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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" section of our Form 10-K for the year ended December 31, 2012, 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.

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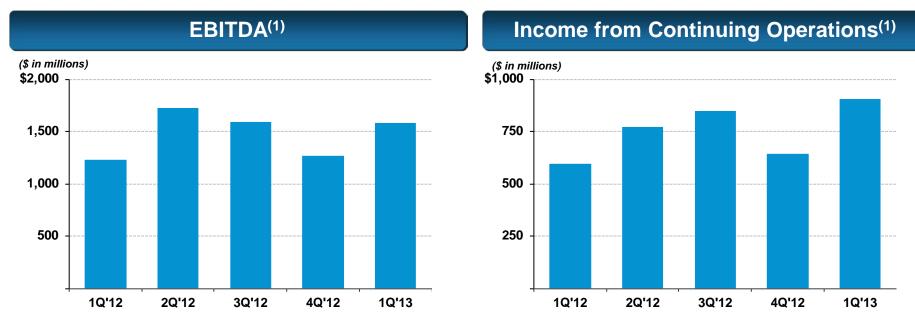
## Information Related to Financial Measures

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

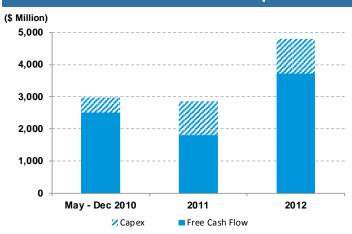
(\$ in millions, except per share data)	LTM March 2013	FY 2012	FY 2011	
EBITDA	\$6,166	\$5,808	\$5,469	
Income from Continuing Operations	\$3,170	\$2,858	\$2,472	
Diluted Earnings (\$ / share) from Continuing Operations	\$5.49	\$4.96	\$4.32	



(1) EBITDA and income from continuing operations include a 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.

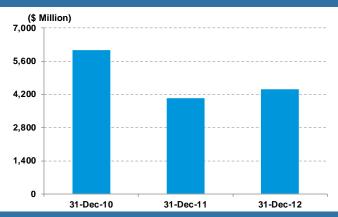
## Free Cash Flow Funds Growth and Return to Investors

## **Net Cash from Operations**

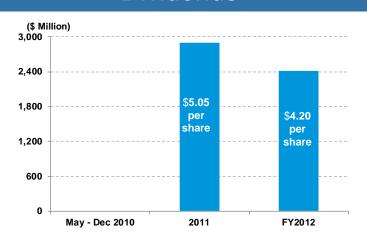


- 2012 total Dividend Yield<sup>(1)</sup> ~ 7%
- ~ \$7 Billion of Combined Net Debt Repayment and Dividends<sup>(2)</sup> From May 2010 through December 2012

## **Total Debt**



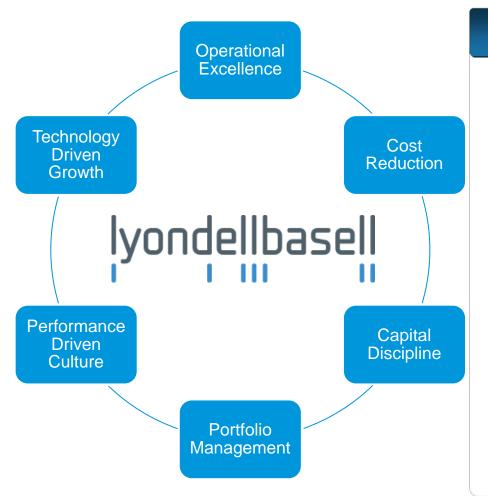
## Dividends<sup>(2)</sup>



<sup>(1)</sup> Dividend Yield data means the total 2012 dividends divided by the company market capitalization. The market cap is calculated based on Dec 31, 2012 closing stock price of \$57.09 per share and approximately 578 million outstanding shares.

Dividends include interim and special dividends.

