

# **Cautionary Statement**

The information in this presentation includes forward-looking statements. These statements relate to future events, such as anticipated revenues, earnings, business strategies, competitive position or other aspects of our operations or operating results. Actual outcomes and results may differ materially from what is expressed or forecast in such forward-looking statements. These statements are not guarantees of future performance and involve certain risks, uncertainties and assumptions that are difficult to predict. Factors that could cause actual results to differ from forward-looking statements include, but are not limited to, availability, cost and price volatility of raw materials and utilities; supply/demand balances; industry production capacities and operating rates; uncertainties associated with worldwide economies; legal, tax and environmental proceedings; cyclical nature of the chemical and refining industries; operating interruptions; current and potential governmental regulatory actions; terrorist acts; international political unrest; competitive products and pricing; technological developments; the ability to comply with the terms of our credit facilities and other financing arrangements; the ability to implement business strategies; and other factors affecting our business generally as set forth in the "Risk Factors" sections of our Form 10-K for the year ended December 31, 2012 and our form 10-Q for the guarter ended June 30, 2013, 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.

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.

# Information Related to Financial Measures

We have included EBITDA in this presentation, which is a non-GAAP measure, as we believe that EBITDA is a measure commonly used by investors. However, 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. For purposes of this presentation, EBITDA means 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. See Table 9 at the end of the slides for reconciliations of EBITDA to net income.

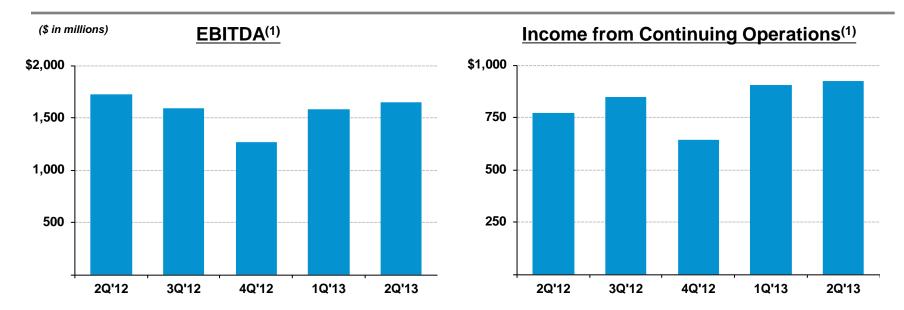
While we also believe that free cash flow (FCF) is a measure commonly used by investors, free cash flow, as presented herein, may not be comparable to a similarly titled measure reported by other companies due to differences in the way the measure is calculated. For purposes of this presentation, free cash flow means net cash provided by operating activities minus capital expenditures.

# LYB Highlights

(\$ in millions, except per share data)	LTM June 2013	FY 2012	FY 2011
EBITDA <sup>(1)</sup>	\$6,091	\$5,808	\$5,469
Income from Continuing Operations <sup>(1)</sup>	\$3,325	\$2,858	\$2,472
Diluted Earnings (\$ / share) from Continuing Operations	\$5.76	\$4.96	\$4.32

## **LTM June 2013 EPS Growth**

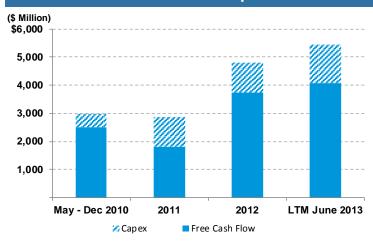
vs. 2012: 16% vs. 2011: 33%



<sup>(1)</sup> EBITDA and income from continuing operations include a pre-tax lower of cost or market adjustment of \$71 million in the second quarter 2012 which was reversed in the third quarter 2012, due to a recovery in market prices.

# Free Cash Flow Funds Growth and Return to Investors

## **Cash from Operations**

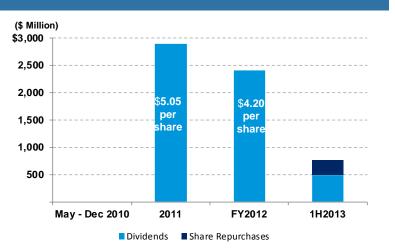


- 10% share buyback over 12 month period approved in May 2013
- Increased interim dividend by 25% to \$0.50 per share
- Repurchased ~ 5.4 Million shares during Q2'13
- Issued 10-yr and 30-yr bonds with an aggregate principal amount of \$1.5 billion in July 2013

## **Total Debt**



## Dividends(1)



Dividends include interim and special dividends.

