

## 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; 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, 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.

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.

#### Information Related to Financial Measures

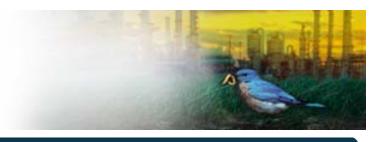
We have included EBITDA in this presentation, which is a non-GAAP measure, as we believe that EBITDA is a measure commonly used by investors. However, EBITDA, as presented herein, may not be comparable to a similarly titled measure reported by other companies due to differences in the way the measure 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 slides # 23 and 25 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.

# World-Class Scale With Leading Positions

(\$ in millions, except per share data)	FY 2013	FY 2012	FY 2011
EBITDA	\$6,311	\$5,808	\$5,469
Income from Continuing Operations	\$3,860	\$2,858	\$2,472
Diluted Earnings (\$/share) from Continuing Operations	\$6.76	\$4.96	\$4.32





<u>Products</u>	Global Capac	ity Position
<b>Chemicals</b> Ethylene Propylene Propylene Oxide	Э	#5 #5 #2
Polymers Polyolefins (PE Polypropylene Polyethylene Polypropylene C	,	#3 #1 #5 #1
Fuels Oxyfuels		#1
<b>Technology and R</b> Polyolefin Licen		#3

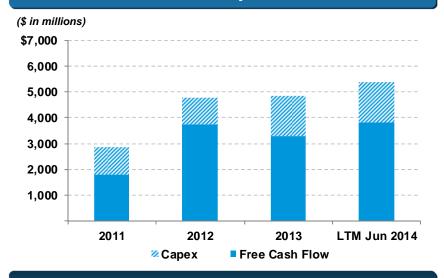


Source of data: Positions based on LyondellBasell wholly owned capacity and pro rata share of JV capacities as of December 31, 2013.

## Strong Cash Generation, Share Repurchases & Dividends



#### **Cash from Operations**



#### **Dividends & Share Repurchases**



#### **Key Statistics**

Snapshot at June 30, 2014

LTM FCF: \$3.8 billion

LTM Capex: \$1.5 billion

Cash<sup>(1)</sup>: \$3.5 billion

Total Debt/LTM EBITDA: 1.0x Total Debt/Book Capital: 39%

Note: Cash balances include cash and short-term securities.

19 million shares repurchased during
 Q2'2014 and ~ 62 million shares
 repurchased as of June 30, 2014

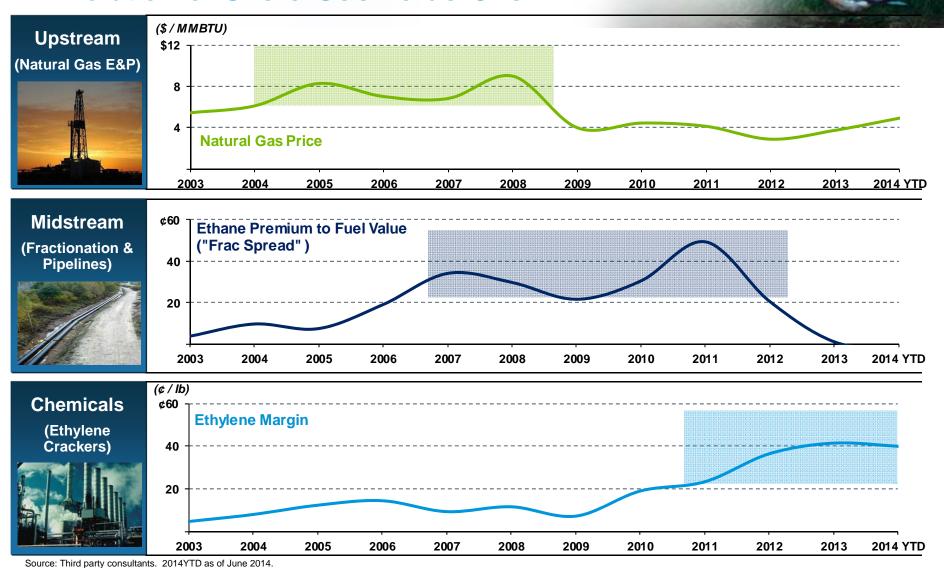
# Our Businesses Benefit from Shale Advantage and Differentiated Positions