# "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

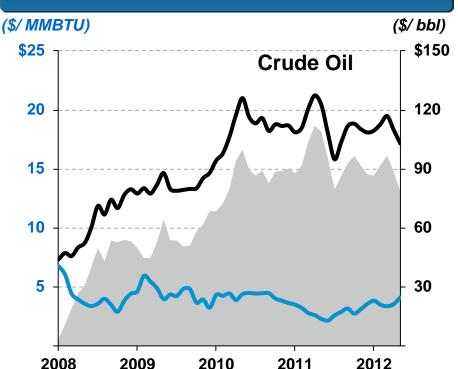
# **Optimizing Our Businesses**

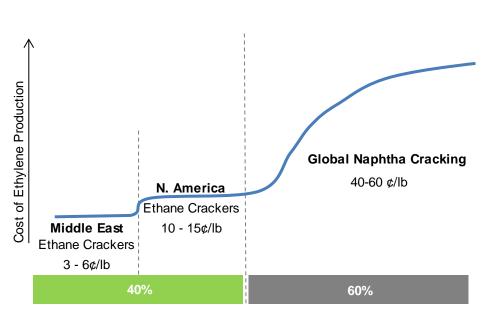
<u>Segment</u>	LYB Market Position	Portfolio Role
Olefins & Polyolefins  – Americas	<ul><li>NGL advantage</li><li>Cyclical upside</li></ul>	Invest
Olefins & Polyolefins – EAI	<ul> <li>Commodities – naphtha based, with cyclical upside</li> <li>Differentiated positions in Catalloy, PP compounding, and 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**

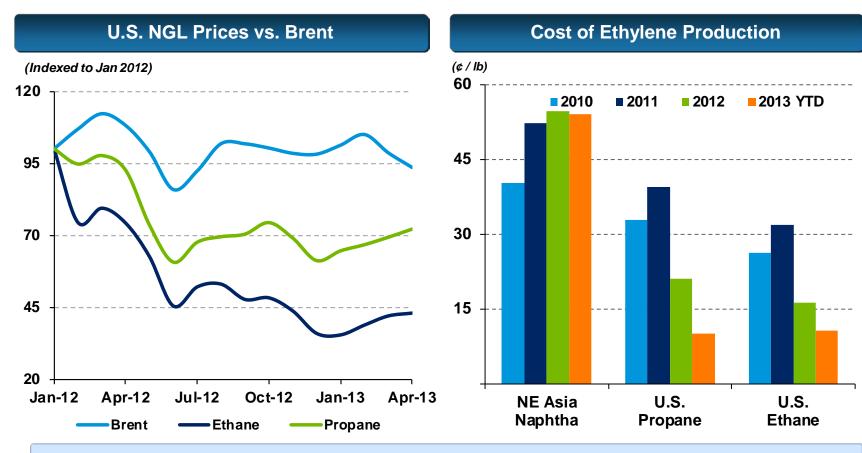




U.S. shale gas revolution significant driver of profitability in North American Olefins and Polyolefins and Intermediate and Derivatives business units

Sources: LYB estimates, third party consultants.

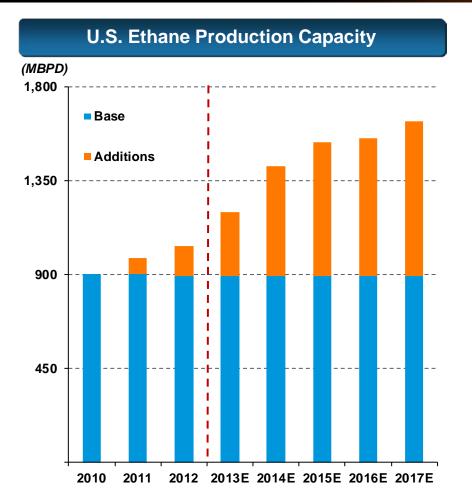
# O&P – Americas: Fundamentals of Natural NGLs Have Defined the Environment



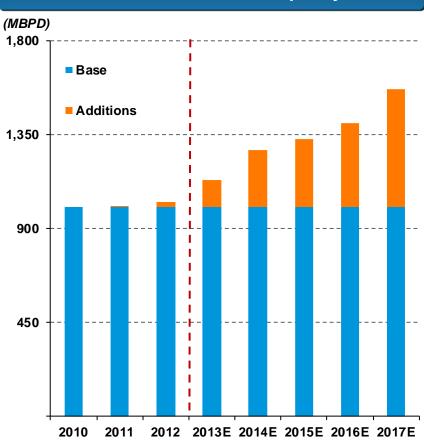
- U.S. NGL advantage has grown steadily
- Cost of ethylene production from naphtha has been high but stable
- LYB has increased NGL cracking capability from ~70% in 2010 to 87% in early 2013