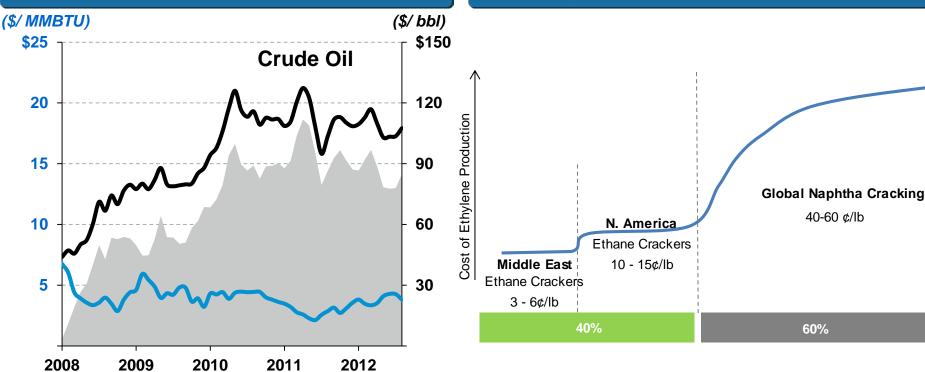
# **Optimizing Our Businesses**

<u>Segment</u>	LYB Market Position	Portfolio Role
Olefins & Polyolefins  - Americas	<ul><li>NGL advantage</li><li>Cyclical upside</li></ul>	Invest
Olefins & Polyolefins – EAI	<ul> <li>Commodities – naphtha based, with cyclical upside</li> <li>Differentiated positions in Catalloy, PP compounding, and JVs</li> </ul>	Restructure
Intermediates & Derivatives (I&D)	<ul><li>Proprietary technologies</li><li>Natural gas advantage</li></ul>	Invest
Refining	<ul> <li>Large, heavy crude refinery</li> </ul>	Sustain
Technology	<ul><li>Strong technology position</li><li>Maintain leadership</li></ul>	Optimize

# Macroeconomic Background

#### U.S. Crude Oil vs. Natural Gas Price

## **Ethylene Production Cost Curve**

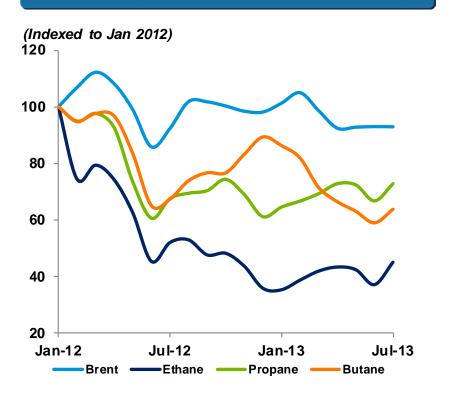


U.S. shale gas revolution significant driver of profitability in North American Olefins and Polyolefins and Intermediate and Derivatives business units

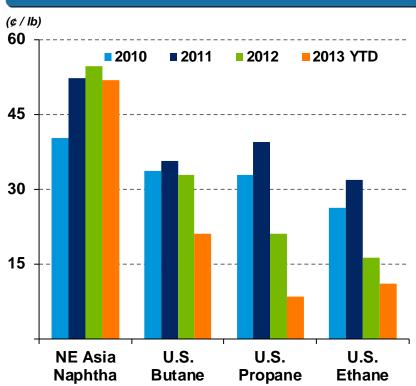
Sources: LYB estimates, third party consultants.

# O&P – Americas: Fundamentals of Natural Cash NGLs Have Defined the Environment

#### **U.S. NGL Prices vs. Brent**



#### **Cost of Ethylene Production**

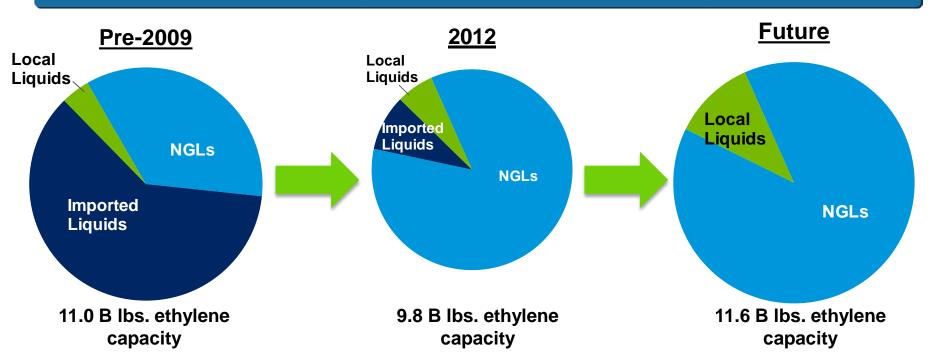


- U.S. NGL advantage has grown steadily
- Cost of ethylene production from naphtha has been high but stable
- LYB has increased NGL cracking capability from ~70% in 2010 to 90% in 2Q'2013

Source: Third party consultants. YTD as of July 2013.

# Feedstock Flexibility Boosts Profitability

## LYB U.S. Ethylene Cracker Feedstock Flexibility



~ 90% of Ethylene Production in Q2'2013 from NGLs

Source: LYB.

Note: Percentages based on volume of feedstock consumed.

