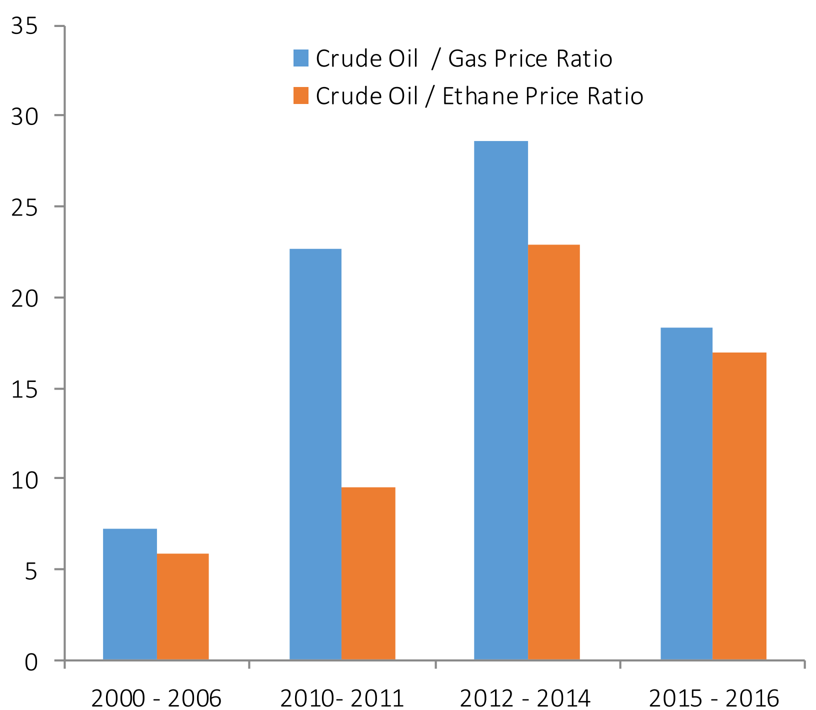
Key Messages

- LYB capacity expansions complete
- Proven operational reliability and feedstock flexibility
- Major turnarounds complete in past two years; significant volume expansion in 2017

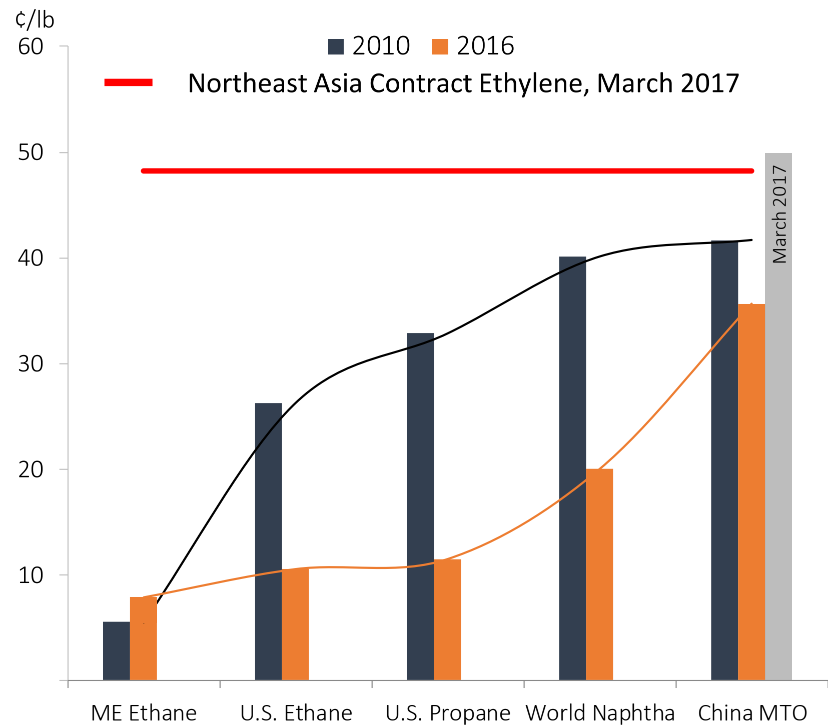
Source: LYB and IHS
(1) LYB wholly-owned capacity and proportional share of JV capacity as of December 31, 2016.

North America Continues to Benefit from Shale Gas Advantage

Oil to Gas and Ethane Price Ratios [1]



Global Ethylene Cost Curve



- Current crude oil to gas ratio remains significantly advantaged
- North America ethylene remains advantaged vs. 60% of the world crackers

Source: IHS

(1) Oil to Gas ratio is Brent crude oil price (USD/bbl) divided by the Henry Hub natural gas price (USD/MMBTU). Ethane price ratio is Brent crude oil price divided by the Mont Belvieu price of ethane expressed as fuel value (USD/MMBTU).

LYB Well-Positioned to Leverage Feedstock Flexibility

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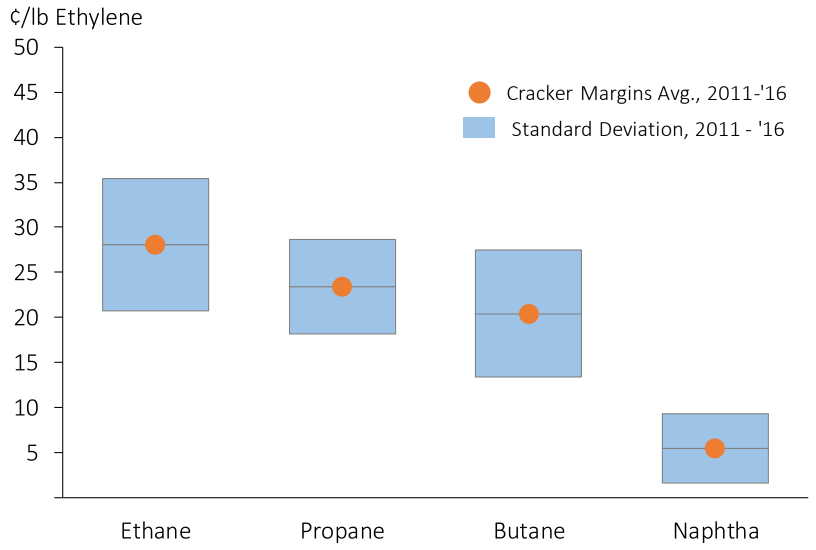
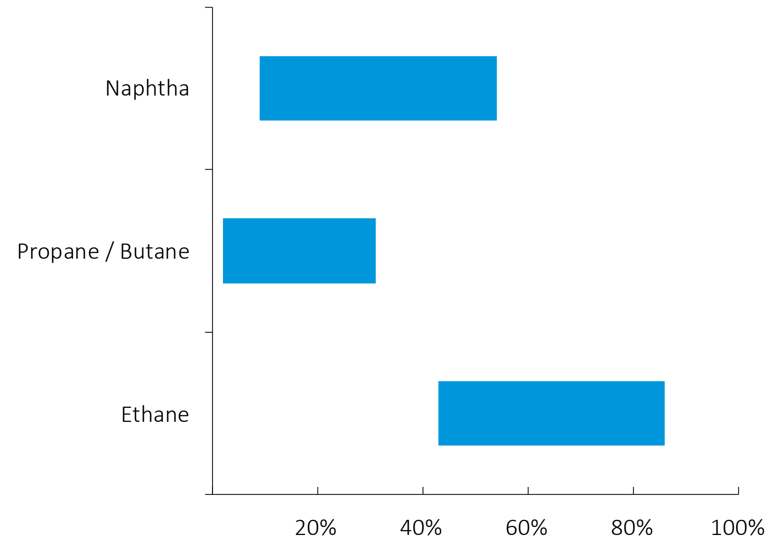
Industry Feedstock Cracker Margins



2016 LYB U.S. Cracker Feedstock Flexibility as Percent of Ethylene Production



- Recently completed LYB expansions designed to maximize ethane
- Sophisticated optimization tools and assets drive feed flexibility for maximum margins
- Advancing a host of small low capital projects to further expand our feedstock optionality

Source: IHS and LYB.

U.S. Ethane Supply Continues to Exceed Demand

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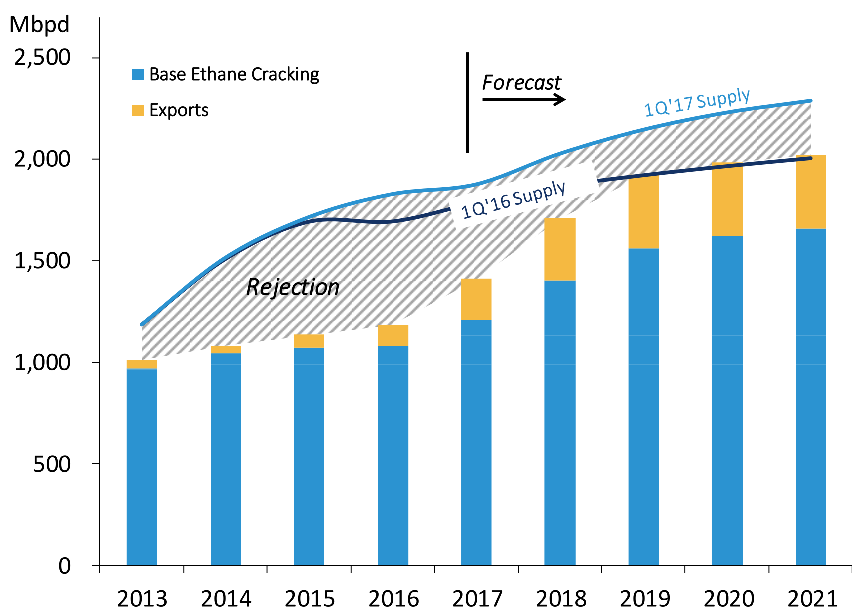
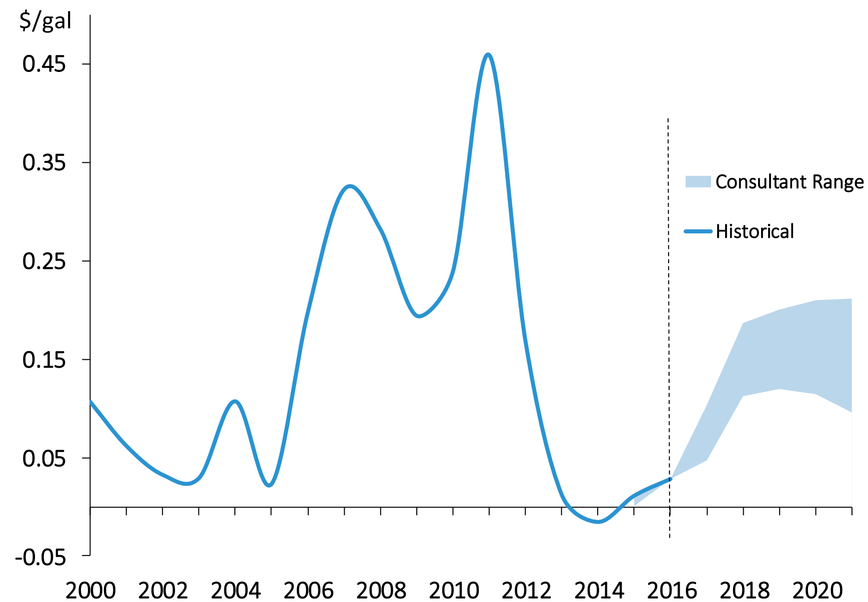
U.S. Ethane Supply & Demand



U.S. Ethane Frac Spread (1)



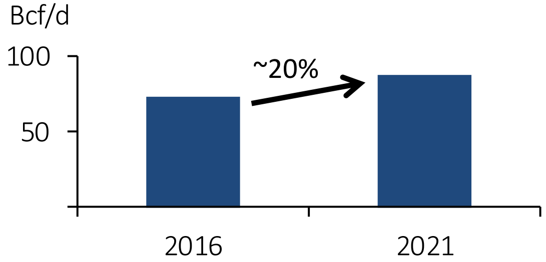
- To mitigate supply risk, LYB has secured long term supply & pipeline contracts
- To mitigate price risk, LYB has alternative feedstock capability & has hedged a small portion of the ethane portfolio

Source: S&P Global Platts, PIRA, Bentek, and LYB as of February 2017.

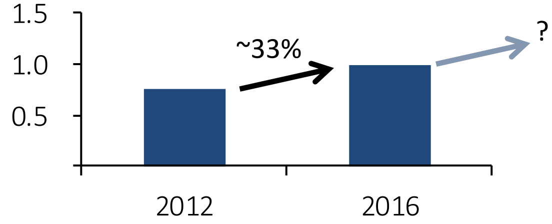
(1) U.S. Ethane Frac Spread = Mont Belvieu ethane price less ethane value using Henry Hub natural gas price.

Trends Support Further Increases in USGC Ethane Supply

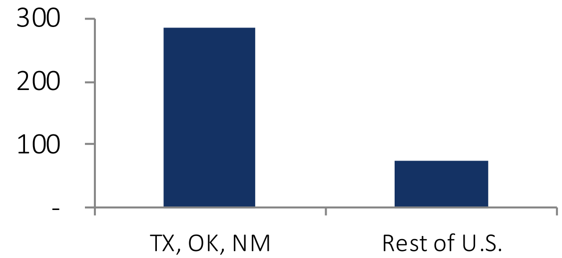
Natural Gas Demand	Ethane gal/Mscf Gas Increasing	Rig Count Additions Jun ’16 – Mar’17



- Growing demand focused on U.S. Gulf Coast markets



- Ethane content in natural gas steadily increasing
- Drilling concentrated in oil fields with rich associated gas



- Increased drilling concentrated in Texas, Oklahoma, and New Mexico
- ~60% in Permian and Eagle Ford

These trends could lead to an upside of several hundred thousand barrels per day of ethane

Source: Tudor Pickering Holt, Baker Hughes, Enterprise, Bentek, EIA, and LYB.

LYB Has Flexibility Within a Broad Ethylene Derivative Portfolio

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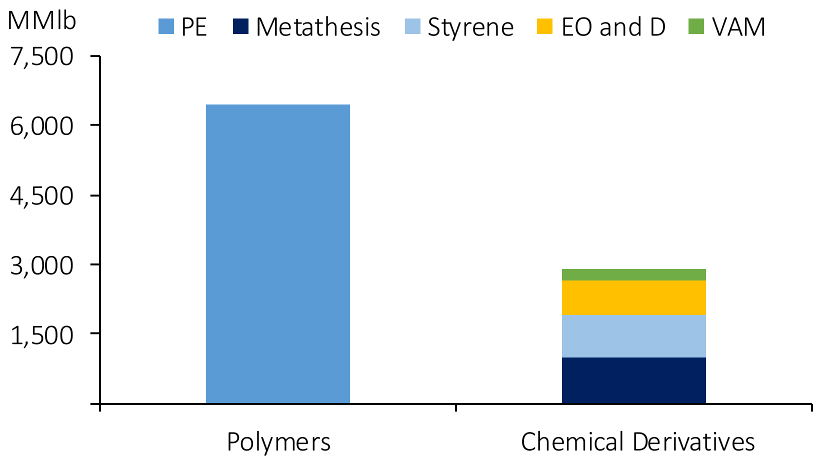
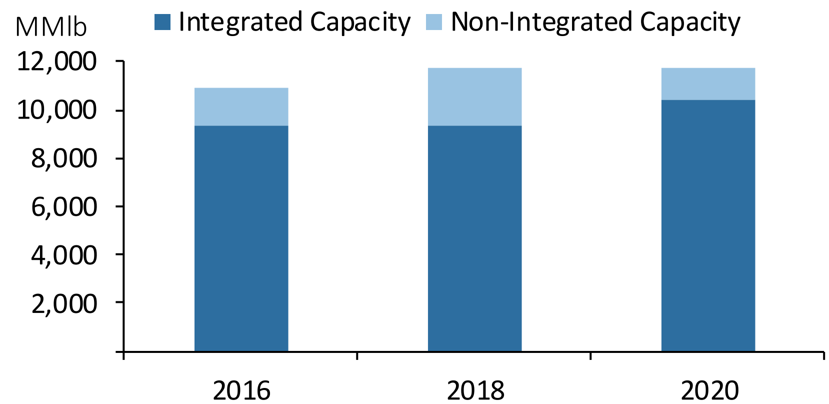
2016 LYB Derivatives Capacities (1) (Ethylene Equivalent)

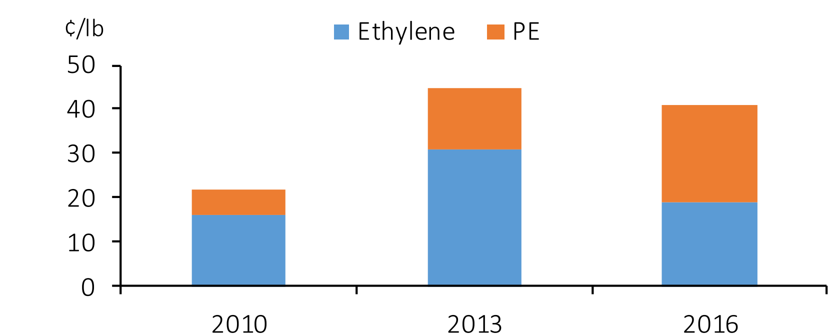


- LYB derivatives represent ~ 15% of 2016 U.S. ethylene consumption
- LYB ethylene integration is ~ 85%
- Merchant position provides access to PVC and non-integrated acetyls and glycols producers

LYB Ethylene Capacity



Ethylene and PE Cash Margin(2) History



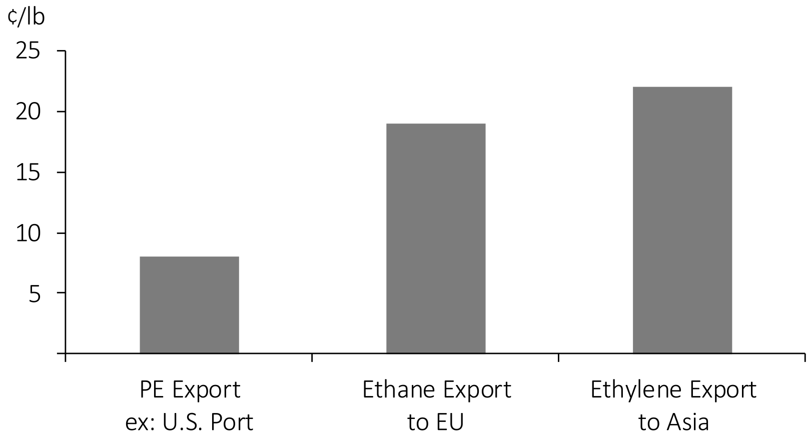
Source: IHS.