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

# Ethane Fractionation and Consumption Capacity



#### **U.S. Ethane Demand Capacity**

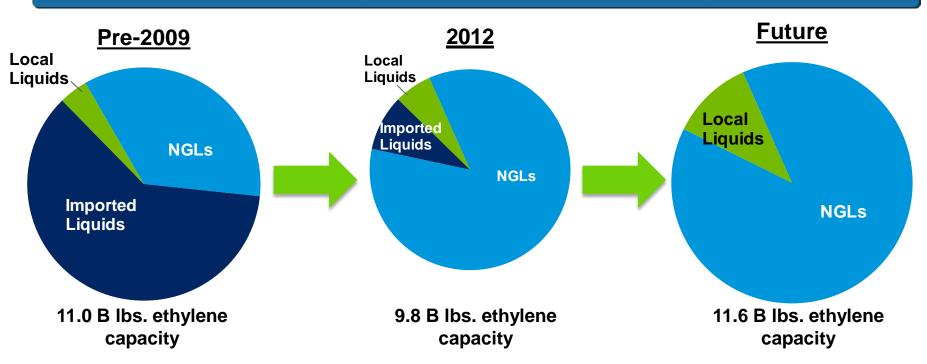


Ethane production is expected to continue exceeding demand

Sources: EIA, EnVantage and LYB estimates.

## Feedstock Flexibility Boosts Profitability

## LYB U.S. Ethylene Cracker Feedstock Flexibility



Expanding capacity while shifting to NGLs and local condensate supply

Source: LYB.

Note: Percentages based on volume of feedstock consumed.

# O&P – Americas Expansion Program: Previously Announced



	Scope	Investment (\$ million)	<b>Timing</b> (status)	Potential Growth Value <sup>(1)</sup> (\$ million / year)
Increase Ethane Capability	500 MM lbs ethylene (naphtha to ethane feed)	~\$25	2012 (complete)	\$50 - \$100
Midwest Debottleneck	100 MM lbs polyethylene	~\$25	2012 (complete)	\$30 - \$40
La Porte Expansion	800 MM lbs ethylene	~\$350-\$400	2014 (in progress)	\$250 - \$300

Previously announced growth projects on track to provide ~\$400 million of value

<sup>(1)</sup> Based on 2012 benchmark margins from third party consultants.

# O&P – Americas Expansion Program: New Projects

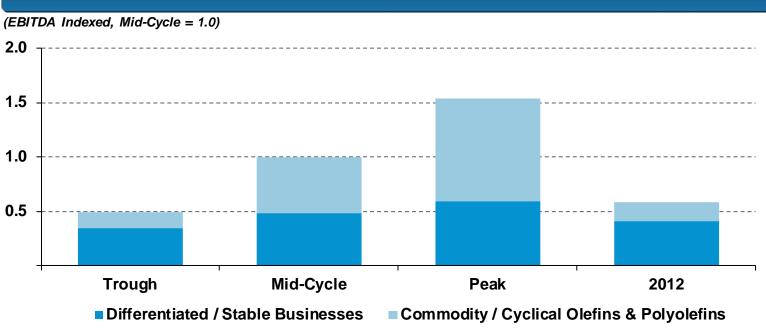
	Scope	Investment (\$ million)	<b>Timing</b> (year)	Potential Growth Value <sup>(1)</sup> (\$ million / year)
PE Debottleneck	~ 220 MM lbs polyethylene	~\$20	2014	\$10 - \$20
Channelview Expansion	250 MM lbs ethylene	~\$170	2015	\$80 - \$100
Corpus Christi Expansion	800 MM lbs ethylene	~\$420	Late 2015	\$250 - \$300
Olefin NGL Recovery	~ 150 MM lbs ethylene / propylene	~\$200	2016	\$110 - \$130
Possible New PE Line	~1,000 MM lbs polyethylene	~\$200	2016	\$50 - \$100

Additional growth projects to provide ~\$600 million of annual value

<sup>(1)</sup> Based on 2012 benchmark margins from third party consultants.