Shale Advantage	<ul><li>U.S. Olefins Chain</li><li>U.S. ethylene</li></ul>	2013 EBITDA <sup>(1)</sup>
	<ul><li>U.S. polyethylene</li><li>EO &amp; EG</li></ul>	
Shale Advantage & Differentiated Positions	<ul><li>Oxyfuels</li><li>C4 chemicals</li><li>Acetyls</li></ul>	
Differentiated Positions	<ul> <li>Propylene oxide and derivatives</li> <li>Polypropylene compounding and Polybutene-1</li> <li>Technology segment</li> <li>Joint ventures</li> <li>Catalloy</li> </ul>	<ul> <li>Shale Advantage</li> <li>Shale Advantage + Differentiated Positions</li> <li>Differentiated Positions</li> </ul>
Commodity Products	<ul> <li>European olefins and polyolefins</li> <li>Refined products</li> <li>Styrene</li> <li>U.S. polypropylene</li> </ul>	■ Commodity Products

(1) EBITDA presented in this chart excludes "other", which includes items not allocated to the segments. U.S. polyethylene benefits from the shale gas advantage and is therefore included in the "Shale advantage" portion of the chart rather than the "commodity products" portion.

#### **Evolution of Shale Gas Value Chain**

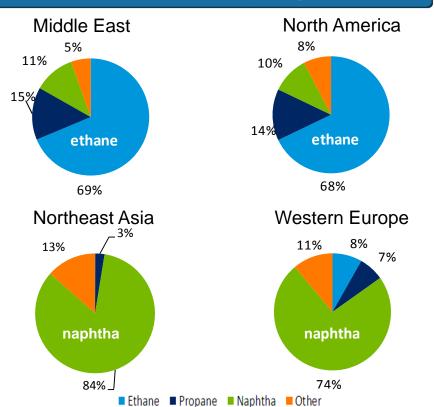


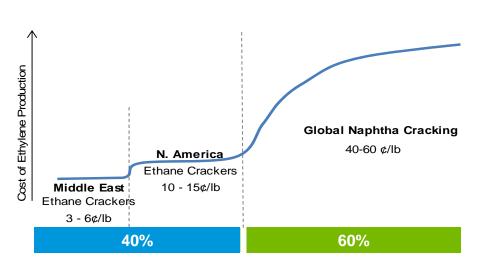
## Low Cost Ethane Has Improved North American Competitiveness





#### **Global Cost of Ethylene Curve**



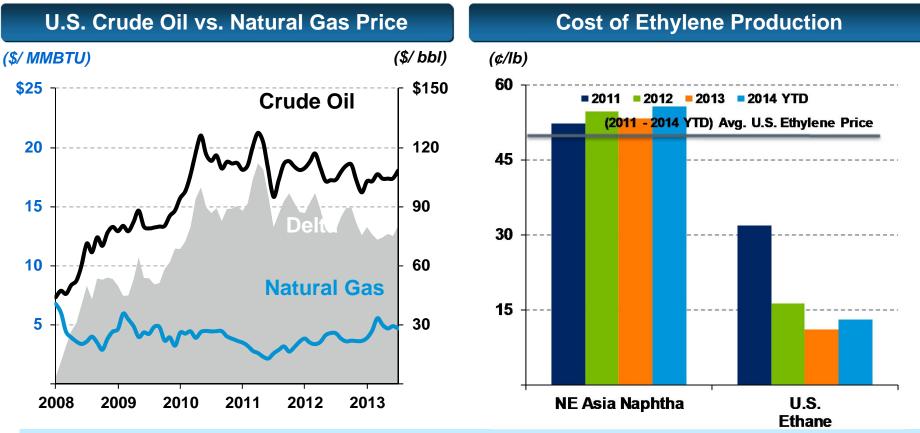


- U.S. cost of ethylene production, at 10-15 ¢/lb, competes with Middle Eastern production
- Europe and Asia still dependent on higher cost naphtha

Source: Third party consultants and LYB estimates.