(1) LYB capacities as of December 31, 2016.

(2) Ethylene cash margin is IHS Ethylene NT price minus IHS ethylene weighted average feedstock cost; PE cash margin is IHS NT estimate blow molding price minus IHS ethylene contract NT minus polyethylene production cost estimate.

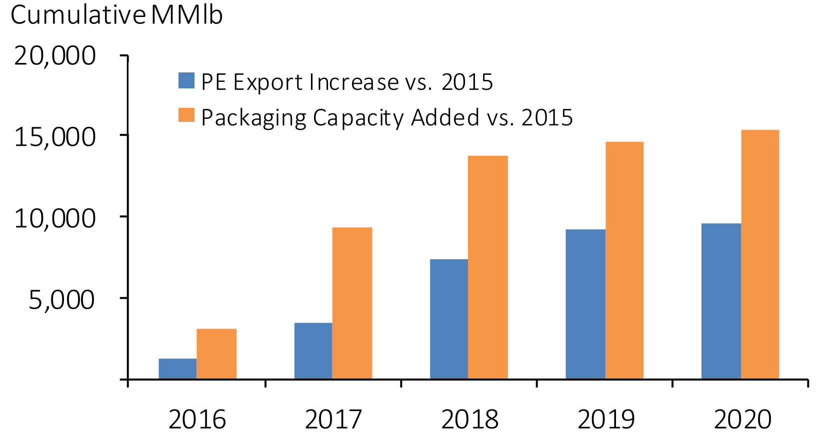
Polyethylene Export is Economically Favored Versus Ethane/Ethylene

Export Logistics Cost

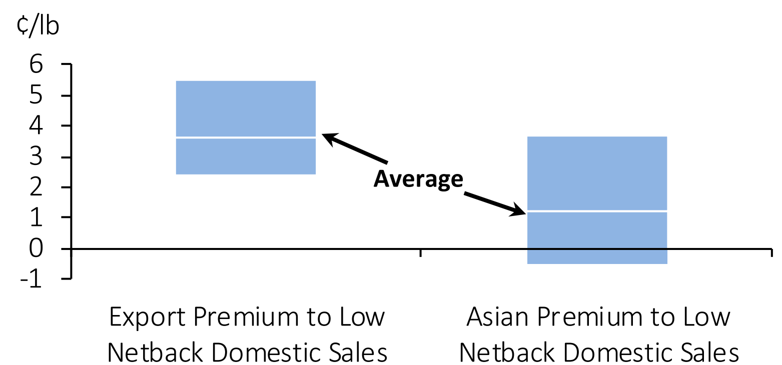


- LYB established global sales and marketing channels
- Export infrastructure under construction
- Export netbacks are similar to large domestic buyers

Packaging Supply Demand Additions Since 2015



LYB 2014-2016 Export vs. Domestic Netback (1)

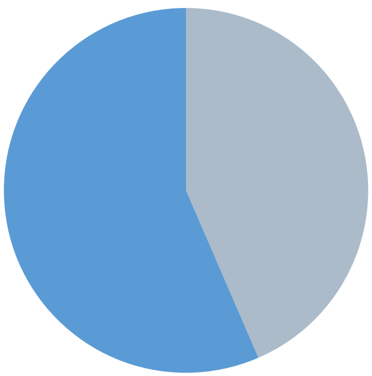


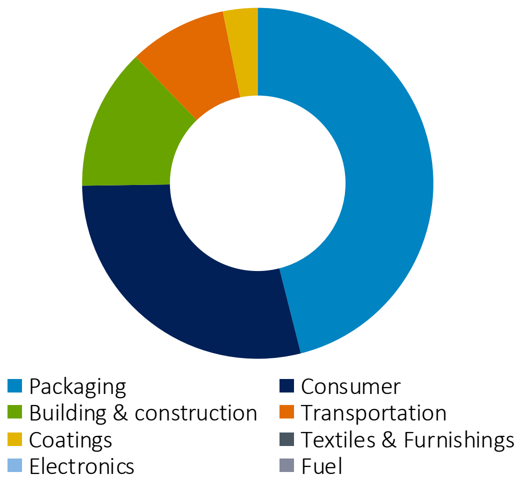
Source: IHS, Townsend Solutions.

1) Netback is the product revenue after deducting costs of transportation and packaging.

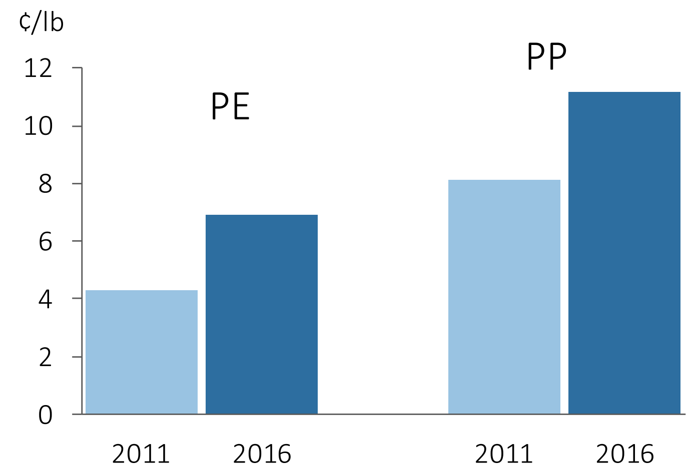
Significant Value Generated by Differentiated Polyolefins Portfolio

2016 Polyolefin Volumes & End Uses





LYB Value of Differentiated Grades



- Top quartile Polyethylene business performance vs. industry
- Improved Polypropylene operations and business performance versus historical trends
- Higher market growth of differential products in automotive, packaging and consumer products

Source: LYB. Based on ACC Polyolefins data.

Hyperzone PE Technology Extends Our Differentiation

New *Hyperzone* HDPE investment will offer resins with:

- Combination of LYB PE and PP technical expertise
- Excellent balance of processing capability and higher stiffness
- Targeting high-growth applications
- 60% of volume representing differential value
- New foundation for global LYB technology licensing

Developing Additional Growth Projects

	Project	Scope	Capex ($MM)	Potential EBITDA [1] ($MM / year) 2016 Margins
COMPLETED	Several Expansions and Debottlenecks	2 Blb Ethylene 0.24 Blb PE	~ $1,900	$370 – 550
PROGRESSING	*Hyperzone* HDPE Plant	1.1 Blb PE	~ $700 – 750	$150 - 200
UNDER STUDY	Expansions	0.55 Blb Ethylene 0.3 Blb PE 0.35 Blb PP	~ $405 - 440	$200 - 290
UNDER STUDY	New Plants	1.1 Blb Propylene 1.1 Blb PP Plant 1.1 Blb PE Plant		

Source: LYB, Chemical Data and IHS.
(1) Potential EBITDA assumes 100% utilization and is based on third party consultant industry margins for 2016 as of February 6, 2017.

O&P-Americas Summary

- North American production continues to be globally favored
- Expect ethane to remain favored into the future
- LYB assets provide excellent flexibility
- Polyolefins differentiation provides incremental value
- Additional expansion options under study

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Investor Day

O&P – Europe, Asia, International

Richard Roudeix

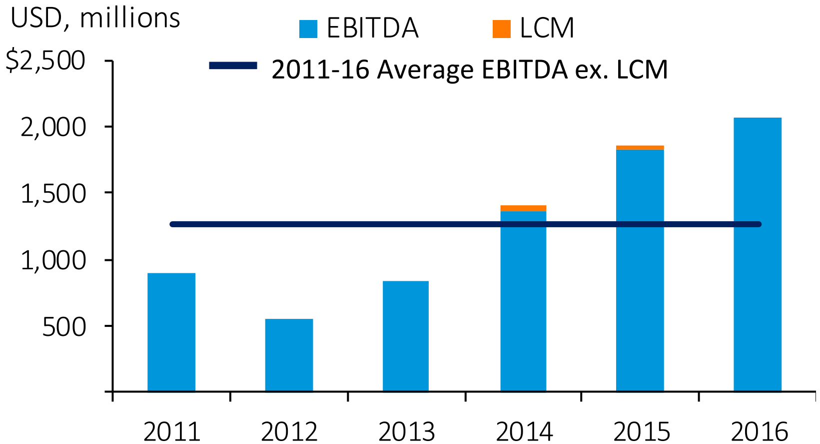
Senior Vice President

New York Stock Exchange
April 5, 2017

Building for the Future

O&P-Europe, Asia, International Segment Overview

EBITDA (ex. LCM) History



Key Messages

- Record EBITDA in 2015 and 2016
- Leveraging O&P Europe restructuring in a positive market environment
- Delivering differential performance to peers
- Joint Ventures & PP Compounds provide stability
- Growing our leading PP Compounds position

Product Capacities and Positions (1)

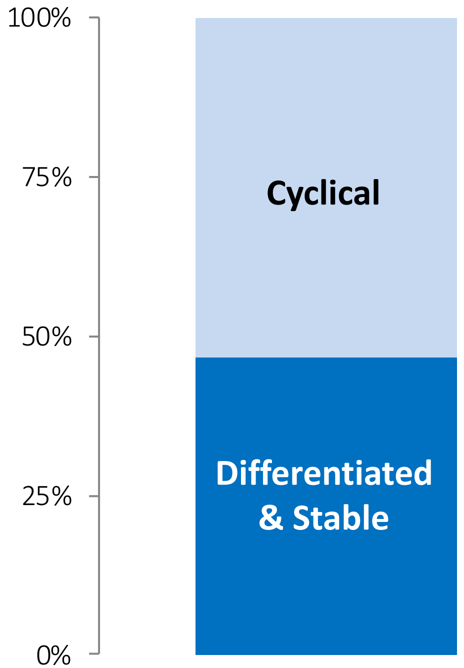
Product	Capacity (B lbs)	Sites	EU ranking
Ethylene	4.8	4	5
Propylene	3.5	7	5
PE	5.2	6	1
PP	7.9	13	1
PP Compounds	2.5	17	1 (Global)

Sources: IHS, AMI, LYB.
(1) LYB wholly-owned capacity and proportional share of JV capacity as of December 31, 2016.

Drivers of Profitability: Portfolio is Well-Balanced

2011-2016 EBITDA[1]	Drivers for Profitability	Near-Term Actions

2011-2016 EBITDA[1]



Drivers for Profitability

- Increased feedstock flexibility
- High operating rates
- Restructuring and cost reduction to offset inflation
- Systematic emphasis on high value end-use and selective innovation for high-value markets

Near-Term Actions

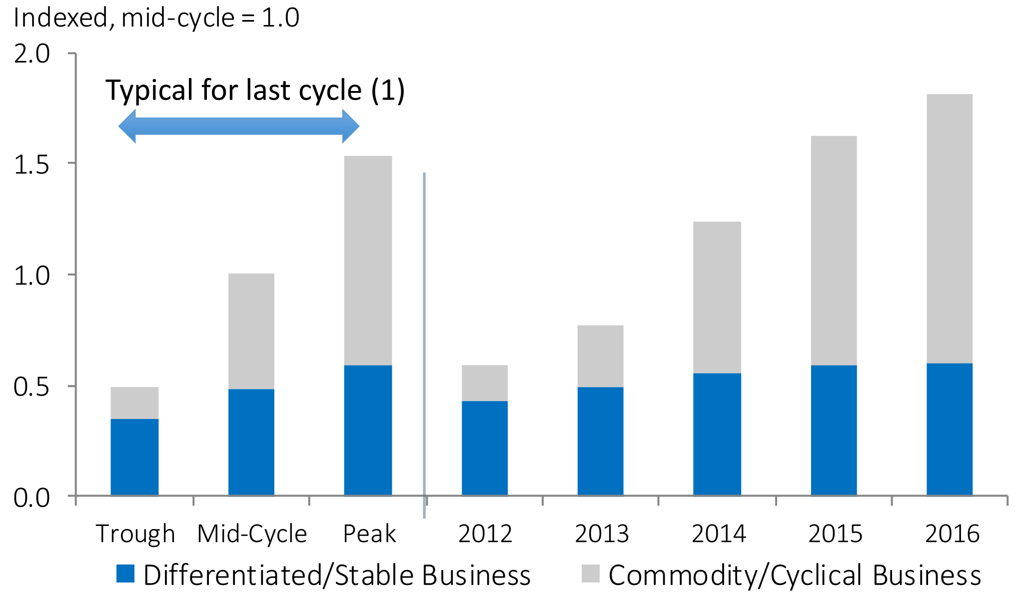
- Sustained focus on operational excellence, cost and capital discipline
- Optimization of feedstock logistics and energy efficiency
- Leverage global scale

Capturing value across the O&P EAI business portfolio

(1) EBITDA excludes amounts allocated to Other.

Structural Improvements and Strong Markets Drive Sustained Profit Improvements

Indexed O&P EAI EBITDA

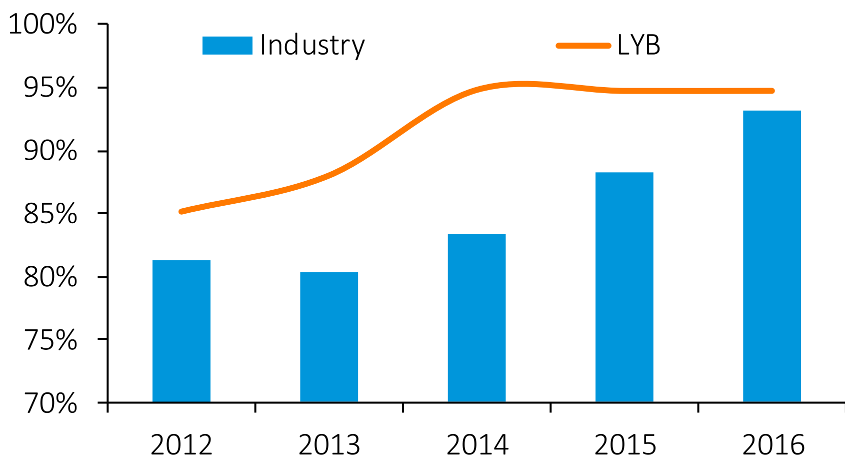


- 2011-2013 restructuring a source of sustainable improvement
- Commodity businesses leveraging high global/European operating rates and foreign exchange rates
- Targeted innovation pipeline building resilience for the future

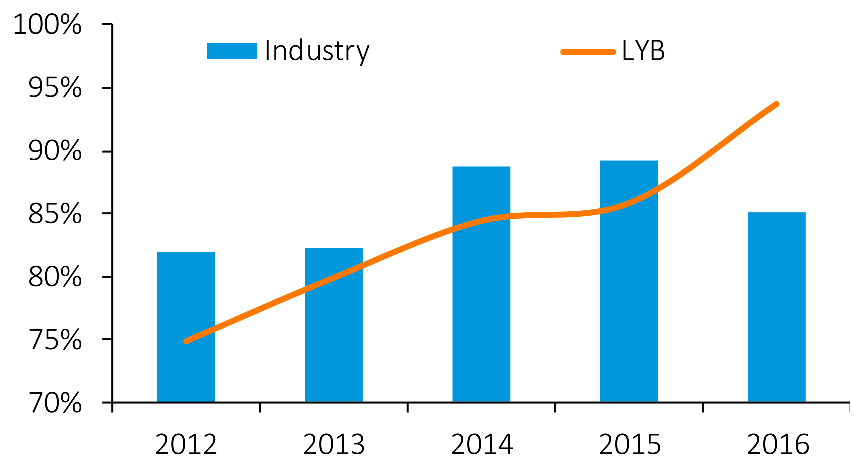
Source: LYB.
(1) O&P EAI trough, mid-cycle and peak EBITDA values are based on LYB estimates.