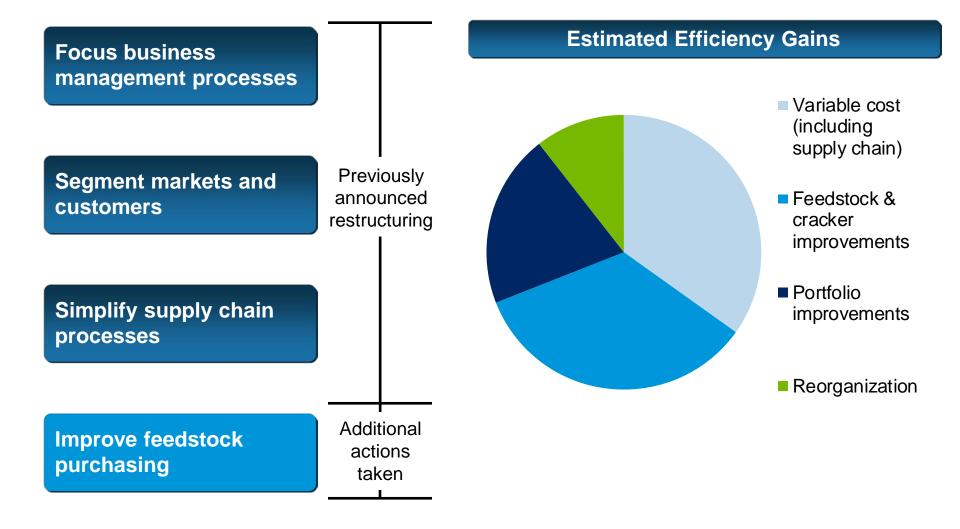
# O&P – EAI: Our Recent Profits Were Primarily Generated from Our Differentiated Position





- 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

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



# Intermediates & Derivatives: A Robust and Diversified Portfolio

## **Intermediates & Derivatives**

2013 LTM 3/31/13 Revenue \$ 9.5 billion 2013 LTM 3/31/13 EBITDA \$ 1.6 billion

Propylene
Oxide &
Derivatives

Capacity<sup>(1)</sup>:

2.6 billion lbs Propylene Oxide C4 Chemicals

Capacity:

1.4 billion lbs High Purity Isobutylene Oxyfuels

Capacity

75,000 bbls/day ETBE & MTBE Acetyls

Capacity:

190 million gallons Methanol

1.2 billion lbs Acetic Acid Ethylene Oxide & Derivatives

Capacity:

0.8 billion lbs Ethylene Oxide

0.7 billion lbs

Ethylene Glycol

Styrene

Capacity<sup>(1)</sup>:

3.5 billion lbs Styrene Monomer

High

**Market & Technology Profitability** 

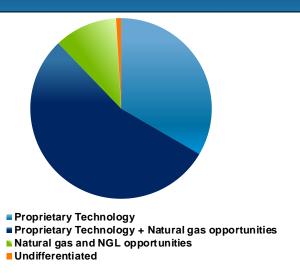
Low

(1) Includes pro-rata share of joint ventures.

# I&D: Businesses Generate Strong Cash Flow

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

#### 2012 Intermediates & Derivatives EBITDA



Note: LYB peers include Eastman, Huntsman and Celanese.

(1) For purposes of peer comparison, EBITDA = operating income + D&A.

# 2012 EBITDA<sup>(1)</sup> less Capex (\$ in millions) 1,800 1,350 900 450 LYB I&D Α В C ■EBITDA – Capex <sup>(1)</sup> ■ Capex

# I&D: Profitability Drivers for Propylene Oxide

## **Key Drivers**

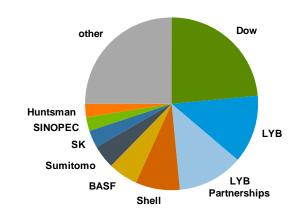
- Propylene oxide demand growth
  - 5% per year globally
  - 9% per year in Asia
- High barrier to entry

# Sources of LYB Competitive Advantage

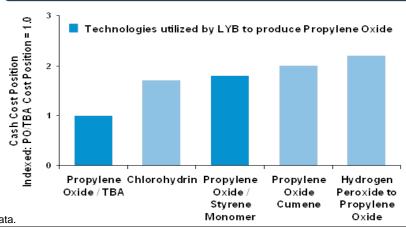
- Large global system
- Proprietary low cost technology