# O&P – EAI: Significant Progress Through Restructuring and Improved Operations



Focus business management processes

Segment markets and customers

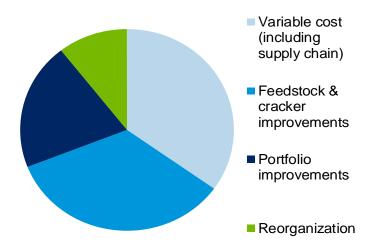
Previously announced restructuring

Simplify supply chain processes

Improve feedstock purchasing

Additional actions taken

#### **Estimated Efficiency Gains Thru December 2012**



#### Recent actions:

- Closure of 100KT per year HDPE unit in Germany
- Increase ethylene from LPG from mid 20% in 2012 to mid 30% in Q2'2013
- Butadiene expansion

# I&D: Profitability Drivers for Propylene Oxide

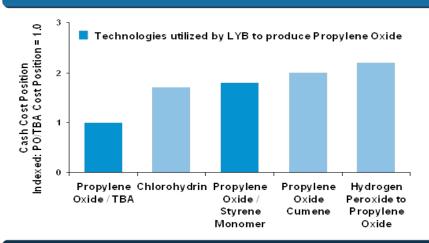
## **Key Drivers**

- Propylene oxide demand growth
  - 5% per year globally
  - 9% per year in Asia
- High barrier to entry

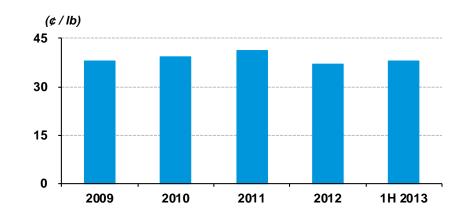
# Sources of LYB Competitive Advantage

- Large global system
- Proprietary low cost technology

#### **Economics of PO Technologies**



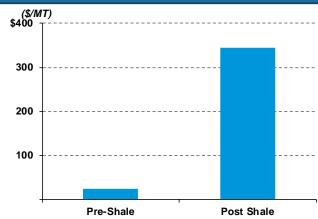
#### **Propylene Glycol Raw Material Margin**



Source: Third party consultants and LYB estimates.

# I&D Benefits from Shale Gas Development – Methanol & Oxyfuels





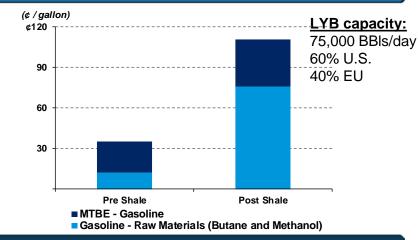
#### **Methanol Restart**

- Location: Channelview, TX
- Start-up: Q4'13
- Cost: \$150 Million
- Potential Growth Value<sup>(1)</sup>: \$250 Million/yr
- Project Status: permitted, construction underway
- Product Marketing: complete

Sources: Third party consultants.

(1) Projects costs are based on company estimates as of Dec. 31, 2012 and values are based on 2012 industry benchmark margins; see Appendix A.

#### **MTBE Spread Factors**

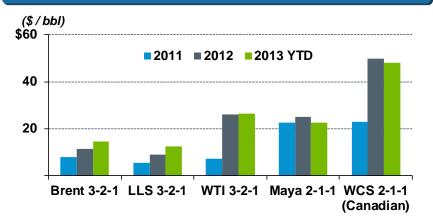


#### **PO/TBA Sinopec JV**

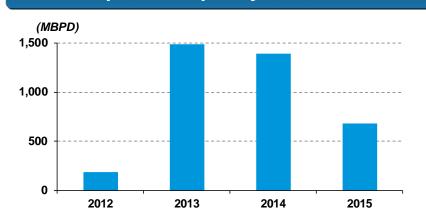
- Location: China
- Start-up: 2016
- Potential JV Dividends: \$70 \$90 Million/yr
- Project Status: signed "Memorandum of Understanding"

# Refining: Profitability Has Been Driven by Geography and Complexity

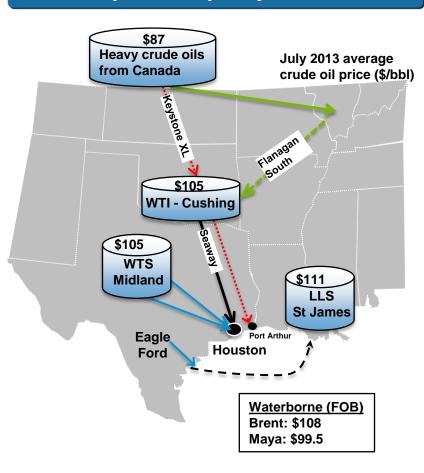
## **Refining Spreads**



## **Pipeline Capacity Increase**



## **New Pipeline Capacity to Houston**



Source: Bloomberg and Wall Street research.

Notes: Maya 2-1-1 based on LLS pricing. WCS refers to west Canadian select vs. Gulf Coast products. 2013 YTD as of July 2013.