## Global Market – Naphtha Crackers Set The Price





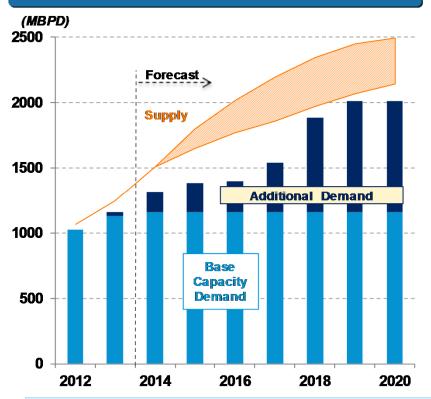
U.S. shale gas revolution is a significant driver of profitability in North American Olefins and Polyolefins and Intermediates and Derivatives segments

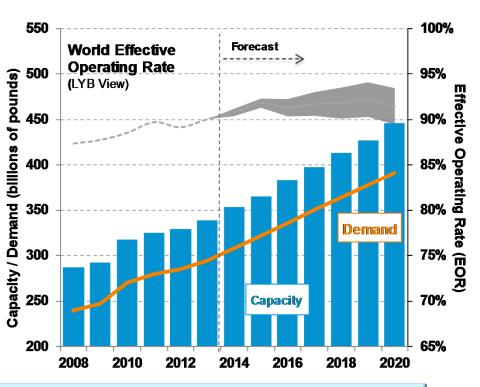
Sources: LYB estimates, third party consultants. Crude oil and natural gas data updated through June 2014.

# Favorable Supply/Demand Balances

#### U.S. Ethane Supply/Demand







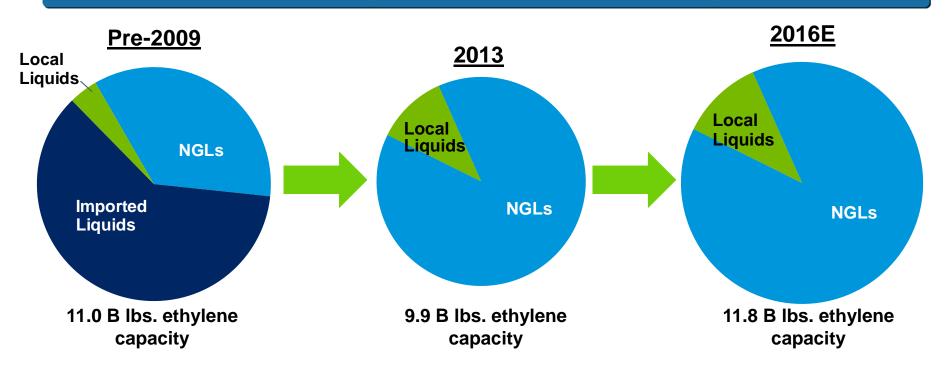
- Ethane production is expected to continue exceeding demand
- N. America ethylene industry effective operating rate ~ 95% in 2013

Source: Third party consultants and LYB estimates.

# O&P – Americas: Feedstock Flexibility Boosts Profitability



#### LYB U.S. Ethylene Cracker Feedstock Flexibility



~ 90% of ethylene production in 2013 from NGLs, and almost 100% from U.S. sourced feedstocks

Source: LYB.

Note: Percentages based on volume of feedstock consumed. Future feedstock mix is LYB estimate.

# O&P – EAI: Driven by Our Differentiated Position



#### Indexed O&P EAI EBITDA Scenarios (1)

(EBITDA Indexed, Mid-Cycle = 1.0)

1.5

1.0

Trough Mid-Cycle Peak 2012 2013

- Differentiated / Stable Businesses Commodity / Cyclical Olefins & Polyolefins
- 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 can represent \$350 \$550 million per year over the cycle

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

# The European Olefins Market is Difficult but LYB Has Generated Profit



#### **West Europe Olefins Operating Rate**

# 95% 90% 85% 75% Q1'13 Q2'13 Q3'13 Q4'13 Q1'14 Q2'14 LYB Industry

#### LYB Advantaged Raw Materials



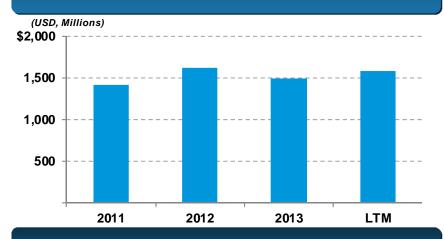
- LYB has captured value through both:
  - Above industry operating rates
  - Processing cost advantaged raw materials

Source: Third party consultants and LYB estimates.