#### LYB Global PO Position

Global Capacity ~ 21 Billion Ibs



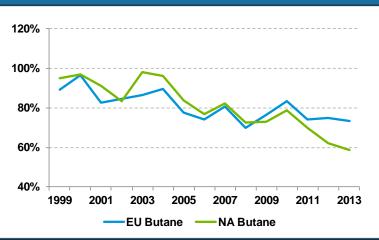
## **Economics of PO Technologies**



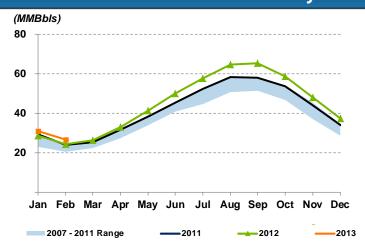
Source: Third party consultants and LYB estimates. Global PO capacities based on 2012 data.

# I&D Benefits from Shale Gas Development - Oxyfuels

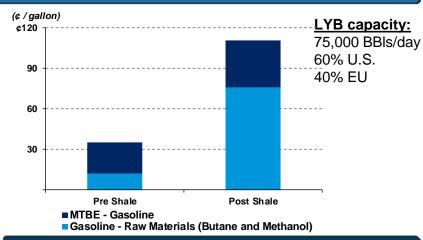
#### **Global Butane Prices as % of Brent**



#### **Historical U.S. Butane Inventory**



## **MTBE Spread Factors**



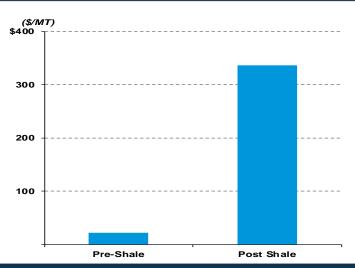
#### **PO/TBA Sinopec JV**

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

Sources: EIA, third party consultants.

# An Additional Benefit to I&D from Shale Gas - Methanol

## **Methanol Cash Margins**



## **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

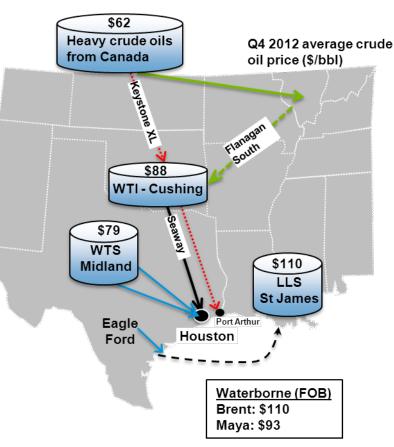
(1) Potential growth value is based on 2012 margins; see Appendix A. Data source: third party consultants.



# Refining: Profitability Has Been Driven by Geography and Complexity

## **Refining Spreads** (\$/bbl) \$60 \$62 ■ 2010 ■ 2012 ■ 2013 YTD 40 20 Brent 3-2-1 LLS 3-2-1 WTI 3-2-1 Maya 2-1-1 WCS 2-1-1 (Canadian) **Pipeline Capacity Increase** \$79 WTS (MBPD) Midland 1,000 Ford 500

## **New Pipeline Capacity to Houston**



Source: Bloomberg and Wall Street research.

2012

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

2014

2013

# Growth and Operational Improvement Programs



**O&P EAI Butadiene Expansion** 

**Methanol Restart** 

PO/TBA JV

O&P – EAI Operational Improvements

Houston Refinery Feedstock Flexibility

Other Quick-Return Projects

Remaining Projected Spending<sup>(1)</sup>

\$1,500 - \$1,700 million Additional Potential Pre-Tax Earnings

\$1,500 - \$2,000 million per year by 2016<sup>(1)</sup>

Combined projects will have average payback period less than 2 years

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

## Importance of Capital Project Selection







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

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

# Cash Deployment Hierarchy

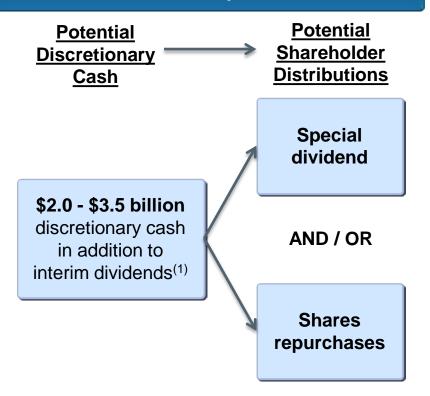
		Current Status	Comments
Foundation	Base Capex Interest	\$700 - \$800 million/yr ~\$260 million/yr	<ul> <li>First priorities for cash</li> </ul>
Foundation	Interim Dividend	~\$920 million per year	<ul> <li>Fund through the cycle with cash flow from operations</li> </ul>
	Growth Capex	~\$750 million per 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>