# Cash Deployment Hierarchy

		Current Status	Comments
Foundation	Base Capex Interest	\$700 - \$800 million/yr ~\$330 million/yr	<ul> <li>First priorities for cash</li> </ul>
	Interim Dividend	\$0.50/share Per Quarter	<ul> <li>Fund through the cycle with cash flow from operations</li> </ul>
	Growth Capex	~\$750 million per year over next 2 years	High-return in advantaged businesses
Discretionary Opportunities	Special Dividends / Share Repurchases / Acquisitions	Balance of cash generated	<ul> <li>Discretionary cash returned to shareholders</li> <li>M&amp;A if strategic and meaningfully accretive</li> </ul>

# Growth and Operational Improvement Programs



At 2012 conditions, our growth and improvement programs are expected to generate an additional \$1.5 – 2.0 billion pre-tax earnings per year by 2016

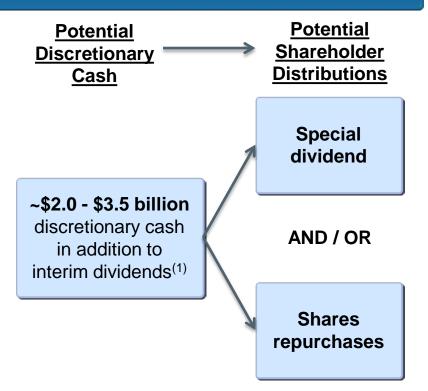
<sup>(1)</sup> Costs are based on company estimates as of Dec. 31, 2012 and values are based on 2012 industry benchmark margins; see Appendix A.

# Value from Both Growth and Cash Distributions

### **Growth Projects Value Potential**

# (\$ in billions) \$48 36 Growth Projects Potential Value(1) Dec. 31, 2012 Market Cap 12/31/12 Market Cap Potential Market Cap (@ 2012 Multiple)

## **Annual Discretionary Cash Potential**



Significant potential shareholder return from both growth investments and discretionary cash distributions

(1) Assuming growth projects potential value at constant 2012 margins.



# Reconciliation of Segment Information to Consolidated Financial Information



Table 8 - Reconciliation of Segment Information to Consolidated Financial Information

			2012				2013	
(Millions of U.S. dollars)	Q1	Q2	Q3	Q4	Total	Q1	Q2	YTD
Sales and other operating revenues: Olefins & Polyolefins - Americas Olefins & Polyolefins - Europe, Asia, International Intermediates & Derivatives	\$ 3,349 3,898 2,485	\$ 3,283 3,575 2,285	\$ 3,217 3,448 2,637	\$ 3,085 3,600 2,251	\$ 12,934 14,521 9,658	\$ 3,244 3,800 2,282	\$ 3,251 3,708 2,217	\$ 6,495 7,508 4,499
Refining Technology	3,203 119	3,496 115	3,272 124	3,320 140	13,291 498	2,468 134	3,077 132	5,545 266
Other	(1,320)	(1,506)	(1,425)	(1,299)	(5,550)	(1,259)	(1,282)	(2,541)
Continuing Operations	\$ 11,734	\$ 11,248	\$ 11,273	\$ 11,097	\$ 45,352	\$ 10,669	\$ 11,103	\$ 21,772
Operating income (loss): Olefins & Polyolefins - Americas Olefins & Polyolefins - Europe, Asia, International Intermediates & Derivatives	\$ 519 3 370	\$ 700 203 390	\$ 738 15 424	\$ 693 (94) 246	\$ 2,650 127 1,430	\$ 821 93 323	\$ 872 189 285	\$ 1,693 282 608
Refining Technology Other	10 38	124 30 2	114 31 6	86 23 5	334 122 13	(17) 50 (3)	(16) 39 (5)	(33) 89 (8)
Continuing Operations	\$ 940	\$ 1,449	\$ 1,328	\$ 959	\$ 4,676	\$ 1,267	\$ 1,364	\$ 2,631
Depreciation and amortization:								
Olefins & Polyolefins - Americas	\$ 65	\$ 71	\$ 69	\$ 76	\$ 281	\$ 75	\$ 69	\$ 144
Olefins & Polyolefins - Europe, Asia, International	69	69	63	84	285	77	76	153
Intermediates & Derivatives	47	48	49	50	194	48	50	98
Refining	38	37	36	37	148	36	37	73
Technology	18	19	18	18	73	17	20	37
Other			1	1	2		2	2
Continuing Operations	\$ 237	\$ 244	\$ 236	\$ 266	\$ 983	\$ 253	\$ 254	\$ 507
EBITDA: (a) Olefins & Polyolefins - Americas	\$ 595	\$ 781	\$ 814	\$ 778	\$ 2,968	\$ 898	\$ 951	\$ 1.849
Olefins & Polyolefins - Europe, Asia, International Intermediates & Derivatives Refining Technology Other	955 115 417 48 56 (4)	305 432 160 50 (1)	102 475 150 49 (1)	26 297 123 42 (1)	548 1,621 481 197 (7)	225 373 20 66 3	295 338 20 59 (11)	520 711 40 125 (8)
Continuing Operations	\$ 1,227	\$ 1,727	\$ 1,589	\$ 1,265	\$ 5,808	\$ 1,585	\$ 1,652	\$ 3,237
Capital, turnarounds and IT deferred spending:	Ψ 1,221	φ 1,727			<u></u>			
Olefins & Polyolefins - Americas Olefins & Polyolefins - Europe, Asia, International Intermediates & Derivatives Refining Technology Other Total	\$ 102 60 18 38 9 2 229	\$ 135 39 24 27 8 3 236	\$ 126 60 44 24 12 1 267	\$ 105 95 73 47 14 (1) 333	\$ 468 254 159 136 43 5	\$ 122 63 106 93 7  391	\$ 122 46 141 67 6 5	\$ 244 109 247 160 13 5
Deferred charges included above	(1)	(3)	(1)		(5)	391	301	770
Continuing Operations	\$ 228	\$ 233	\$ 266	\$ 333	\$ 1,060	\$ 391	\$ 387	\$ 778