# I&D Segment Benefits from Proprietary Technology and Advantaged Positions



#### Strong and Stable EBITDA<sup>(1)</sup>

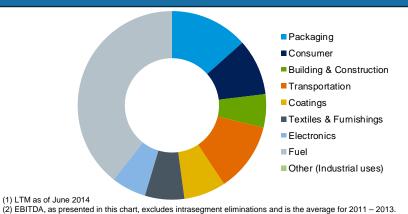


## **I&D EBITDA Benefits from Proprietary Technology** and an Advantaged Gas and NGL Position<sup>(2)</sup>

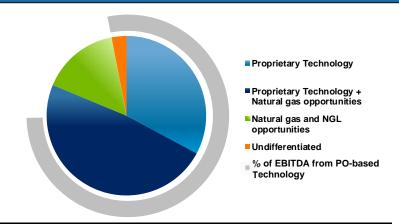
	РО	C4s / Oxyfuels	Acetyls	EO & Derivatives
Proprietary Technology	$\checkmark$	✓	✓	
Advantaged Gas / NGL Position		✓	✓	✓

#### Diverse End Uses<sup>(3)</sup>

(3) Source: Internal LYB estimates derived from third party sales and estimated end uses, 2012.



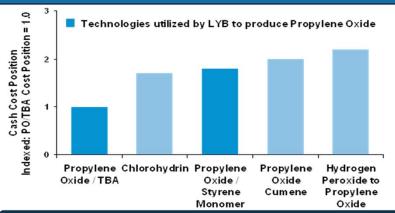
## ~80% of EBITDA is Generated from PO Proprietary Technology<sup>(2)</sup>



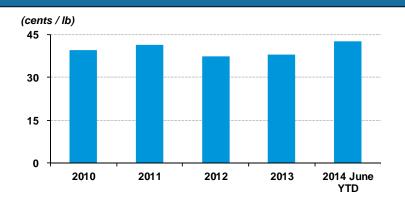
# LYB Propylene Oxide Benefits from Low Cost Technology and Healthy Demand



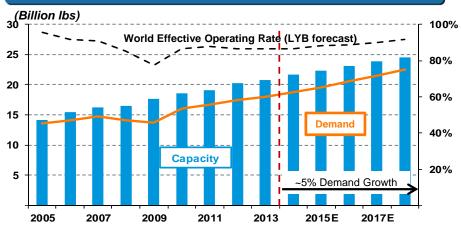
#### **Economics of PO Technologies**(1)



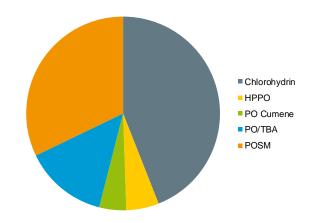
#### P-Glycol Raw Material Margins<sup>(2)</sup>



#### PO Supply / Demand Outlook(3)



#### Global PO Production Technology<sup>(3)</sup>



<sup>(1)</sup> Source: Third party consultants and 2012 LYB data and estimates

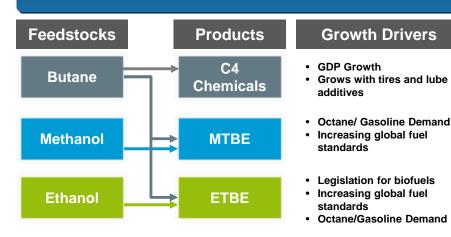
<sup>(2)</sup> Source: Average per Chemdata

<sup>(3)</sup> Source: Internal LYB estimates derived from third party consultants

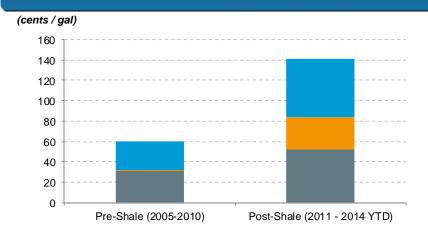
# TBA and Oxyfuels Benefit from Octane Demand and U.S. Shale Gas Advantage