# Value from Both Growth and Cash Distributions

## **Growth Projects Value Potential**

# (\$ in billions) \$48 33% appreciation 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
Sales and other operating revenues:						
Olefins & Polyolefins - Americas	\$ 3,349	\$ 3,283	\$ 3,217	\$ 3,085	\$ 12,934	\$ 3,244
Olefins & Polyolefins - Europe, Asia, International	3,898	3,575	3,448	3,600	14,521	3,800
Intermediates & Derivatives	2,485	2,285	2,637	2,251	9,658	2,282
Refining	3,203	3,496	3,272	3,320	13,291	2,468
Technology	119	115	124	140	498	134
Other	(1,320)	(1,506)	(1,425)	(1,299)	(5,550)	(1,259)
Continuing Operations	\$ 11,734	\$ 11,248	\$ 11,273	\$ 11,097	\$ 45,352	\$ 10,669
Operating income (loss):						
Olefins & Polyolefins - Americas	\$ 519	\$ 700	\$ 738	\$ 693	\$ 2,650	\$ 821
Olefins & Polyolefins - Europe, Asia, International	3	203	15	(94)	127	93
Intermediates & Derivatives	370	390	424	246	1,430	323
Refining	10	124	114	86	334	(17)
Technology	38	30	31	23	122	50
Other		2	6	5	13	(3)
Continuing Operations	\$ 940	\$ 1,449	\$ 1,328	\$ 959	\$ 4,676	\$ 1,267
Depreciation and amortization:						
Olefins & Polyolefins - Americas	\$ 65	\$ 71	\$ 69	\$ 76	\$ 281	\$ 75
Olefins & Polyolefins - Europe, Asia, International	69	69	63	84	285	77
Intermediates & Derivatives	47	48	49	50	194	48
Refining	38	37	36	37	148	36
Technology	18	19	18	18	73	17
Other			1	1_	2	
Continuing Operations	\$ 237	\$ 244	\$ 236	\$ 266	\$ 983	\$ 253
EBITDA: (a)						
Olefins & Polyolefins - Americas	\$ 595	\$ 781	\$ 814	\$ 778	\$ 2,968	\$ 898
Olefins & Polyolefins - Europe, Asia, International	115	305	102	26	548	225
Intermediates & Derivatives	417	432	475	297	1,621	373
Refining	48	160	150	123	481	20
Technology	56	50	49	42	197	66
Other	(4)	(1)	(1)	(1)	(7)	3
Continuing Operations	\$ 1,227	\$ 1,727	\$ 1,589	\$ 1,265	\$ 5,808	\$ 1,585
Capital, turnarounds and IT deferred spending:						
Olefins & Polyolefins - Americas	\$ 102	\$ 135	\$ 126	\$ 105	\$ 468	\$ 122
Olefins & Polyolefins - Europe, Asia, International	60	39	60	95	254	63
Intermediates & Derivatives	18	24	44	73	159	106
Refining	38	27	24	47	136	93
Technology	9	8	12	14	43	7
Other	2	3	1	(1)	5	
Total	229	236	267	333	1,065	391
Deferred charges included above	(1)	(3)	(1)		(5)	
Continuing Operations	\$ 228	\$ 233	\$ 266	\$ 333	\$ 1,060	\$ 391
				==		

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



#### Table 9 - EBITDA Calculation

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

#### 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		

## 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



# Ethylene Oxide & Derivatives





- Surfactants
- Antifreeze
- Industrial coatings
- Polyester



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





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

Durables	Non-	Durables
U.S.	EU	Asia

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

# Future Operational and Financial Improvements

nd nts

Further O&P – EAI Restructuring

Further structural and product mix improvements

To be completed by 2015

Further Houston Refinery Flexibility

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

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 will 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.