<sup>(</sup>a) See Table 9 for EBITDA calculation.

# Reconciliation of EBITDA to Income from Continuing operations

Table 9 - EBITDA Calculation

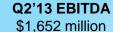
			2	2012				7	2013		
(Millions of U.S. dollars)	Q1	 Q2		Q3	 Q4	 Total	Q1		Q2		YTD
Net income attributable to the Company shareholders	\$ 600	\$ 770	\$	846	\$ 632	\$ 2,848	\$ 901	\$	929	\$	1,830
Net loss attributable to non-controlling interests	(1)	(2)		(2)	(9)	(14)	(1)		(2)		(3)
(Income) loss from discontinued operations, net of tax	(5)			7	22	24	6		(4)		2
Income from continuing operations	 594	 768		851	 645	 2,858	 906		923	_	1,829
Provision for income taxes	301	306		435	285	1,327	357		410		767
Depreciation and amortization	237	244		236	266	983	253		254		507
Interest expense, net	95	409		67	69	640	69		65		134
EBITDA	\$ 1,227	\$ 1,727	\$	1,589	\$ 1,265	\$ 5,808	\$ 1,585	\$	1,652	\$	3,237

#### 2011 EBITDA Calculation

			2011			
(Millions of U.S. dollars)	 <u>Q1</u>	<u>Q2</u>	<u>Q3</u>	<u>Q4</u>		<u>Total</u>
Net income (loss) attributable to the Company shareholder	\$ 663	\$ 804 \$	895	\$ (215)	\$	2,147
Net loss attributable to non-controlling interests	(3)	(1)	-	(3)		(7)
Loss from discontinued operations, net of tax	22	48	17	245	_	332
Income from continuing operations	682	851	912	27		2,472
Provision for (benefit from) income taxes	263	388	506	(98)		1,059
Depreciation and amortization	215	224	237	255		931
Interest expense, net	156	163	146	542		1,007
EBITDA	\$ 1,316	\$ 1,626 \$	1,801	\$ 726	\$	5,469