Sustainable Differential Performance

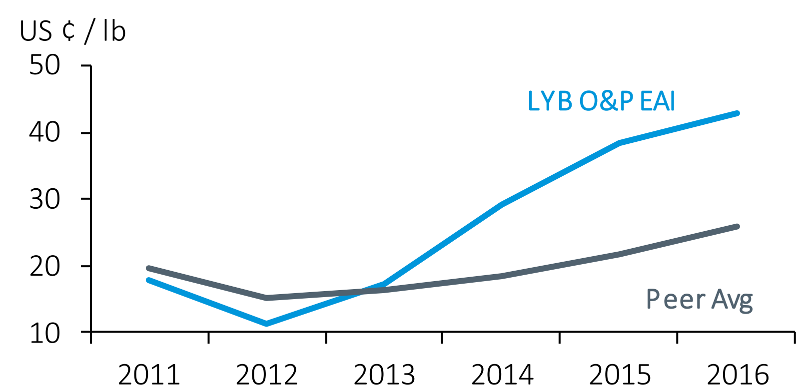
European Crackers Operating Rate



European HDPE Operating Rate



EBITDA per pound of Ethylene (1)

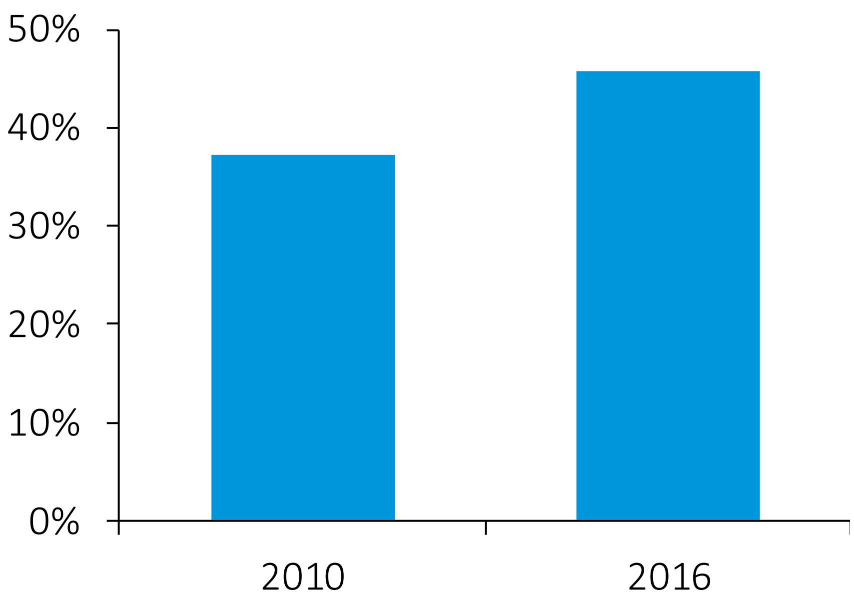


LYB continues to **outperform peers**

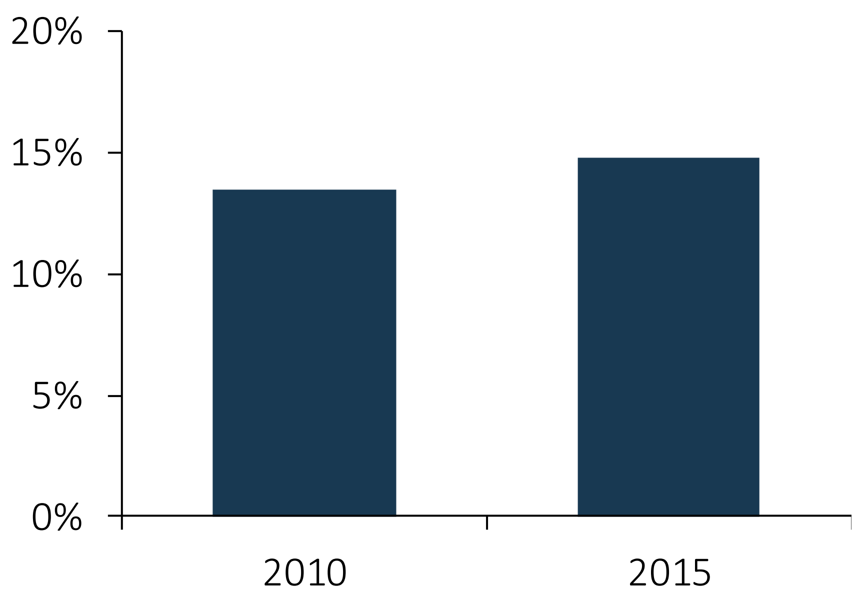
Source: LYB, Cefic, Fides. Industry and LYB Operating Rates are excluding turnarounds.
(1) LYB EBITDA excludes LCM; O&P EAI peers are Borealis and INEOS.

Improved European Cost Position

LYB O&P EAI Ethylene Production from Advantaged Feeds



LYB O&P EAI Polyolefins Total Cost Advantage vs. Industry

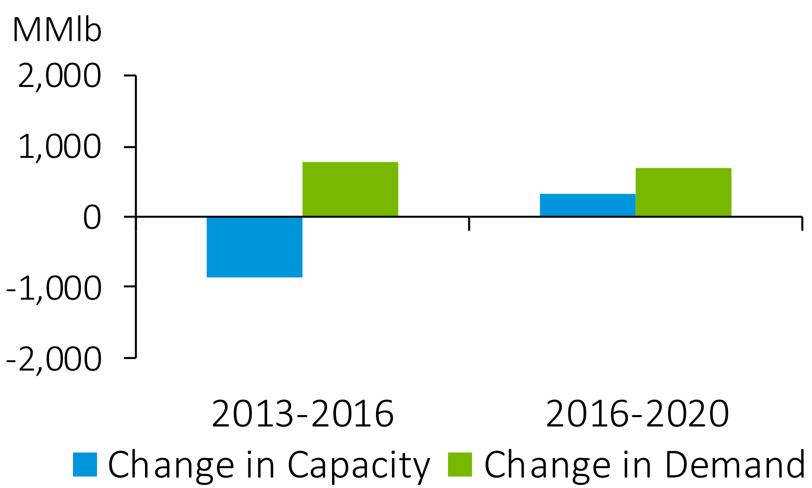


Optimize profitability with **feedstock agility** and continuous **cost management**

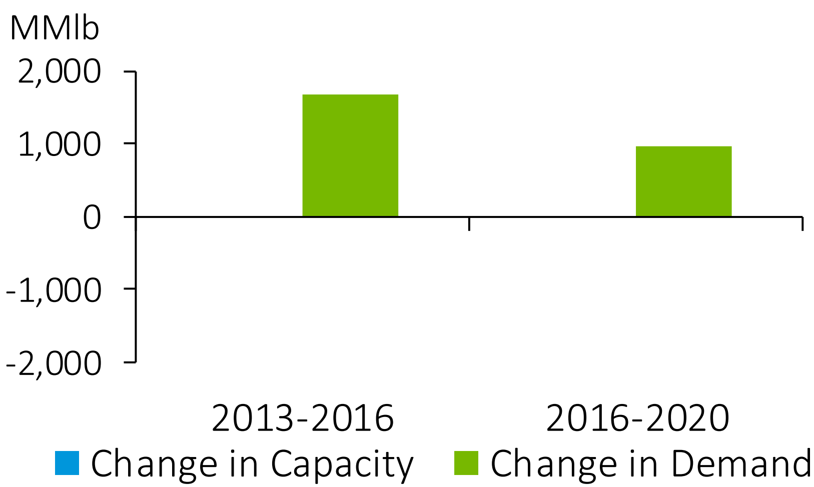
Source: 2015 PTAI PCMP.

Lack of New Capacity and Moderate Growth Should Maintain High Operating Rates

European HDPE Supply-Demand Change



European PP Supply-Demand Change

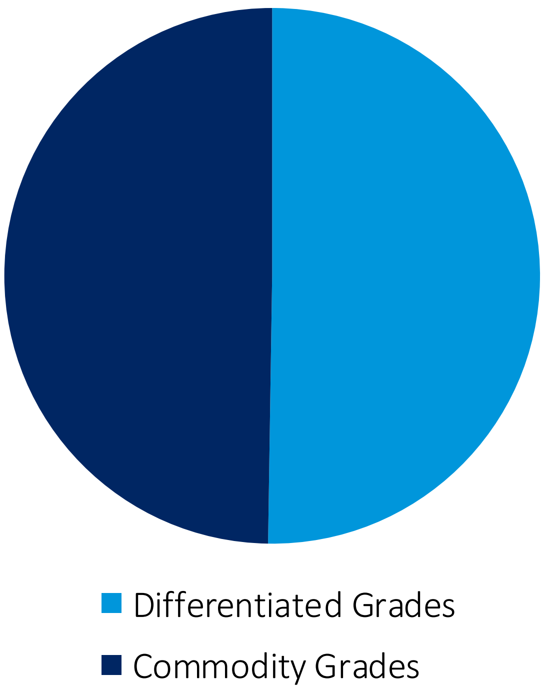


- No net capacity growth: 2013 - 2020
- Demand growth forecasted for PE and PP in Europe

Source: 2017 IHS.

Polyolefins Differentiation Provides Earnings Stability Through the Cycle

2016 LYB EAI Polyolefins Product Volumes



- Differentiated grades provide volume stability
- Differentiated grades provide premium margin over commodity
- Premium margin more significant at the bottom of the cycle

Joint Ventures and International Marketing

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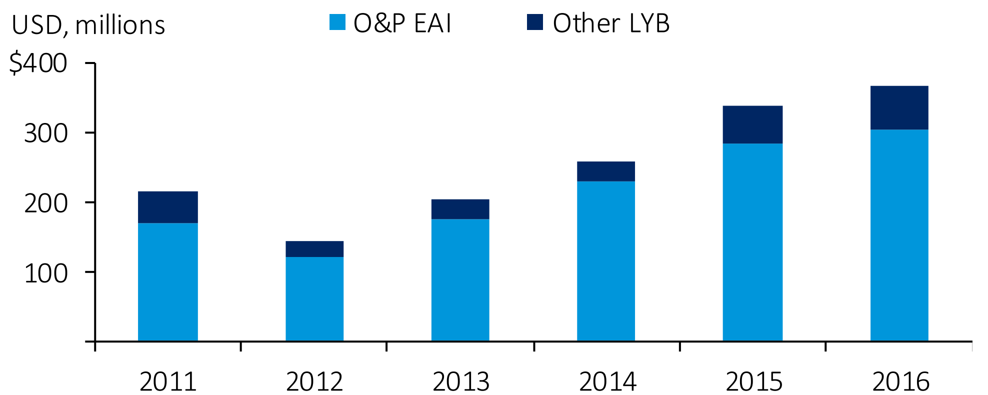
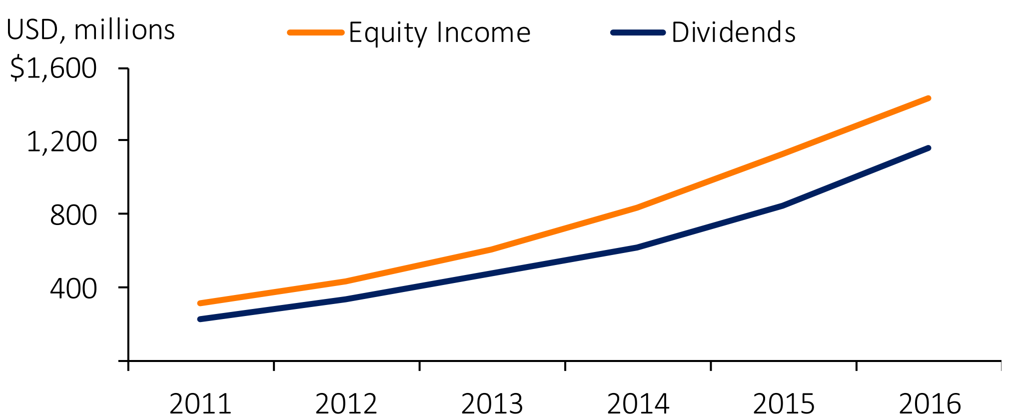
LYB Equity Income largely from O&P EAI



Cumulative O&P EAI JV Equity Income and Dividends



- Feedstock advantaged production in Middle East
- Local participation in Asia/ME markets
- Significant JV capacities[1]
  - 5.5 B lbs. olefins
  - 9.7 B lbs. PE & PP
  - 0.3 B lbs. compounding
- Significant source of after-tax earnings and free cash flow
- Scalable, global network

Source: LYB.

(1) Represents total joint venture annual nameplate capacity.

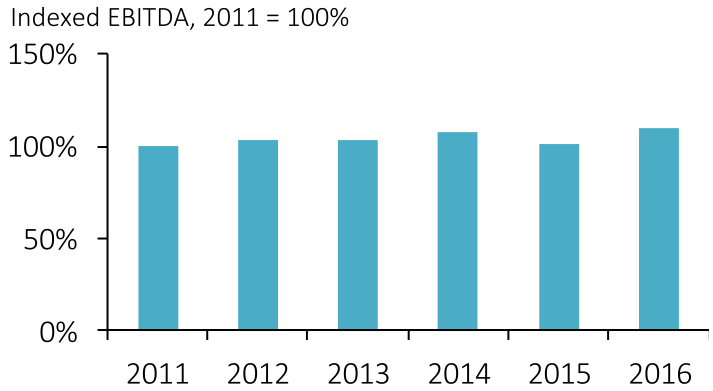
Well-positioned for Global Marketing of U.S. Exports

Asia - Marketing and Sales

- 80+ Countries
- 1500+ direct customers
- 100+ staff for sales and marketing

Global PP Compounds Generate Stable Returns

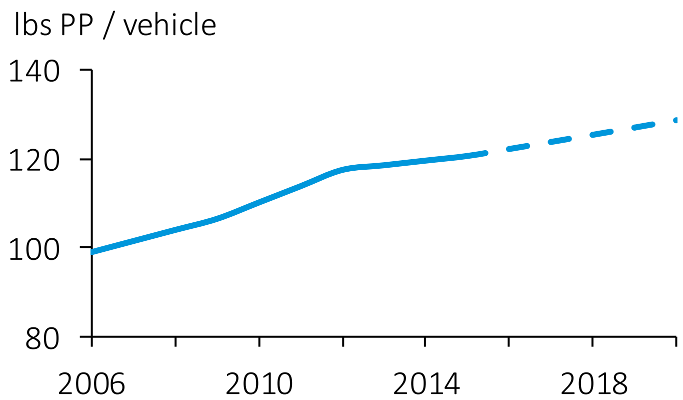
EBITDA Trend



PP Compounds

- Leading market position of up to 50% regionally
- 2.4B pounds sold in 2016 or 25 lbs for every light vehicle produced in our markets
- Organic growth with market and strengthening position through acquisitions

PP: 120lbs/ vehicle



Source: AMI PP Compounds, August 2016.