# Second Quarter 2013 and Last-Twelve-Months (LTM) Segment EBITDA

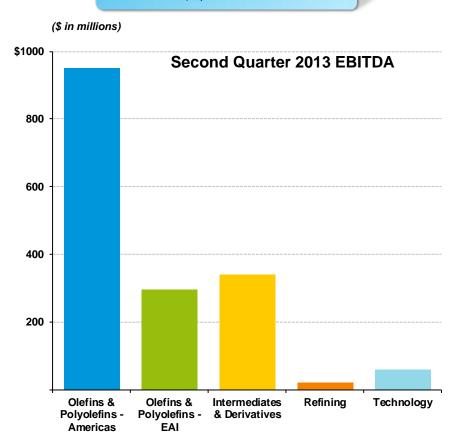


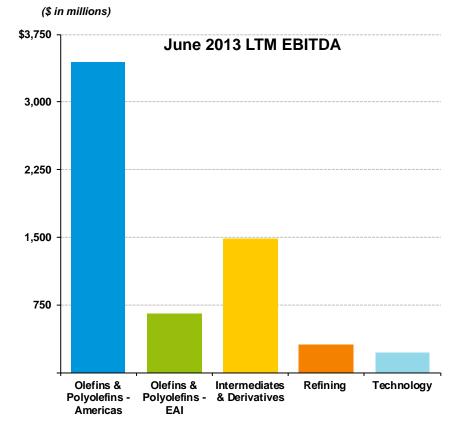


**Q2'13 Operating Income** \$1,364 million

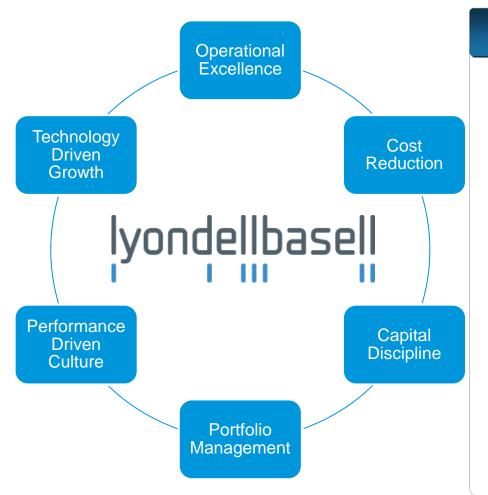
#### LTM June EBITDA \$6.091 million

LTM Operating Income \$4,918 million





# "Back-To-Basics" Strategy Drives Value



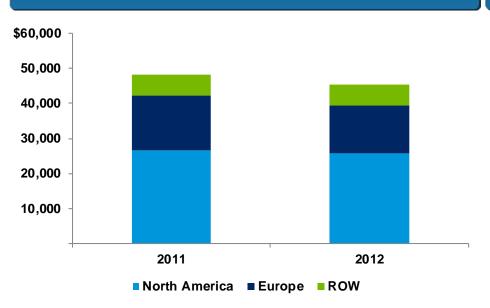
## **Our Results**

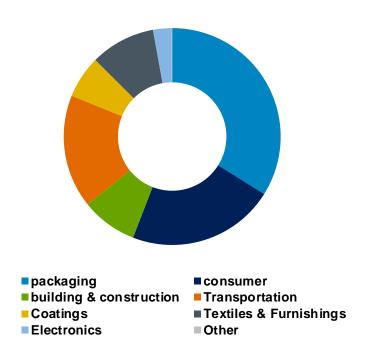
- Excellent safety and environmental performance combined with reliable operations
- Maintained fixed costs flat
- Completed numerous turnarounds
- Exited lagging businesses
- Growing where advantaged through high-return, low-risk projects

# LYB Has Diverse Footprint and End Uses

# Sales by Region

# 2012 Chemical Sales by End Use<sup>(1)</sup>

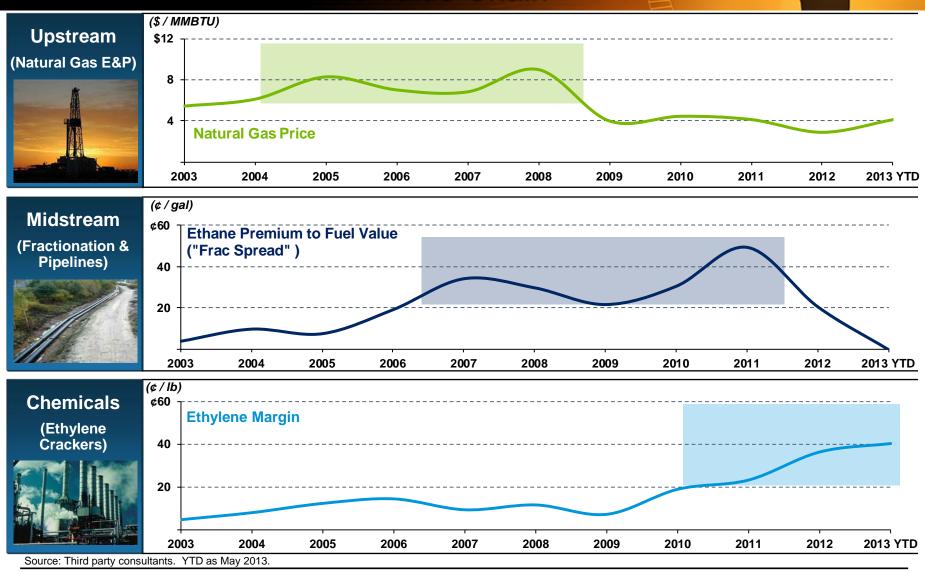




### N. America sales represent ~ 55% of total company revenues

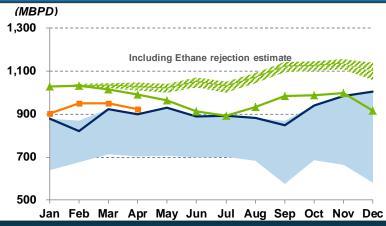
(1) Estimated based on LYB 2012 chemical sales (O&P and Intermediates & Derivatives segments excluding olefin fuel products and oxyfuel sales) and third party industry estimates of products end uses.