Next Application Opportunities

Metallic Pigmented *Hifax (Range Rover)*

Soft Touch Softell (Audi)

O&P EAI
Strong Portfolio of Businesses and Assets

- Structurally improved cost basis and flexibility, leveraging 2010-2011 restructuring

- 50% of 2016 EBITDA generated from areas of differentiation with potential for further growth
  - Premium polyolefin mix
  - PP compounds, *Catalloy* and Polybutene
  - Cost-advantaged Joint Ventures asset base
  - Strong Joint Ventures dividends flow

- Scalable Global Marketing Network, in particular in Asia
  - Decades of direct polyolefin marketing experience in Asia
  - ~ 4.5 B lbs of annual sales from wholly-owned and JV assets

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Investor Day

Intermediates & Derivatives

Jim Guilfoyle

Senior Vice President

Global Intermediates & Derivatives

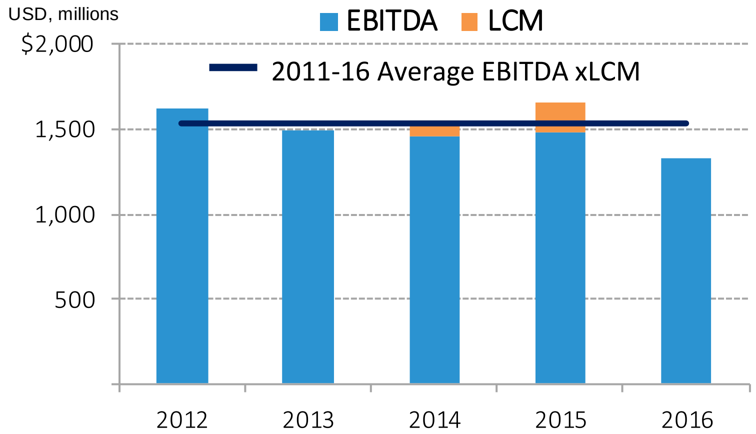
Global Supply Chain

New York Stock Exchange
April 5, 2017

Building for the Future

Intermediates and Derivatives: A Platform for Earnings Stability & Growth

EBITDA (ex. LCM) History



Key Messages

- Stable earnings and consistent cash generation
- Broad product portfolio with feedstock integration
- Leading market positions and differential technologies
- Strong market outlook and platform for growth

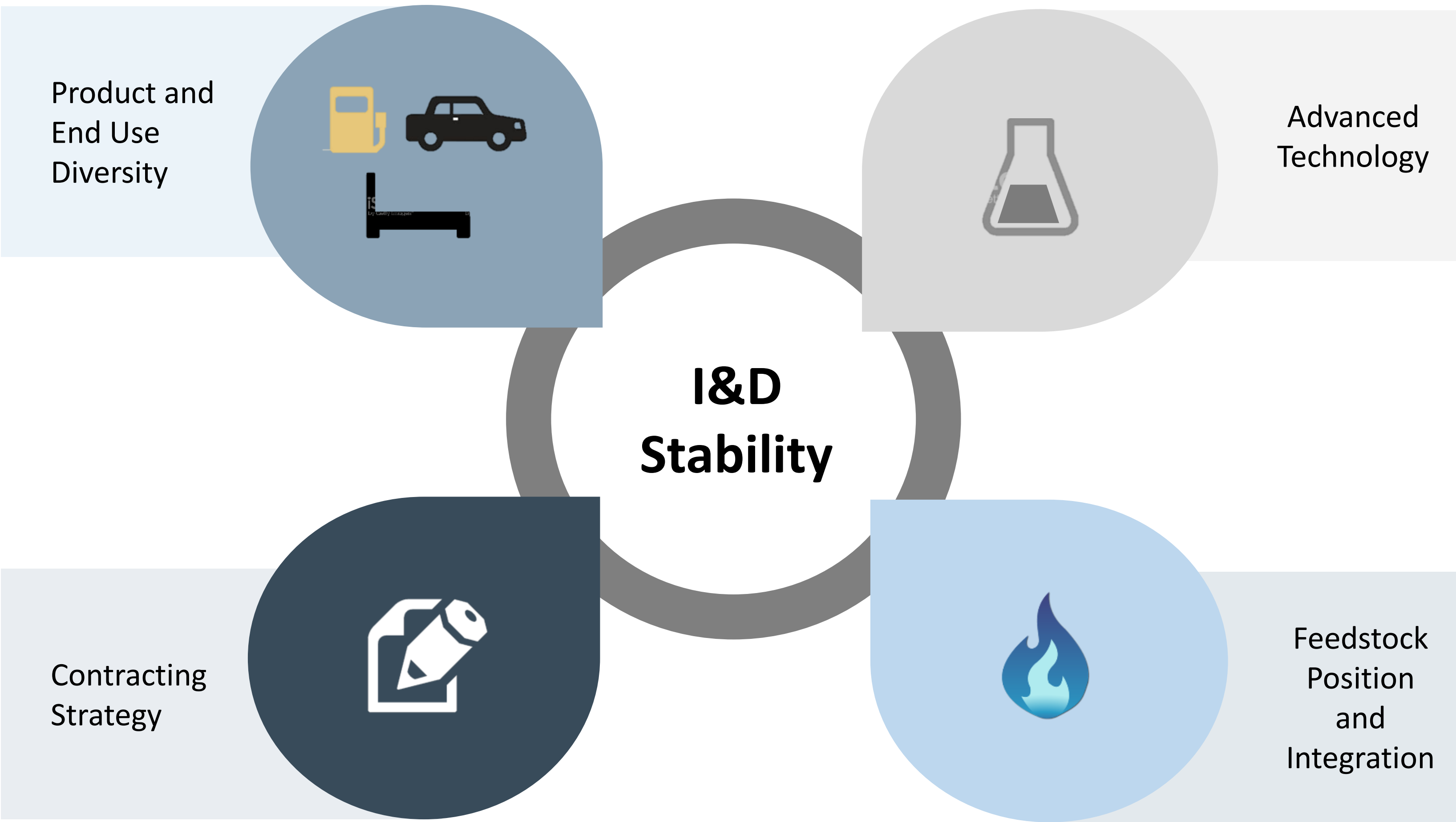
Product Capacities and Positions[1]

Product	Capacity	Global Position
Propylene Oxide	5.1 Blbs.	#2
Oxyfuels	75 MBPD	#1
Styrene	5.9 B Lbs.	#1

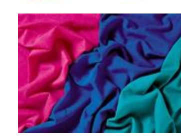
Botlek, The Netherlands

(1) Capacity data represents 100% capacity share.

Fundamental Drivers for Stable Earnings

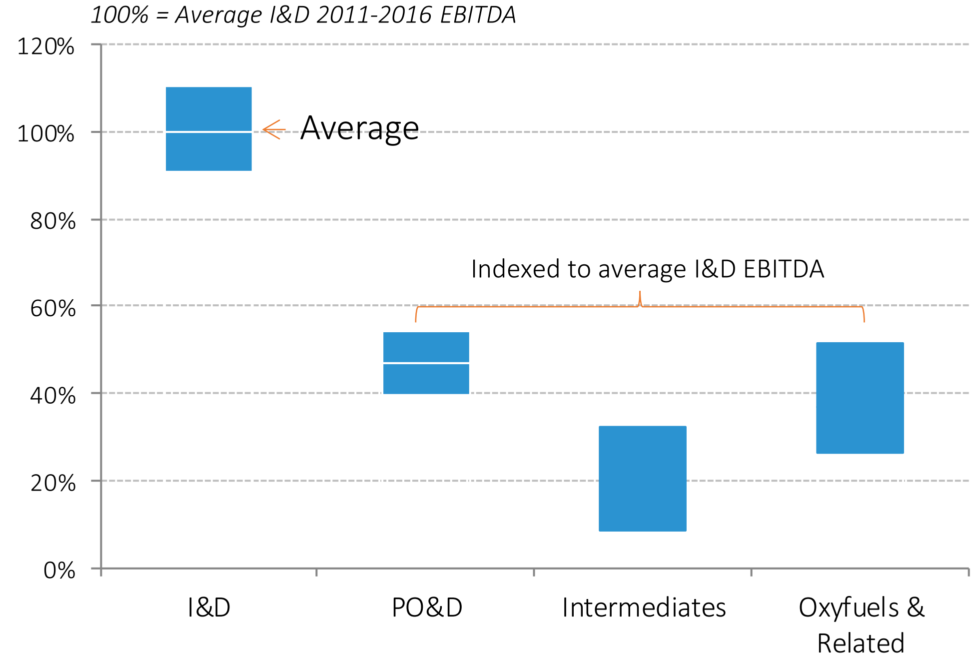


Broad Product Portfolio Provides Resilient Demand

	Propylene Oxide & Derivatives	Oxyfuels and Related Products	Intermediate Chemicals
Core Products	- Propylene Oxide (PO) - Propylene Glycol (PG) - Butanediol (BDO)	- High Purity Isobutylene (HPIB) - Methyl Tertiary Butyl Ether (MTBE) - Ethyl Tertiary Butyl Ether (ETBE)	- Styrene Monomer (SM) - Methanol (MeOH) - Glacial Acetic Acid (GAA) - Vinyl Acetate Monomer (VAM) - Ethylene Oxide (EO)
Key Raw Materials	- Propylene	- Butane, Bio-ethanol, Methanol	- Ethylene, Benzene, Natural Gas
Key Applications	- Home and auto cushioning - Insulation foams - Polyester composites - Coatings - Automotive parts - Spandex  	- Inside liner tires - Lubricant additives - Fuel blending components   	- Food packaging - Textiles - Coatings - Safety glass - Surfactants - Antifreeze - Industrial coatings - Polyester    

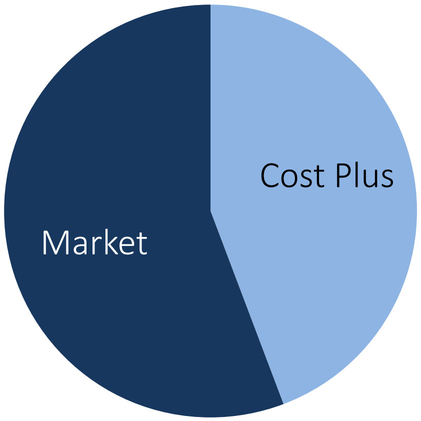
Breadth of Product Portfolio and Contracting Strategy Dampens Volatility

EBITDA (ex. LCM) Variability Over Time: 2011 – 2016



PO&D	Intermediates	Oxyfuels & Related
• PO • P-Glycol • Glycol Ethers • Butanediol	• Styrene • Methanol • Acetic Acid • VAM • EO/EG	• MTBE • ETBE • Isobutylene • TBHP • TBA

Contracting Strategy (1)



Source: LYB.

(1) Internal LYB estimates derived from third party sales, 2016.

Technology Advantage Has Provided Stability and a Platform for Growth

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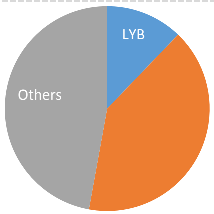
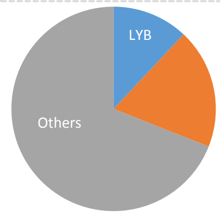
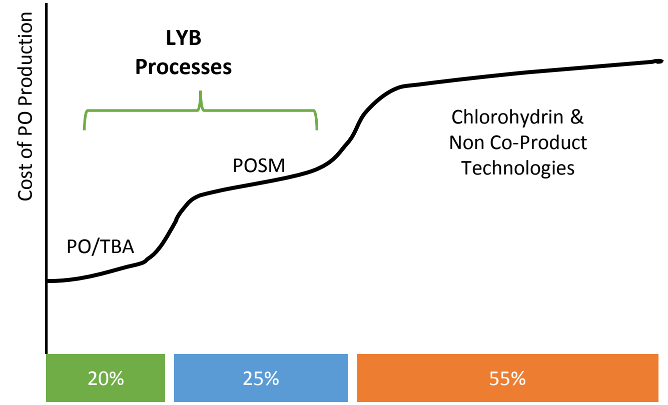
	Propylene Oxide & Derivatives (PO&D)	Co-Products (TBA & Styrene Chain)
Global Capacity Share (2016) (1)	**Propylene Oxide** LYB #2 in PO Top 5: 53% ■ Market: 23 B lbs.	**Oxyfuels** LYB #1 Top 5: 31% ■ Market: 810 MB/D
Sources of LYB Advantage	■ Access to low-cost technologies ■ Market has low liquidity ■ Downstream integration	■ Leader in fuels advocacy ■ Flexible production capability ■ Global logistics network

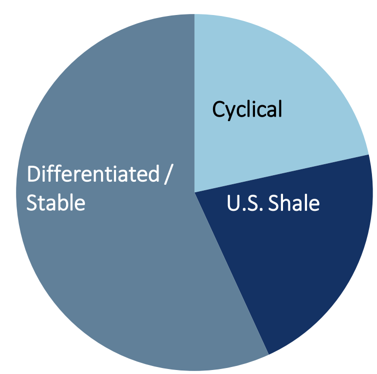




PO Cost Curve and Global Capacity



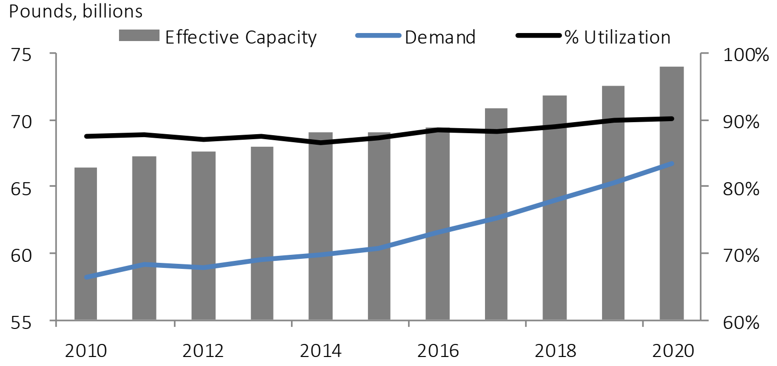
Differentiated Proprietary Technology (2)



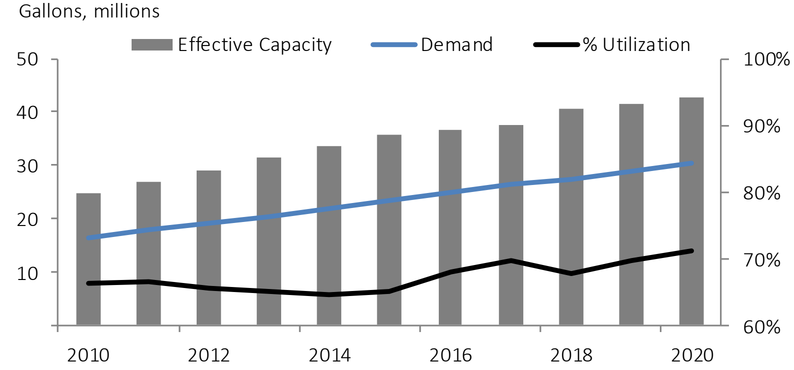
(1) Capacity data from IHS, PCI, and LYB resources.
(2) Proportion of 2016 EBITDA, excluding the impact of the LCM adjustment.

Styrene and Methanol Scale is Significant and Leveraging

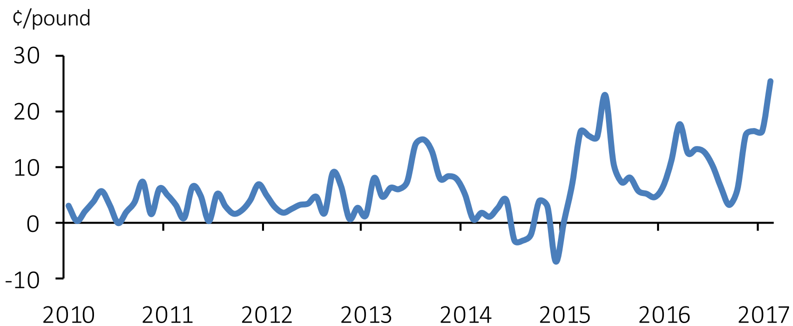
Styrene Supply and Demand



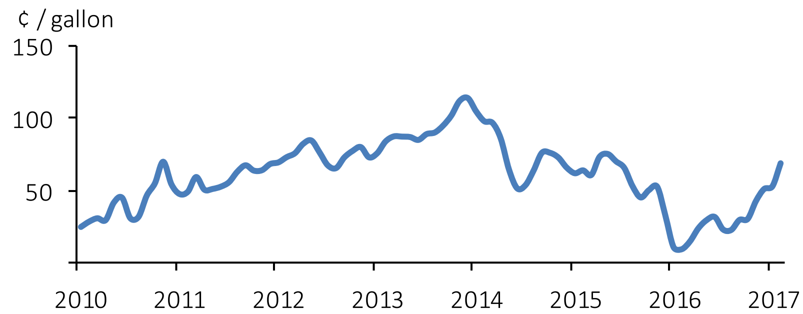
Methanol Supply and Demand



U.S. Styrene Industry Margin [1]



U.S. Methanol Industry Margin [1]



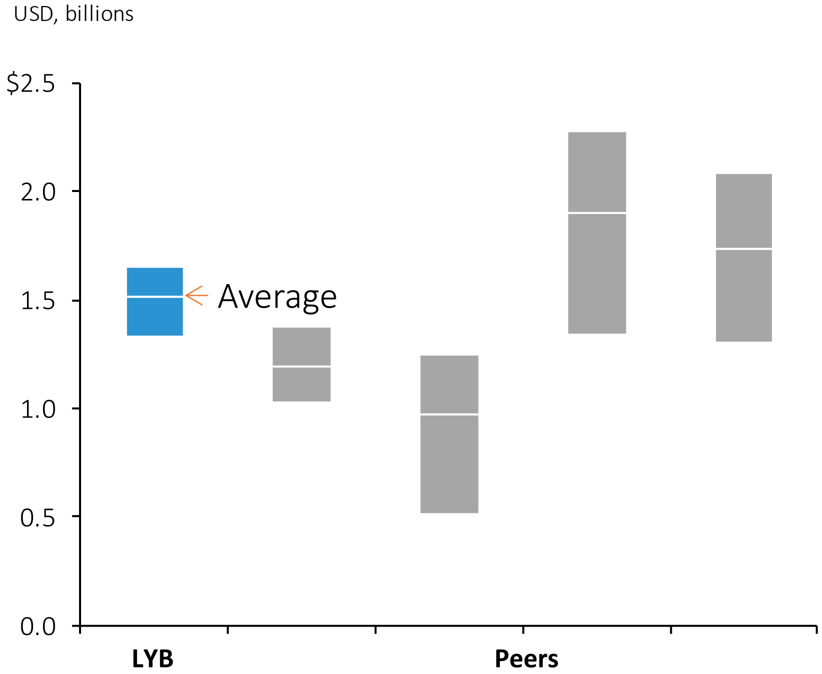
3.4 billion pounds
LYB's wholly-owned Styrene capacity

440 million gallons
LYB's wholly-owned Methanol capacity

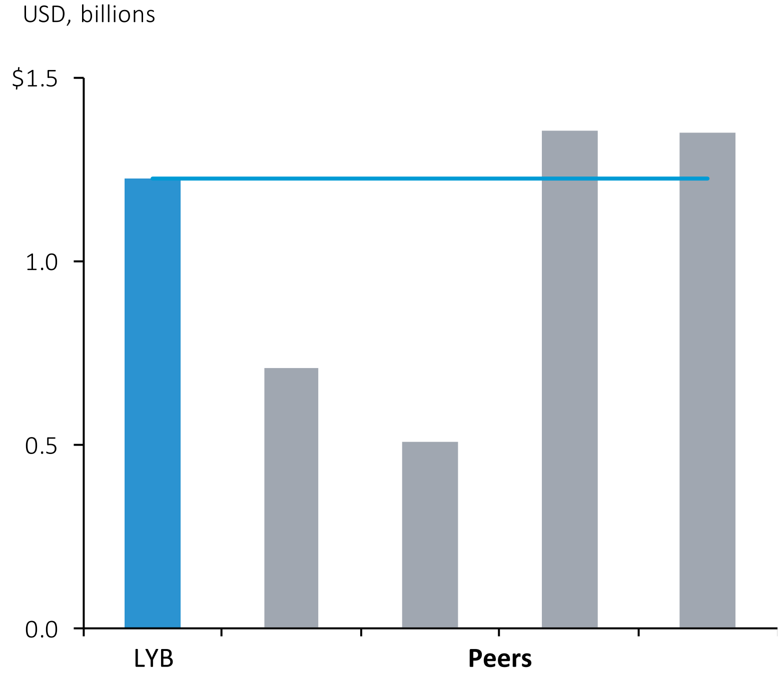
Source: IHS and LYB.
1) 3-month moving average.