# **Evolution of Shale Gas Value Chain**

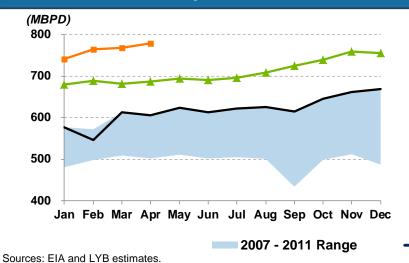


# Production and Inventories Remain at Record Levels

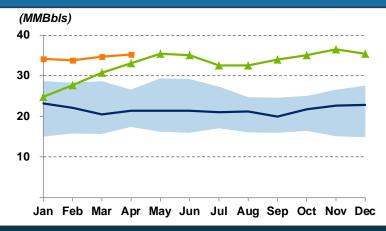
#### **Historical Ethane Production**



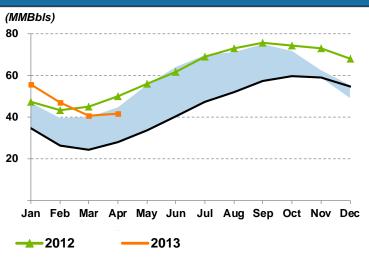
## **Historical Propane Production**



## **Historical Ethane Inventory**



## **Historical Propane Inventory**

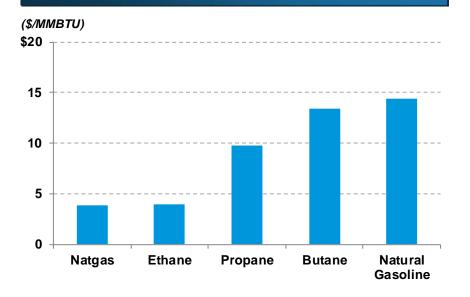


2011

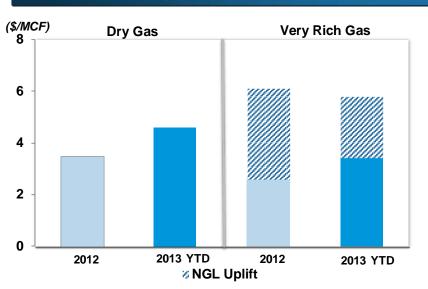
# The Value of NGLs Drives Production Even at Low Natural Gas Prices



#### **NGL Component Values vs. Natural Gas**



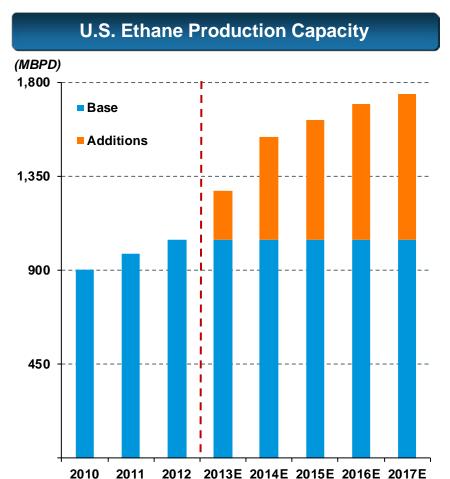
# Dry vs. Rich Gas: NGL Uplift (Margin Over Fuel Value)

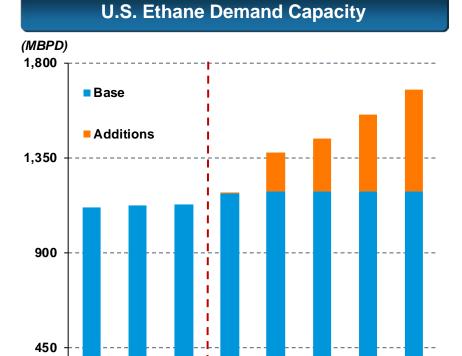


NGLs provide significant additional value to gas producers

Source: Third party consultants, LYB. Data as of July 2013.

# Ethane Fractionation and Consumption Capacity





Ethane production is expected to continue exceeding demand

2010

2011

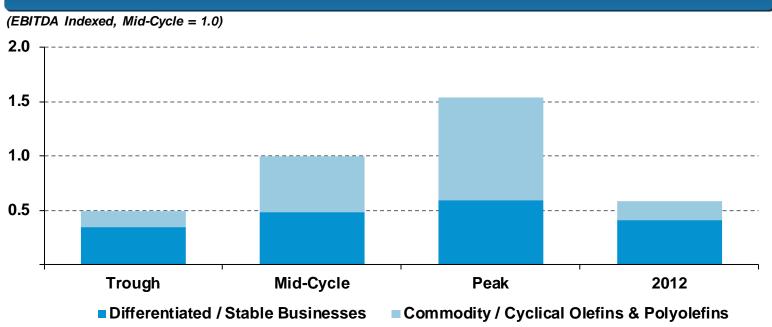
Sources: EIA, EnVantage and LYB estimates.

2012 2013E 2014E 2015E 2016E 2017E

# O&P – EAI: Our Recent Profits Were Primarily Generated from Our Differentiated Position



#### **Indexed O&P EAI EBITDA Scenarios**



- O&P EAI portfolio is more than European olefins and commodity polyolefins
  - Global polypropylene compounds
  - Middle East and Asian JVs
  - Premium grades of polyolefins (Catalloy, Polybutene-1)
- Differentiated products typically represents \$350 \$550 million per year over the cycle

# I&D: Globally Diversified End Uses

# Propylene Oxide & Derivatives





- Home and auto cushioning
- Insulation foams
- Polyester composites
- Coatings
- Automotive parts
- Spandex

Durables Non-Durables
U.S. EU Asia

#### **Acetyls**





- Food packaging
- Textiles
- Coatings
- Safety glass

Durables Non-Durables

U.S. EU Asia

# Ethylene Oxide & Derivatives





- Surfactants
- Antifreeze
- Industrial coatings
- Polyester

Durables Non-Durables
U.S. Asia

# **Co-Products: Oxyfuels, Isobutylene and Styrene**





- Gasoline blending
- Lube & fuel additives
- Tires
- Polyester composites
- Food packaging

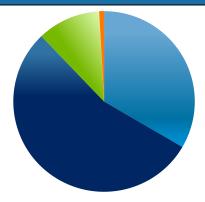
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Note: LYB 2011 end-use (durable / non-durable) and revenues by region, %.