The Result is Consistent EBITDA and Outstanding Cash Generation

EBITDA (ex. LCM) Range 2011 – 2016 (1)



2011 – 2016 Avg. EBITDA (ex. LCM) less Capex (1)



Cash generation and earnings larger than most public peers

Source: LYB, Capital IQ.

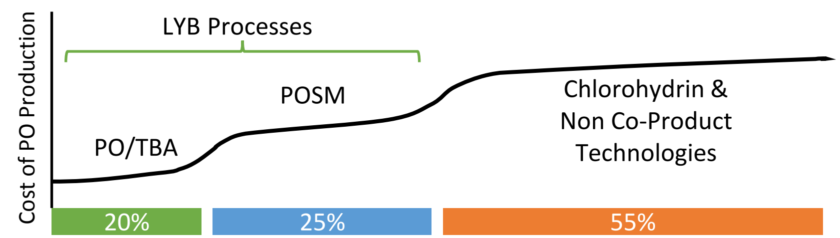
(1) EBITDA is as reported by Capital IQ and could include adjustments and therefore not be on the same basis. One peer did not restate financial information back to 2011 following a reorg and therefore the average for this peer was based on the average of 2012 – 2016.

Notes: Peers include Huntsman, Celanese, Eastman, and Dow Performance Materials and Chemicals.

Market Conditions are Favorable for a PO/TBA Project

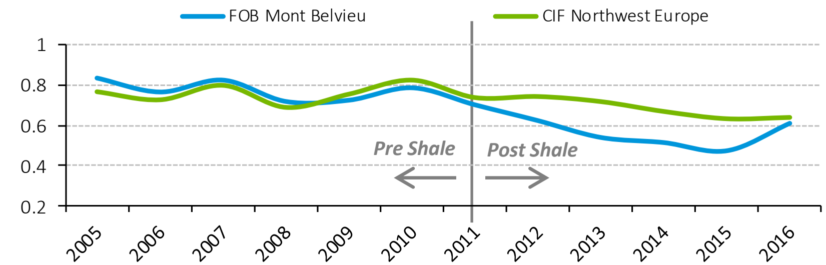
- Aligns with our strategy
  - Invest where we have leading technology positions
  - Leverage leading market position
  - Stable business with strong cash flow

LYB Practices the Leading PO Technologies



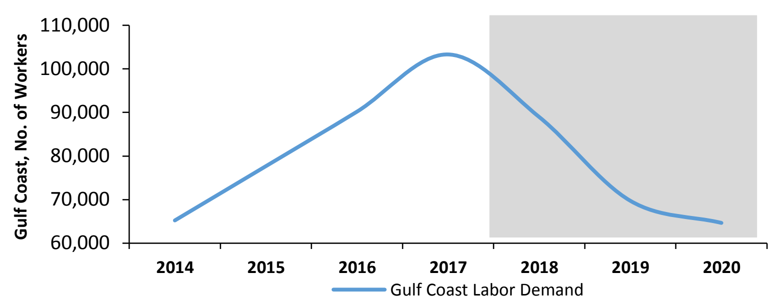
- U.S. Shale Advantage
  - Abundant butane
  - Favorable oil / NGL pricing

Butane as a Percentage of Brent (1)



- Construction schedule aligned
  - Industry resource availability on tail of major USGC build(2)

Gulf Coast Labor Availability (2)

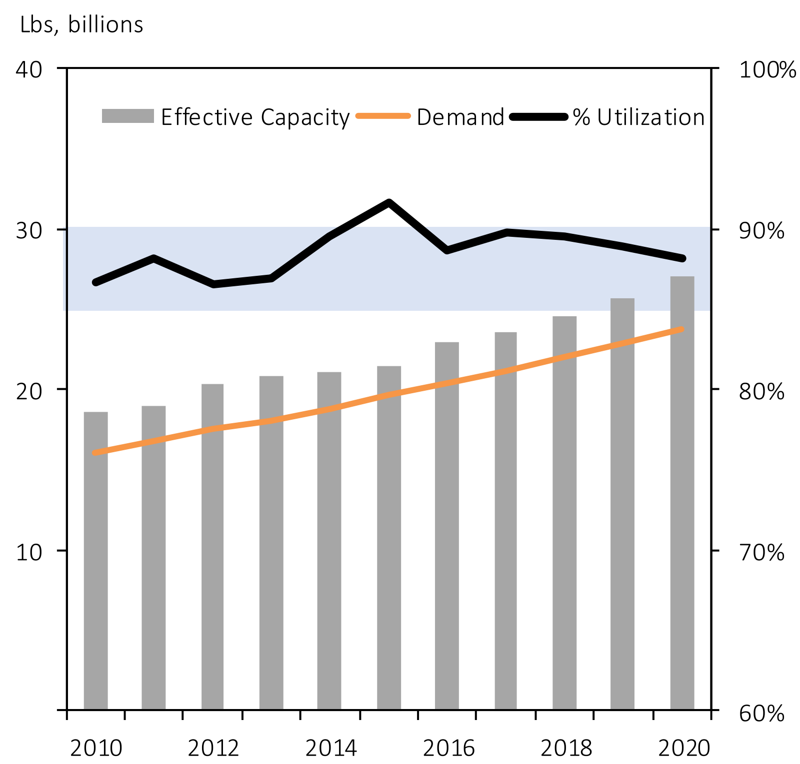


(1) Source: IHS.
(2) Source: Industrial Information Resources and LYB.

Propylene Oxide: Favorable Growth Environment

- Operating rate stability
- PO demand growth equivalent to one new world scale plant per year
- Growth underpinned by macro trends of population growth, urbanization, and wealth expansion
- Environmental pressure on competing technologies

Global Propylene Oxide (PO) Supply/Demand

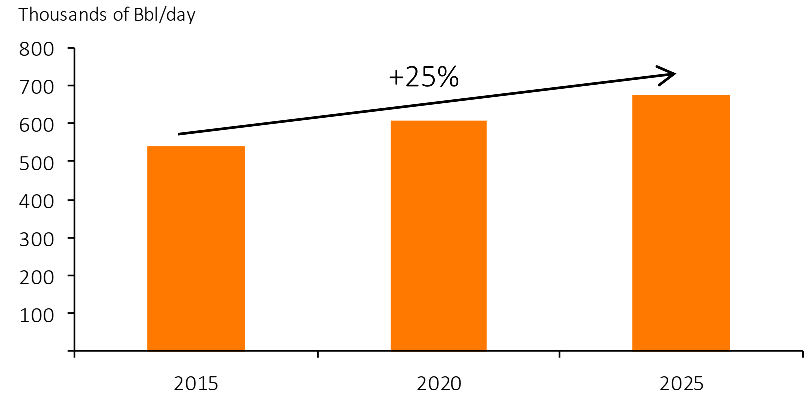


Source: LYB.

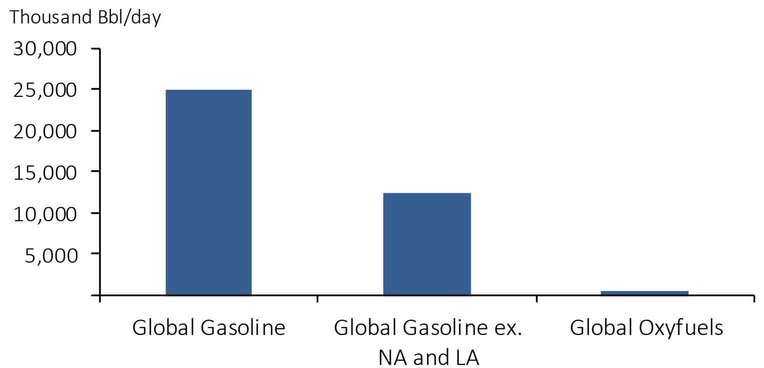
Oxyfuels: Butane Upgraded to High Octane Gasoline

- U.S. will continue shale gas production and associated NGLs will be abundantly available
- Meets the needs of improving gasoline quality
- Environmental benefit of oxygenates blended to fuel
- Increased demand in developing countries

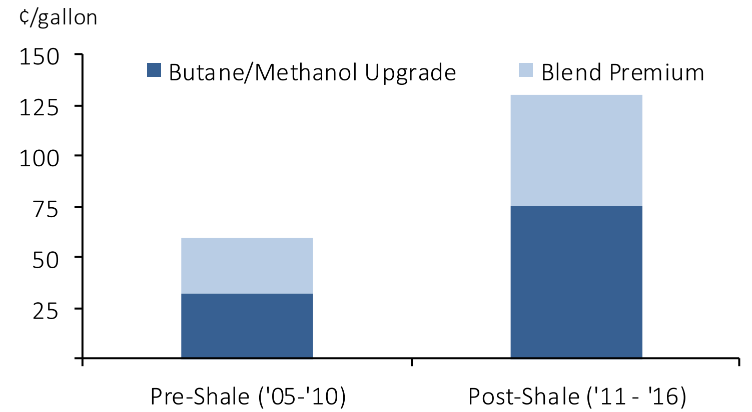
Demand for Oxyfuels is Growing (1)



Global Gasoline and Oxyfuel Demand (3)



U.S. MTBE Upgrade Value (2)



(1) Source: IHS.
(2) Source: LYB, Platts, and IHS.
(3) Source IHS. Global Gasoline ex. NA and LA is excluding North America and Latin America.

I&D: Strong Foundation In Markets and Technology Enable Growth

- Maintain focus on strong operations generating steady cash flow
- Increase investment in core chemical technologies
- Grow organically through advantaged technologies and feedstocks
- Expand platform for value-driven growth

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Investor Day

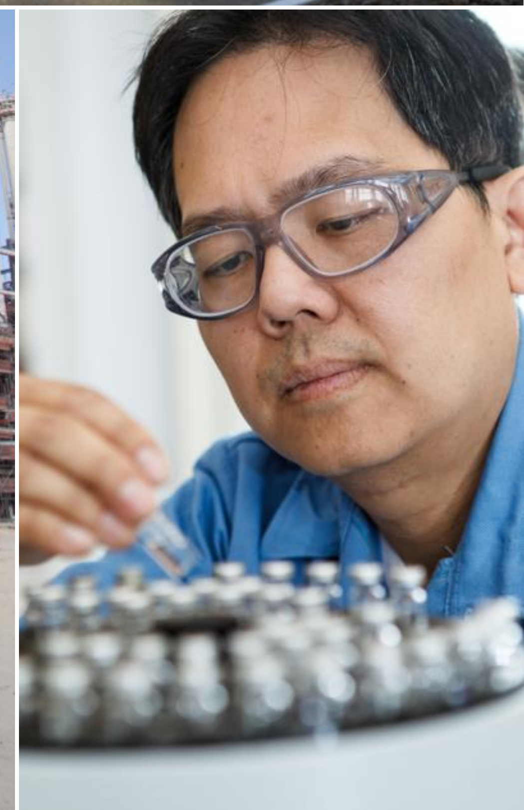
Refining, Manufacturing and Projects

Dan Coombs

Executive Vice President

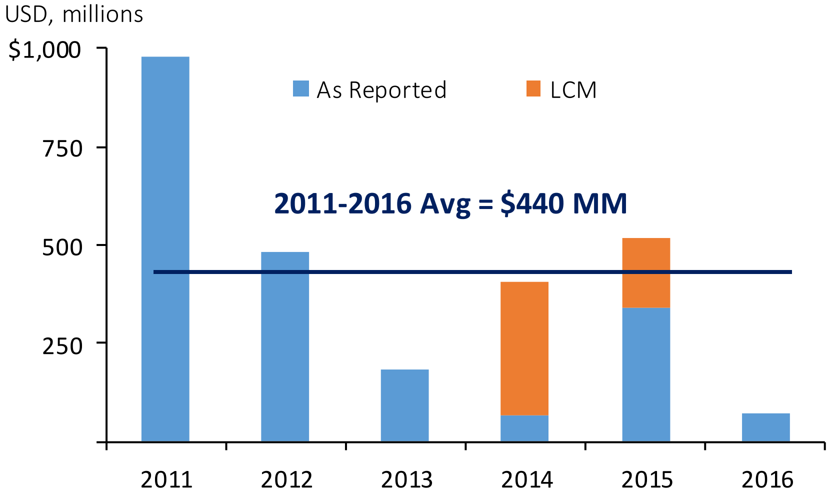
New York Stock Exchange
April 5, 2017

Building for the Future



Refining

EBITDA (ex. LCM) History



Key Messages

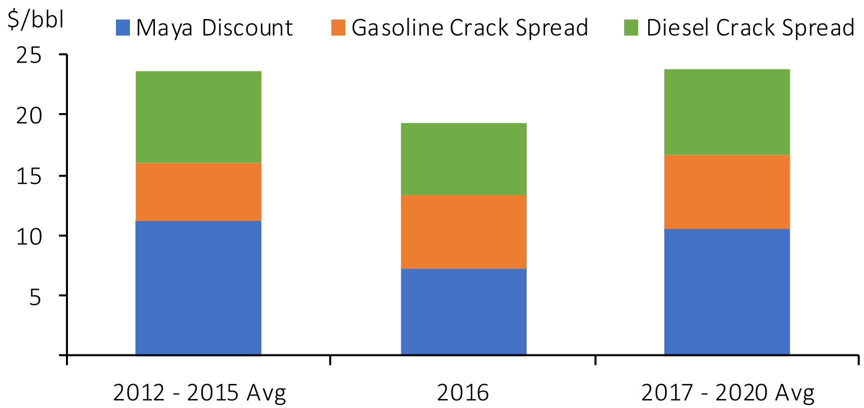
- Margins supported by growing demand for cleaner fuels and greater heavy crude discounts
- Good access to advantaged feedstocks and domestic and export markets
- Recent performance impacted by reliability and turnarounds. Positive outlook post 1Q 2017.
- 2011 – 2016 refining EBITDA (ex. LCM) less capital expenditures > $1.6 billion

Characteristics

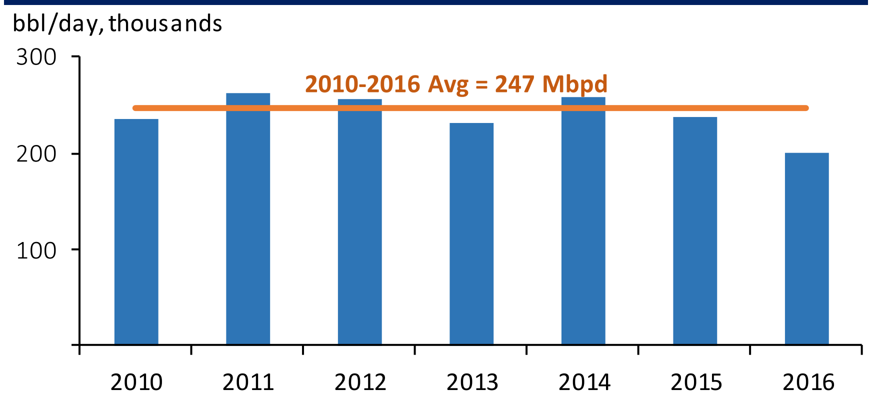
- 268,000 barrels per day capacity
- Designed for heavy, sour crude oils (Nelson Complexity = 12.5)
- Upgrading investments completed for new, stringent gasoline and diesel fuel specifications
- Houston Ship Channel location has excellent access to global heavy crude supplies and markets for products

Heavy Refining Spreads Forecast to Increase

Maya 2-1-1



Houston Refinery Throughput



- Diesel fuel demand supported by maritime fuel requirement
- 10 ppm sulfur gasoline spec increases octane demand
- Discount for heavy crudes increases at higher crude price
- Identified and correcting 2016 issues to improve reliability

Source: LYB, Platts.

Robust Global Manufacturing Footprint

Spanning the Globe

We manufacture at **55** sites across **17** countries

Legend

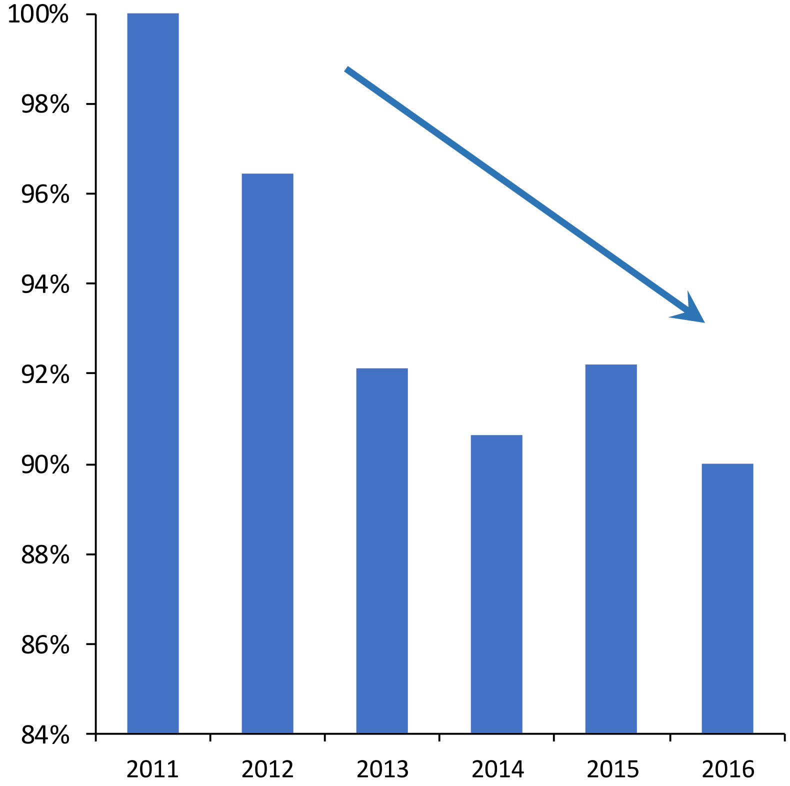
■ LyondellBasell Manufacturing
▲ Joint Venture Manufacturing

Our Focus

- GoalZero operations
- Comprehensive benchmarking
- Cost and capital discipline
- Leveraging global footprint

Focus on Manufacturing Cost Discipline

Manufacturing Operating Costs (1)



Benchmarking (2)

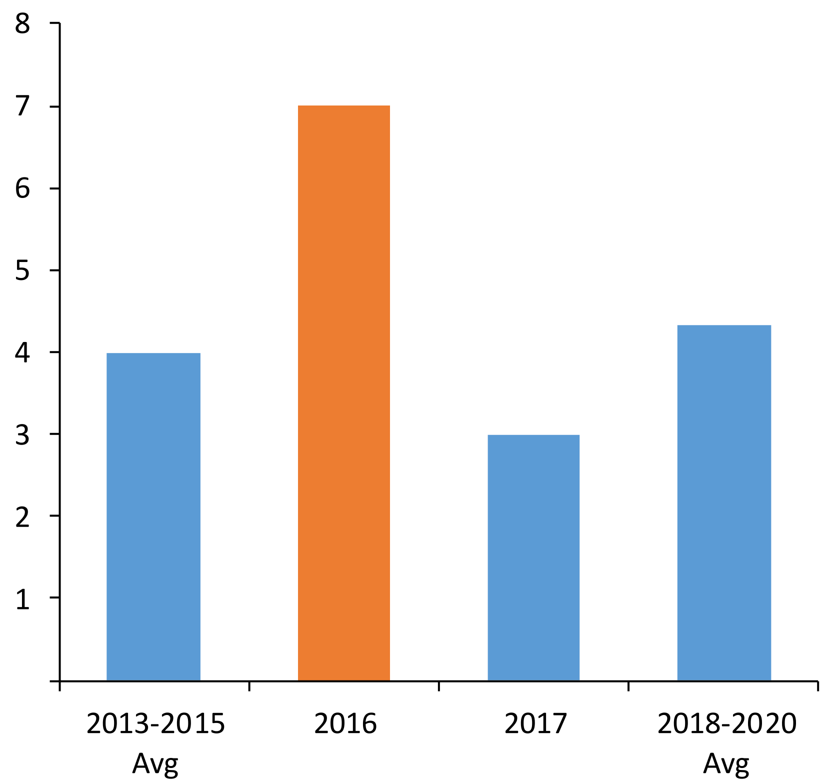
Internal and external benchmarking drives focused, continual actions and improvements

- Olefins: ~ 80% of production in top half operating cost performance
- Polyolefins: > 50% of production in top half operating cost performance
- PO/SM, PO/TBA and Methanol all in top half of industry cost of production performance

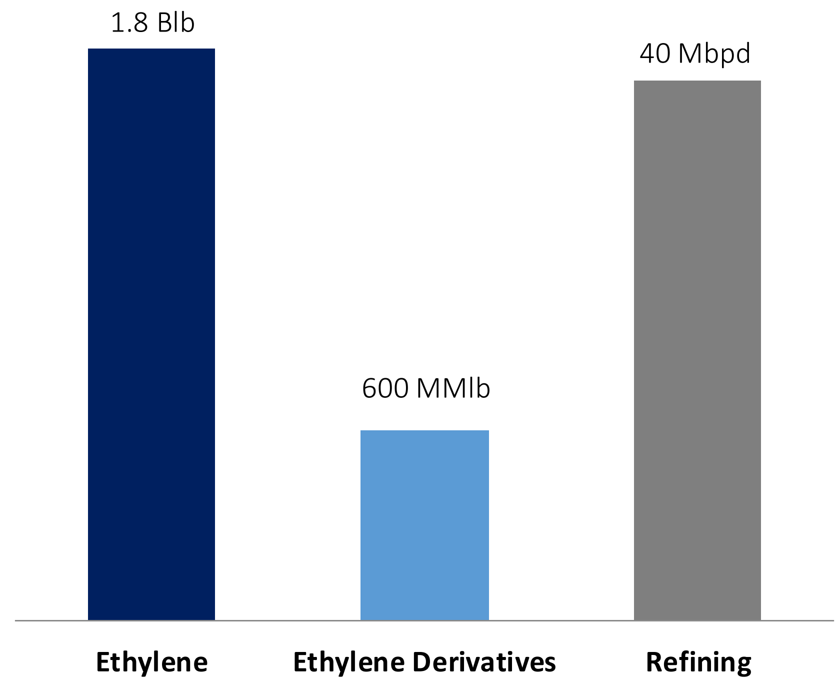
(1) Adjusted for wage inflation.
(2) External benchmarking vs. North American and European industry competitors. Based on 2015 data.

2017 Potential Benefits from LYB Maintenance Investments During 2016

LYB Major Turnarounds Per Year



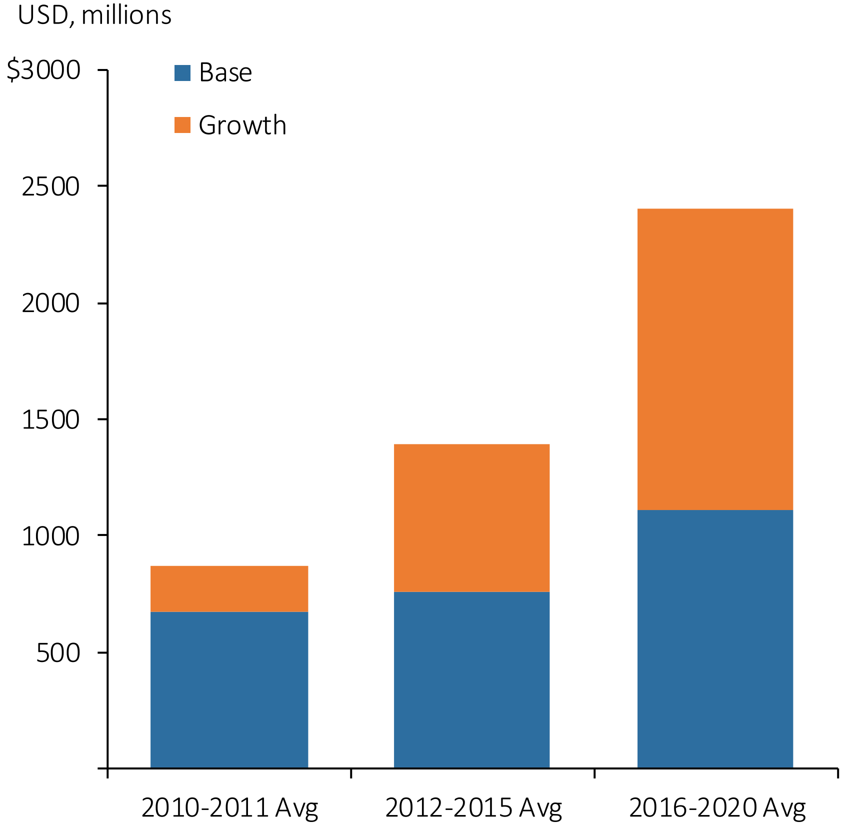
2017 vs. 2016 Available Capacity



~$600 million EBITDA at
2016 industry benchmark margins

Increasing Investment in LYB Growth

Capital Investment



- Capital programs moving toward profit-generating growth
- Base investment increases with
  - Larger asset base due to growth program
  - Inflation
  - Near-term HSE program spending

LYB Projects Have Added Value

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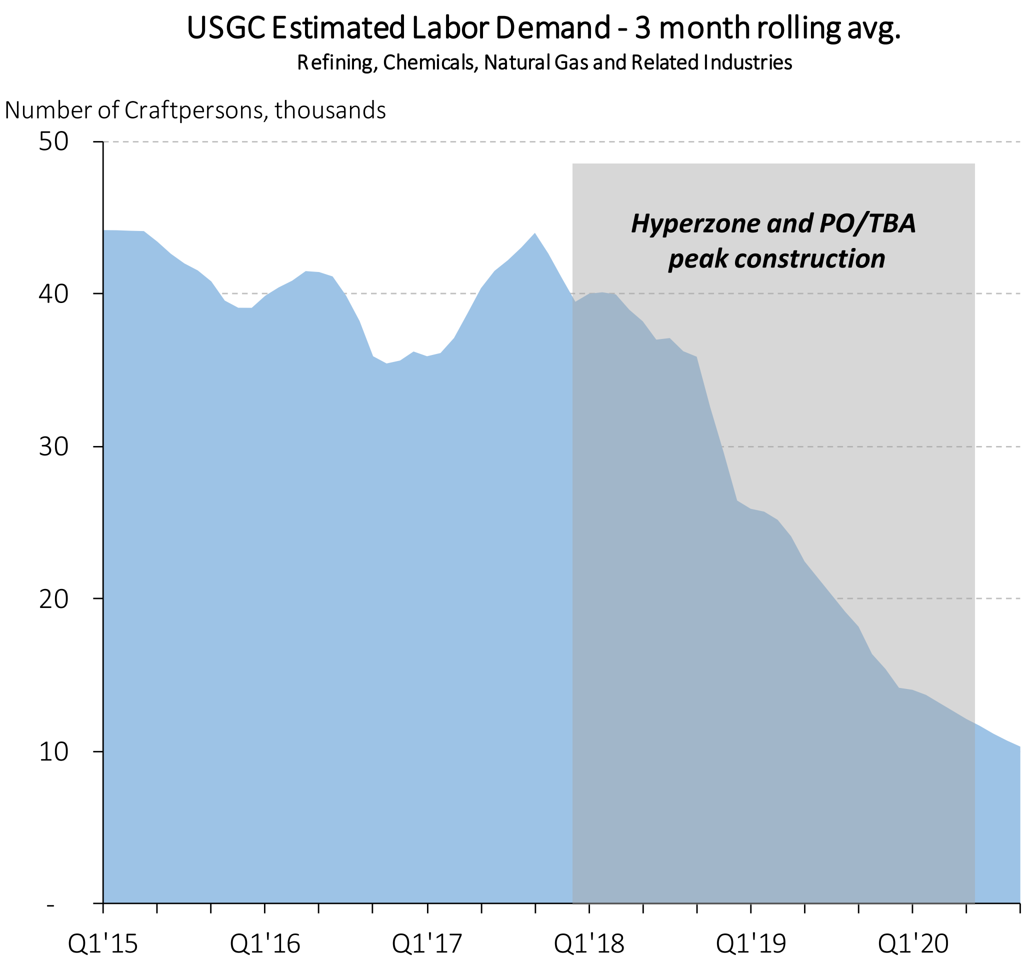
Project	Schedule[1]	Cost[1]	Benefit / Comment
European Butadiene Expansion	✓	✓	Paid for itself in ~3 years
Channelview Methanol Restart	✓	✓	Paid for itself in ~2 years
Matagorda Polyethylene Expansion	✓	✓	Paid for itself in ~1 year
La Porte Ethylene Expansion	✓	✓	Running above design output
Channelview Ethylene Expansion	✓	✓	Matching design output
Corpus Christi Ethylene Expansion	✓	✓	Full capacity available mid-2017
Tier III Gasoline	✓	✓	On schedule, on budget

(1) Schedule target is +/- 3 months and cost target is +/- 20%.

Gulf Coast Project Pressures Continue but Easing with Time



Source: LYB.

- Initial wave of industry projects suffered from higher cost and lower productivity due to lack of skilled workers and engineers – impact expected to decrease over time

- Majority of LYB PO/TBA and *Hyperzone* construction windows occur outside of peak USGC labor demand period

Update on Major Projects

La Porte *Hyperzone* Polyethylene

- 1.1 billion pounds per year
- Groundbreaking – May 2017
- Startup 2019
- Est. cost: ~$700 - 750 million

PO/TBA

- 1 billion pounds Propylene Oxide, 29 MBPD Oxyfuels
- Final Investment Decision – 3Q 2017
- Est. cost: ~$2.0 – $2.5 billion

Hyperzone **PE Pilot Plant, Frankfurt, Germany**


Rendering of new PO/TBA Plant

Summary

- Refinery positioned to return to strong cash generation
- Global manufacturing focus
  - Health, Safety and Environmental excellence
  - Reliability
  - Feedstock efficiency
  - Cost discipline
- Investment in assets maintains industry-leading reliability
- Investment in profit-generating growth projects increasing from ~25% in 2011 to ~50% of all CAPEX through 2020