# I&D: Businesses Key Advantages

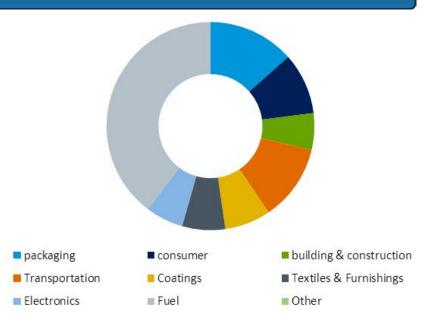
	РО	C4's / Oxyfuels	Acetyls	EO & Derivatives
Proprietary Technology	✓	✓	✓	
Advantaged NGL / Crude Oil Price Ratio		✓	✓	<b>√</b>

#### 2012 Intermediates & Derivatives EBITDA



- Proprietary Technology
- Proprietary Technology + Natural gas opportunities
- Natural gas and NGL opportunities
- Undifferentiated

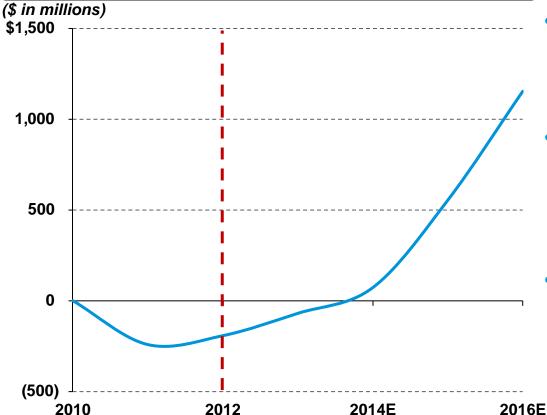
## 2012 Sales by End Use<sup>(1)</sup>



(1) Estimated based on LYB 2012 Intermediates and Derivatives sales, and third party industry estimates of products end uses.

# Importance of Capital Project Selection





#### Fast Execution & High Returns

- Announced projects expected to be on line by 2016
- \$1.6 billion of announced growth capital expenditures from 2013 to 2016

 Over \$1.5 billion per year of additional EBITDA at 2012 margins by 2017

Capital project portfolio selected for optimum use of cash to maximize returns

(1) EBITDA estimates assume 2012 benchmark margins for future periods. Cash flow defined as EBITDA less depreciation, cash taxes and capital expenditures.

# Future Operational and Financial Improvements

Further O&P – EAI Restructuring

Further structural and product mix improvements

Expected to be completed by 2015

Further Houston Refinery Flexibility

Expand operating window / increase feedstock capacity for lighter Canadian crude oil

Expected to be completed by 2014

Future improvements are expected to yield an additional \$250 - \$400 million per year by 2015<sup>(1)</sup>

(1) Costs are based on company estimates and values are based on 2012 industry benchmark margins; see Appendix A.

# Previously Announced High-Return Growth Opportunities



Olefins Ethane Capability

**Methanol Restart** 

O&P EAI Butadiene Expansion

Midwest Debottlenecks

PO/TBA JV

PP Compounding Growth

Other Quick-Return Projects

Remaining Projected Spending

\$600 - \$700 million Additional Potential Pre-Tax Earnings

\$800 - \$1,000 million per year by 2016<sup>(1)</sup>

Previously announced projects are on track

- \$600 \$700 million of capital remaining to be spent in the near-future
- \$800 \$1,000 million of additional annual pre-tax earnings by 2016

(1) Costs are based on company estimates and values are based on 2012 industry benchmark margins; see Appendix A.

# **New Growth Opportunities**

Channelview Expansion

Corpus Christi Expansion

Olefins NGL Recovery

PE Debottleneck

Potential New PE Line

# Projected Spending

\$900 - \$1,000 million

# Potential Pre-Tax Earnings

\$500 - \$600 million per year by 2016<sup>(1)</sup>

Combined projects expected to have average payback period less than 2 years

(1) Costs are based on company estimates and values are based on 2012 industry benchmark margins; see Appendix A.

# Appendix A

#### **Details of Assumptions:**

#### O&P - Americas:

 Growth projects potential values are based on LYB growth projects capacities and 2012 industry benchmark margins data from third party consultants as indicated in the 2013 Investor Day O&P Americas slides.

#### O&P - EAI:

- Growth projects potential values are based on LYB growth projects capacities and 2012 industry benchmark margins data from third party consultants as indicated in the 2013 Investor Day O&P EAI slides.
- Improvements are based on company estimates of restructuring costs and benefits.

#### • I&D:

 Growth projects potential values are based on LYB growth projects capacities and 2012 industry benchmark margins data from third party consultants as indicated in the 2013 Investor Day I&D slides.

#### Refining:

Improvements potential values are based on data indicated in the 2013 Investor Day Refining slides.

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.