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Investor Day

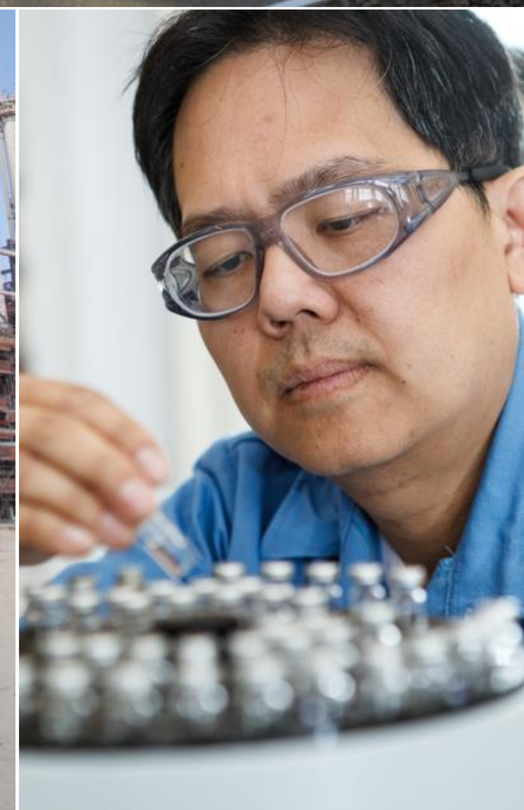
Concluding Remarks

Bob Patel

Chief Executive Officer

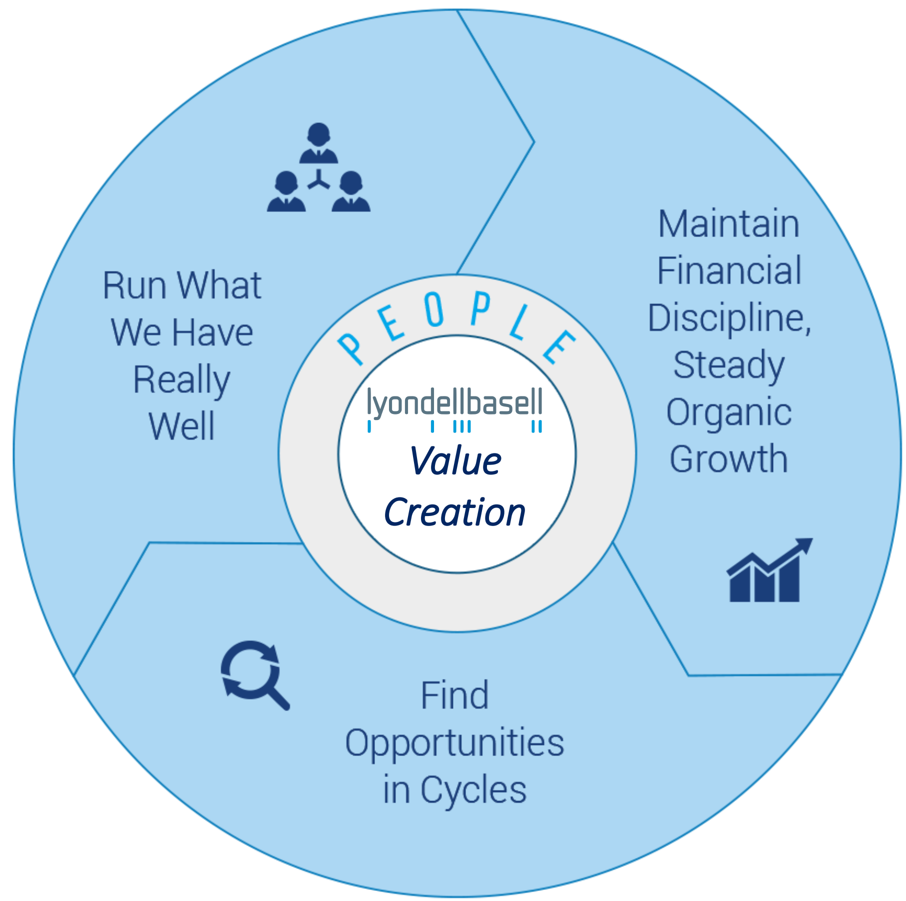
New York Stock Exchange
April 5, 2017

Building for the Future



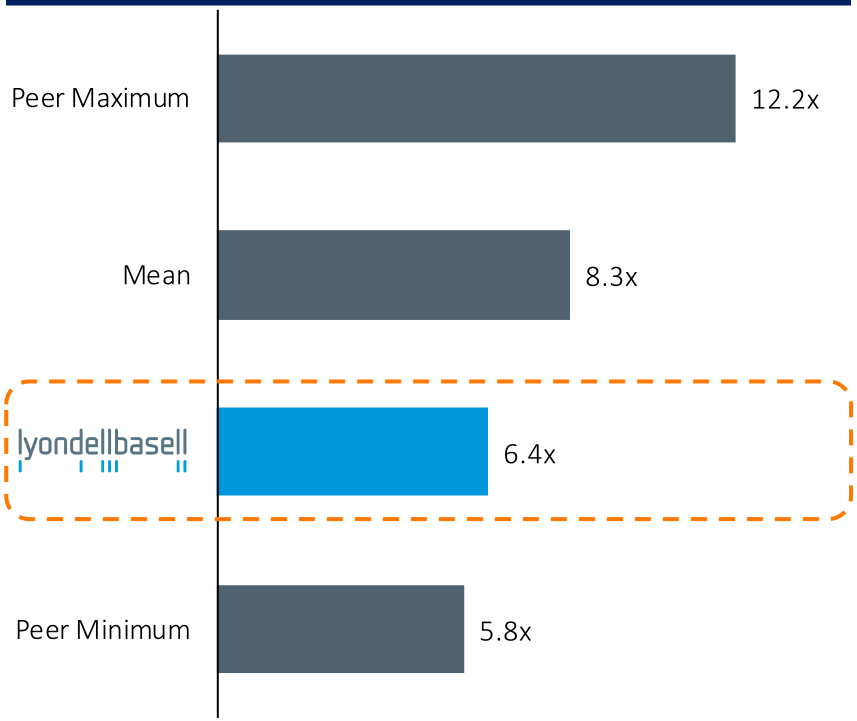
Guided by a Clear and Value-Oriented Strategy

- Achieve Top Quartile **Operations**
- Practice Relentless **Cost Discipline**
- Prudent **Financial Stewardship**
- Pursue Profitable **Organic Growth**
- **Capture Opportunities** In Cycles



Market Significantly Undervalues LYB's Earnings and Cash Flow

Enterprise Value / 2017 Consensus EBITDA



Premier Operations in Attractive Markets

Global Company With Leading Scale and Market Positions

Unmatched Cost Discipline and Efficiency

Sizable and Sustainable Cash Flows and Leading Capital Returns

Strong Organic Growth Program

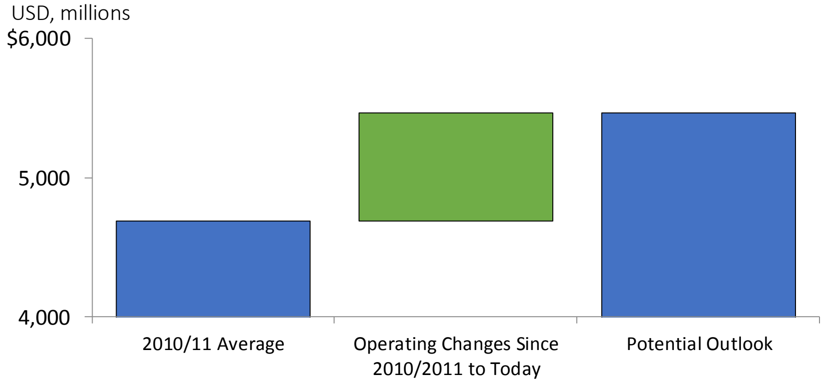
Geographically Positioned to Capture Feedstock Advantage

Resilience Through Downcycle With Upside Potential

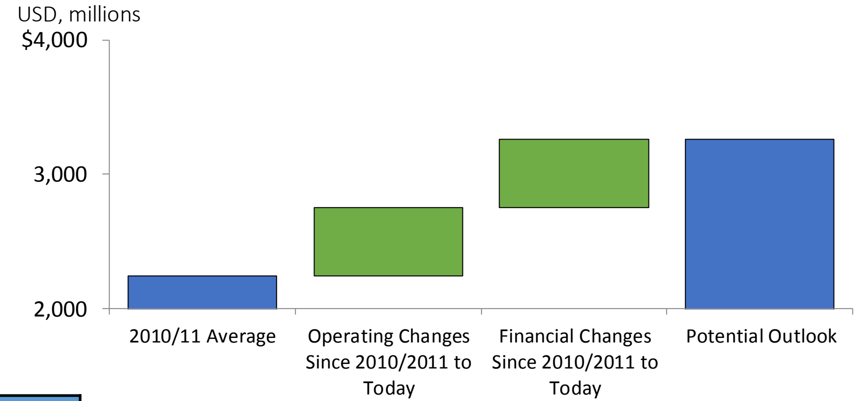
(1) Source: Factset EV and Consensus as of Dec. 31, 2016. Peers are BASF, Celanese, CF Industries, Covestro, Dow, DuPont, Eastman, Evonik, Huntsman, Methanex, Olin, SABIC, Trinseo, Westlake.

Actions Taken Elevate Earnings Even at 2010/2011 Industry Conditions

LYB Potential EBITDA (ex. LCM)



LYB Potential Net Income (ex. LCM)



2010/2011 Industry Conditions and Metrics

Brent Crude	$96/bbl	Global Ethylene Operating Rate	91%
Natural Gas	$4.32/MMBTU	NWE MTBE Raw Material Margin	62 ¢/gallon
Ethane	68 ¢/gallon ($10/MMBTU)	Maya 2-1-1	$20/bbl
Oil / Gas ratio	22	2010/2011 Average LYB Share Count	570 MM
Oil / Ethane ratio	9	2016 Year-end Average LYB Share Count	404 MM

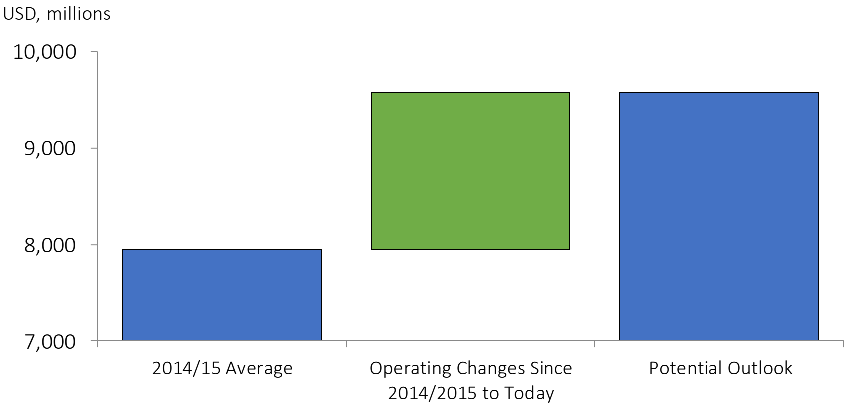
(1) LYB Estimates. Operating and financial changes tax affected using the U.S. statutory rate.

Key LYB Changes Since 2010/11

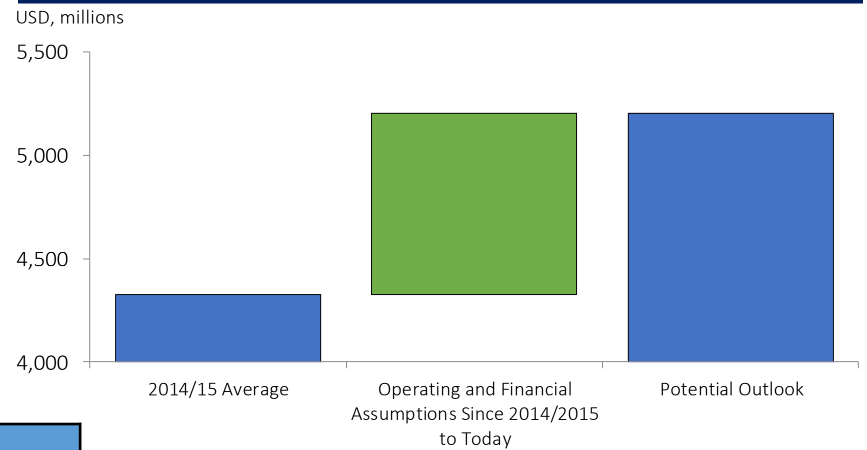
- Operating Assumptions
  - Additional ethylene capacity
  - Additional methanol capacity
  - Additional BD capacity
  - O&P EAI restructuring / optimization
- Financial Changes
  - Lower interest expense
  - Higher depreciation expense
  - Lower share count

Our Strategy Increases the Upside Potential

LYB Potential EBITDA (ex. LCM)



LYB Potential Net Income (ex. LCM)



2014/2015 Industry Conditions and Metrics

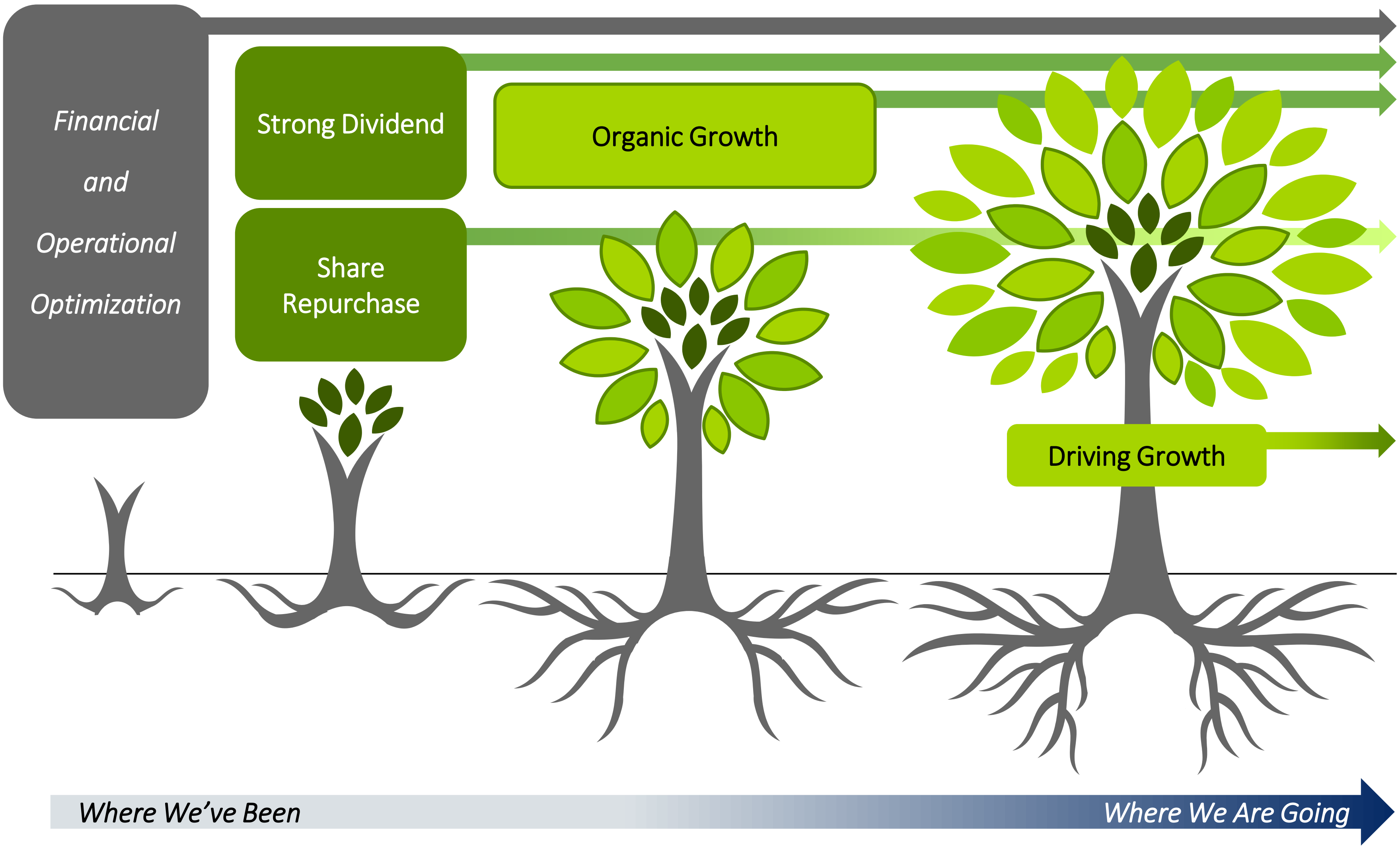
Brent Crude	$76/bbl	Global Ethylene Operating Rate	94%
Natural Gas	$3.63/MMBTU	NWE MTBE Raw Material Margin	90 ¢/gallon
Ethane	23 ¢/gallon ($3/MMBTU)	Maya 2-1-1	$23/bbl
Oil / Gas ratio	21	2014/2015 Average LYB Share Count	494 MM
Oil / Ethane ratio	22	2016 Year-end Average LYB Share Count	404 MM

(1) LYB Estimates. Operating and financial changes tax affected using the U.S. statutory rate.

Key LYB Assumptions Since 2014/15

- Operating Assumptions
  - Corpus ethylene expansion
  - *Hyperzone* polyethylene plant
  - PO/TBA plant
  - PP at 2016 Performance
- Financial Changes
  - Lower share count
  - Higher depreciation expense

Matching Capital Allocation with the Maturity of the Company



We Are Well-Positioned for Value-Driven Growth

Strong Foundation
- Global reach
- Leading technology
- World-class operator
- Balance sheet capacity

Strong Earnings Upside at a Low Valuation
- Portfolio breadth with differentiated products
- Feedstock advantage and flexibility
- Strong and secure dividend

Talented People and Robust Processes
- Ownership culture
- Incentives aligned with shareholders
- Disciplined capital deployment processes

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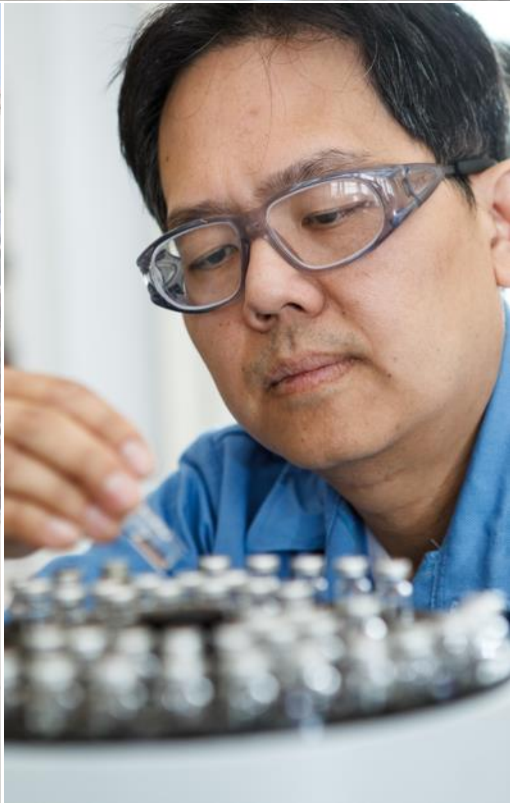
Investor Day

Appendix

New York Stock Exchange
April 5, 2017

Building for the Future



Information Related to Financial Measures

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This presentation makes reference to certain “non-GAAP” financial measures as defined in Regulation G of the U.S. Securities Exchange Act of 1934, as amended. The non-GAAP measures we have presented include diluted earnings per share from continuing operations excluding LCM, EBITDA and EBITDA excluding LCM, EBITDA excluding LCM less capital expenditures and EBITDA excluding LCM less base capital expenditures which we also refer to as cash flows, and EBITDA excluding LCM per pound of ethylene capacity. LCM stands for “lower of cost or market,” which is an accounting rule consistent with GAAP related to the valuation of inventory. Our inventories are stated at the lower of cost or market. Cost is determined using the last-in, first-out (“LIFO”) inventory valuation methodology, which means that the most recently incurred costs are charged to cost of sales and inventories are valued at the earliest acquisition costs. Market is determined based on an assessment of the current estimated replacement cost and selling price of the inventory. In periods where the market price of our inventory declines substantially, cost values of inventory may be higher than the market value, which results in us writing down the value of inventory to market value in accordance with the LCM rule, consistent with GAAP. This adjustment is related to our use of LIFO accounting and the decline in pricing for many of our raw material and finished goods inventories. We report our financial results in accordance with U.S. generally accepted accounting principles, but believe that certain non-GAAP financial measures, such as EBITDA and earnings and EBITDA excluding LCM, provide useful supplemental information to investors regarding the underlying business trends and performance of the company's ongoing operations and are useful for period-over-period comparisons of such operations. Non-GAAP financial measures should be considered as a supplement to, and not as a substitute for, or superior to, the financial measures prepared in accordance with GAAP.

EBITDA, as presented herein, may not be comparable to a similarly titled measure reported by other companies due to differences in the way the measure is calculated. We calculate EBITDA as income from continuing operations plus interest expense (net), provision for (benefit from) income taxes, and depreciation & amortization. EBITDA should not be considered an alternative to profit or operating profit for any period as an indicator of our performance, or as an alternative to operating cash flows as a measure of our liquidity. We have also presented financial information herein exclusive of adjustments for LCM.

While we also believe that free cash flow (FCF) and the ratio of average free cash flow to EBITDA excluding LCM are measures commonly used by investors, free cash flow, as presented herein, may not be comparable to similarly titled measures reported by other companies due to differences in the way the measures are calculated. For purposes of this presentation, free cash flow means net cash provided by operating activities minus capital expenditures. The ratio of average free cash flow to EBITDA is calculated by dividing the average free cash flow for the period by EBITDA excluding LCM for the same period.

Information Related to Financial Measures (continued)

An analysis of capital expenditures is included to show investors the portion of LYB capital investment which is base versus profit generating. Total capital expenditures is the sum of base capital expenditures and profit generating expenditures.

Additionally, EBITDA per pound of ethylene capacity, EBITDA excluding LCM less base capital expenditures, the ratio of total debt to EBITDA excluding LCM, and the ratio of net debt to EBITDA excluding LCM are measures which provide an indicator of value to investors. For purposes of this presentation, EBITDA per pound of ethylene capacity means annual segment EBITDA divided by end of year segment ethylene capacity in pounds. EBITDA excluding LCM less base capital expenditures means EBITDA excluding LCM less base capital expenditures. Net debt is total debt less cash and cash equivalents, short term investments and repurchase agreements. The ratio of net debt to EBITDA excluding LCM means net debt divided by EBITDA excluding LCM.

Reconciliations for our non-GAAP measures can be found on our website at www.lyb.com/investorrelations

EBITDA Excluding LCM Adjustments to EBITDA

Reconciliation of EBITDA Excluding LCM Adjustments to EBITDA

In Millions of Dollars	For the Years Ended December 31, 2011	2012	2013	2014	2015	2016	Average 2011-2016
EBITDA Excluding LCM Adjustments:							
Olefins & Polyolefins - Americas	$ 2,137	$ 2,968	$ 3,573	$ 4,190	$ 3,821	$ 2,906	$ 3,266
Olefins & Polyolefins - EAI	865	548	839	1,410	1,855	2,067	1,264
Intermediates & Derivatives	1,410	1,621	1,492	1,552	1,656	1,333	1,511
Refining	977	481	182	409	519	72	440
Technology	191	197	232	232	243	262	226
Other	(111)	(7)	(7)	17	(13)	(9)	(22)
Total	5,469	5,808	6,311	7,810	8,081	6,631	6,685
Less:							
LCM Adjustments:							
Olefins & Polyolefins - Americas	-	-	-	279	160	29	78
Olefins & Polyolefins - EAI	-	-	-	44	30	-	12
Intermediates & Derivatives	-	-	-	93	181	-	46
Refining	-	-	-	344	177	-	87
Technology	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
Total	-	-	-	760	548	29	223
EBITDA:							
Olefins & Polyolefins - Americas	2,137	2,968	3,573	3,911	3,661	2,877	$ 3,188
Olefins & Polyolefins - EAI	865	548	839	1,366	1,825	2,067	1,252
Intermediates & Derivatives	1,410	1,621	1,492	1,459	1,475	1,333	1,465
Refining	977	481	182	65	342	72	353
Technology	191	197	232	232	243	262	226
Other	(111)	(7)	(7)	17	(13)	(9)	(22)
Total	$ 5,469	$ 5,808	$ 6,311	$ 7,050	$ 7,533	$ 6,602	$ 6,462

Net Income to EBITDA

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Reconciliation of Net Income To EBITDA

In Millions of Dollars	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
	For the Years Ended December 31,					
Net Income	$ 2,140	$ 2,834	$ 3,853	$ 4,168	$ 4,474	$ 3,837
(Income) Loss from Discontinued Operations	332	24	7	4	5	10
LCM Adjustments, After Tax				483	351	18
Income from Continuing Operations Excluding LCM Adjustments	2,472	2,858	3,860	4,655	4,830	3,865
Less:						
LCM Adjustments, After Tax				(483)	(351)	(18)
Income from Continuing Operations	2,472	2,858	3,860	4,172	4,479	3,847
Provision for Income Taxes	1,059	1,327	1,136	1,540	1,730	1,386
Depreciation and Amortization	931	983	1,021	1,019	1,047	1,064
Interest expense, net	1,007	640	294	319	277	305
LCM Adjustments, Pre Tax				760	548	29
EBITDA Excluding LCM Adjustments	5,469	5,808	6,311	7,810	8,081	6,631
LCM Adjustments, Pre Tax	-	-	-	(760)	(548)	(29)
EBITDA	$ 5,469	$ 5,808	$ 6,311	$ 7,050	$ 7,533	$ 6,602

EBITDA Excluding LCM Less Capital Expenditures

EBITDA Excluding LCM Less Capital Expenditures

In Millions of Dollars	2011	2012	2013	2014	2015	2016	Average 2011-2016
EBITDA Excluding LCM Adjustments							
Olefins & Polyolefins - Americas	$ 2,137	$ 2,968	$ 3,573	$ 4,190	$ 3,821	$ 2,906	$ 3,266
Olefins & Polyolefins - EAI	865	548	839	1,410	1,855	2,067	1,264
Intermediates & Derivatives	1,410	1,621	1,492	1,552	1,656	1,333	1,511
Refining	977	481	182	409	519	72	440
Technology	191	197	232	232	243	262	226
Other	(111)	(7)	(7)	17	(13)	(9)	(22)
Total	5,469	5,808	6,311	7,810	8,081	6,631	6,685
Less:							
Capital Expenditures:							
Olefins & Polyolefins - Americas	425	468	645	912	668	1,376	$ 749
Olefins & Polyolefins - EAI	235	254	229	191	186	261	226
Intermediates & Derivatives	101	159	443	241	441	333	286
Refining	224	136	209	123	108	224	171
Technology	26	43	30	25	24	36	31
Other	39	-	5	7	13	13	13
Total	1,050	1,060	1,561	1,499	1,440	2,243	1,476
EBITDA Excluding LCM Less Capital Expenditures:							
Olefins & Polyolefins - Americas	1,712	2,500	2,928	3,278	3,153	1,530	$ 2,517
Olefins & Polyolefins - EAI	630	294	610	1,219	1,669	1,806	1,038
Intermediates & Derivatives	1,309	1,462	1,049	1,311	1,215	1,000	1,224
Refining	753	345	(27)	286	411	(152)	269
Technology	165	154	202	207	219	226	196
Other	(150)	(7)	(12)	10	(26)	(22)	(35)
Total	$ 4,419	$ 4,748	$ 4,750	$ 6,311	$ 6,641	$ 4,388	$ 5,210

EBITDA Excluding LCM Less Base Capital Expenditures

EBITDA Excluding LCM Less Base Capital Expenditures

In Millions of Dollars	2012	2013	2014	2015	2016	Average 2012-2016
EBITDA Excluding LCM Adjustments						
Olefins & Polyolefins - Americas	$ 2,968	$ 3,573	$ 4,190	$ 3,821	$ 2,906	$ 3,492
Olefins & Polyolefins - EAI	548	839	1,410	1,855	2,067	1,344
Intermediates & Derivatives	1,621	1,492	1,552	1,656	1,333	1,531
Refining	481	182	409	519	72	333
Technology	197	232	232	243	262	233
Other	(7)	(7)	17	(13)	(9)	(4)
Total	5,808	6,311	7,810	8,081	6,631	6,928
Less:						
Base Capital Expenditures:						
Olefins & Polyolefins - Americas	241	249	336	230	448	301
Olefins & Polyolefins - EAI	184	150	113	153	227	165
Intermediates & Derivatives	120	213	136	322	213	201
Refining	130	185	91	84	164	131
Technology	24	23	24	20	16	21
Other	-	5	6	6	13	6
Total	699	825	706	815	1,081	825
EBITDA Excluding LCM Less Base Capital Expenditures:						
Olefins & Polyolefins - Americas	2,727	3,324	3,854	3,591	2,458	$ 3,191
Olefins & Polyolefins - EAI	364	689	1,297	1,702	1,840	1,178
Intermediates & Derivatives	1,501	1,279	1,416	1,334	1,120	1,330
Refining	351	(3)	318	435	(92)	202
Technology	173	209	208	223	246	212
Other	(7)	(12)	11	(19)	(22)	(10)
Total	$ 5,109	$ 5,486	$ 7,104	$ 7,266	$ 5,550	$ 6,103

Base Capital Expenditures to Total Capital Expenditures

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Reconciliation of Base Capital Expenditures to Capital Expenditures

In Millions of Dollars	2012	2013	2014	2015	2016	Average 2012-2016
Base Capital Expenditures:						
Olefins & Polyolefins - Americas	241	249	336	230	448	301
Olefins & Polyolefins - EAI	184	150	113	153	227	165
Intermediates & Derivatives	120	213	136	322	213	201
Refining	130	185	91	84	164	131
Technology	24	23	24	20	16	21
Other	-	5	6	6	13	6
Total	699	825	706	815	1,081	825
Profit Generating Capital Expenditures:						
Olefins & Polyolefins - Americas	227	396	576	438	928	513
Olefins & Polyolefins - EAI	70	79	78	33	34	59
Intermediates & Derivatives	39	230	105	119	120	123
Refining	6	24	32	24	60	29
Technology	19	7	1	4	20	10
Other	-	-	1	7	-	2
Total	361	736	793	625	1,162	735
Capital Expenditures:						
Olefins & Polyolefins - Americas	468	645	912	668	1,376	$ 814
Olefins & Polyolefins - EAI	254	229	191	186	261	224
Intermediates & Derivatives	159	443	241	441	333	323
Refining	136	209	123	108	224	160
Technology	43	30	25	24	36	32
Other	-	5	7	13	13	8
Total	$ 1,060	$ 1,561	$ 1,499	$ 1,440	$ 2,243	$ 1,561

Diluted EPS from Continuing Operations Excluding LCM Adjustments to Diluted EPS from Continuing Operations

Reconciliation of Diluted EPS from Continuing Operations Excluding LCM Adjustments to Diluted EPS from Continuing Operations

	For the Years Ended December 31,					
	2011	**2012**	**2013**	**2014**	**2015**	**2016**
Diluted Earnings Per Share from Continuing Operations Excluding LCM Adjustmen	$ 4.32	$ 4.96	$ 6.76	$ 8.92	$ 10.35	$ 9.20
Less:						
LCM Adjustments	-	-	-	0.92	0.75	0.05
Diluted Earnings Per Share from Continuing Operations	$ 4.32	$ 4.96	$ 6.76	$ 8.00	$ 9.60	$ 9.15

Free Cash Flow to Net Cash Provided by Operating Activities

Reconciliation of Free Cash Flow to Net Cash Provided by Operating Activities

In Millions of Dollars	For the Years Ended December 31, 2011	2012	2013	2014	2015	2016	Average 2011-2016
Free Cash Flow	$ 1,810	$ 3,727	$ 3,274	$ 4,549	$ 4,402	$ 3,363	$ 3,521
Add:							
Capital Expenditures	1,050	1,060	1,561	1,499	1,440	2,243	$ 1,476
Net Cash Provided by Operating Activities	$ 2,860	$ 4,787	$ 4,835	$ 6,048	$ 5,842	$ 5,606	$ 4,996

O&P-EAI EBITDA Excluding LCM per Average Pound of Ethylene Capacity

Reconciliation of O&P-EAI EBITDA Excluding LCM per Average Pound of Ethylene Capacity

<u>**In Million of Dollars Unless Otherwise Indicated**</u>	**For the Years Ended December 31,**					
	2011	**2012**	**2013**	**2014**	**2015**	**2016**
EBITDA Excluding LCM	865	548	839	1,410	1,855	2,067
Average Annual Ethylene Capacity (Millions of Pounds)	4,829	4,829	4,829	4,829	4,829	4,829
EBITDA Excluding LCM per Average Pound of Ethylene Capacity	17.9¢	11.3¢	17.4¢	29.2¢	38.4¢	42.8¢

Ratio of LYB Enterprise Value (EV) to 2017 EBITDA Consensus

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Calculation of Ratio of LYB Enterprise Value (EV) to 2017 EBITDA Consensus

In Million of Dollars except for common shares outstanding		
Common Shares Outstanding, December 31, 2016		404,046,331
Multiplied by:		
Closing Share Price, December 31, 2016	$	85.78
Market Capitalization	$	34,659
Add:		
Current Maturities of Long-Term Debt		2
Short-Term Debt		594
Long-Term Debt		8,385
Less:		
Cash		875
Short-Term Investments		1,147
Net Debt		6,959
Non-Controlling Interests		25
Enterprise Value		41,643
Divided by:		
2017 EBITDA Consensus		6,524
Ratio of Enterprise Value to 2017 EBITDA Consensus		6.4 x

Ratio of Average Free Cash Flow (2011-2016) to EBITDA Excluding LCM

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Calculation of Ratio of Average Free Cash Flow (2011-2016) to EBITDA Excluding LCM

In Million of Dollars

Free Cash Flow (2011- 2016):		
2011	$	1,810
2012		3,727
2013		3,274
2014		4,549
2015		4,402
2016		3,363
Average FCF (2011-2016)		3,521
EBITDA Excluding LCM:		
2011		5,469
2012		5,808
2013		6,311
2014		7,810
2015		8,081
2016		6,631
Average EBITDA Excluding LCM (2011-2016)		6,685
Ratio of Average Free Cash Flow to Average EBITDA Excluding LCM		53%

Ratio of Cumulative Dividends and Share Repurchases (2011-2016) to Average Market Capitalization

Ratio of Cumulative Dividends and Share Repurchases (2011-2016) to Average Market Capitalization

	For the Years Ended December 31,						
In Millions of Dollars	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2011-2016**
Interim Dividends	$ 313	$ 833	$ 1,127	$ 1,403	$ 1,410	$ 1,395	$ 6,481
Special Dividends	2,580	1,582	-	-	-	-	4,162
Repurchases of Ordinary Shares	-	-	1,949	5,788	4,656	2,938	15,331
Total	$ 2,893	$ 2,415	$ 3,076	$ 7,191	$ 6,066	$ 4,333	$ 25,974
Common Shares Outstanding	573,390,514	575,216,709	548,824,138	486,969,402	440,150,069	404,046,331	504,766,194
Multiplied by:							
Average Closing Share Price	$ 35.89	$ 45.27	$ 67.84	$ 93.66	$ 91.47	$ 81.00	$ 69.19
Average Market Capitalization	$ 20,579	$ 26,040	$ 37,232	$ 45,610	$ 40,261	$ 32,728	$ 34,924
'Ratio of Cumulative Dividends and Share Repurchases to Average Market Capitalization							74%

Ratio of Pro Forma Total Debt to EBITDA Excluding LCM

Ratio of Pro Forma Total Debt to EBITDA Excluding LCM (1)

In Million of Dollars	**Pro Forma March 2017**
Total Long-Term Debt, Including Current Maturities	$ 8,387
Short-Term Debt	594
Total Debt, December 31, 2016	8,981
Less:	
Capital leases	96
Add:	
Unamortized Discount	59
Unamortized Debt Issuance Costs	59
Fair Value Adjustments	87
Total Pro Forma Debt	9,090
EBITDA	6,602
Add:	
LCM Adjustment	29
EBITDA Excluding LCM	$ 6,631
Ratio of Pro Forma Debt to EBITDA Excluding LCM	1.4x

(1) Total pro forma debt excludes capital leases, inlcuding precious metal leases, fair value adjustments and unamortized amortization of bonds and debt issuance costs and includes impact of the March 2017 issuance of $1000 million of 3.5% Guaranteed Notes due 2027 and repayment of the aggregate principal amount of $1,000 million outstanding of our 5% Senior Notes due 2019.

Ratio of Net Debt to EBITDA and EBITDA Excluding LCM

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Reconciliation of Ratio of Net Debt to EBITDA and EBITDA Excluding LCM

In Million of Dollars	Pro Forma March 2017
Total Long-term debt, including current maturities	$ 8,387
Short-term debt	594
Total debt, December 31, 2016	8,981
Less:	
Capital leases	96
Add:	
Unamortized discount	59
Unamortized debt issuance costs	59
Fair value adjustments	87
Total pro forma debt	9,090
Less:	
Cash and cash equivalents	875
Short-term investments	1,147
Repurchase agreements	369
	2,391
Pro Forma Net Debt	$ 6,699