#### **TBA Chain Feedstocks and Growth Drivers**



#### U.S. MTBE Upgrade Value<sup>(1)</sup>

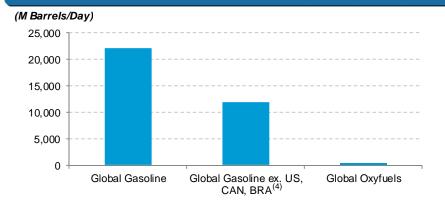


#### Physical Properties of Gasoline and Oxyfuels<sup>(2)</sup>

Fuel	Octane (R+M)/2	Vapor Pressure (RVP)	Sulfur (PPM)
Gasoline	87-93	7 - 13	10 - 30
MTBE	110	8	< 10
ETBE	111	4	< 10
Naphtha	70 - 75	8-12	30 - 100

#### 1) Source: Platts. Excludes conversion costs

#### Global Gasoline and Oxyfuel Demand<sup>(3)</sup>



<sup>(2)</sup> Source: EIA and internal estimates.

<sup>(3)</sup> Source: EIA, IHS.

Note: U.S., Canada, and Brazil do not consume MTBE

## Acetyls Benefits from U.S. Natural Gas Advantage

#### **Key Drivers**

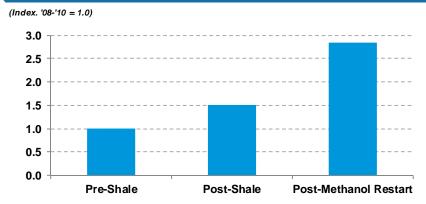
- U.S. natural gas advantage
- Oil to gas ratio
- Ethylene integration
- Gasoline blending

## **Sources of LYB Competitive Advantage**

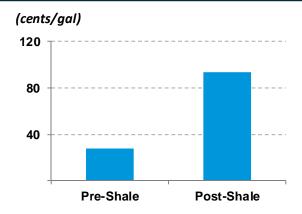
- Low capital expansion
- System integration



## Growing Acetyls EBITDA from U.S. Natural Gas Advantage and Methanol Restart<sup>(1)</sup>



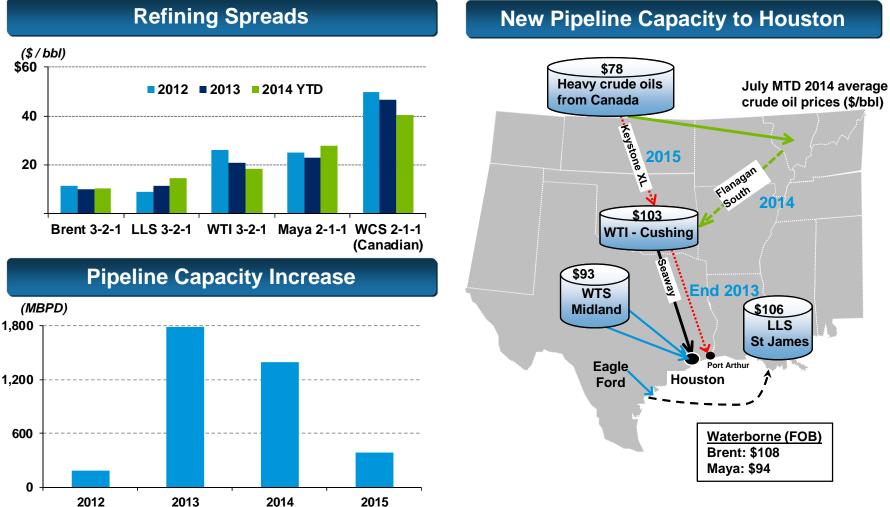
## Methanol Cash Margin Benefits from Lower U.S. Natural Gas<sup>(2)</sup>



<sup>(1)</sup> Pre-Shale refers to the years '08-'10; Post Shale refers to the years 2011 – 2013. Post Methanol Restart refers to the LTM ending June '14. (2) Pre-shale refers to years 2000 – '10 while post-shale refers to the years 2011 - 2013.

# Refining: Profitability Has Been Driven by Geography and Complexity





Maya 2-1-1 based on LLS pricing. WCS refers to west Canadian select vs. Gulf Coast products. 2014 YTD as of June 2014. July MTD prices as of July 31st.

lyondellbasell

Source:

Bloomberg and Wall Street research.

## **Growth and Operational Improvement Programs**

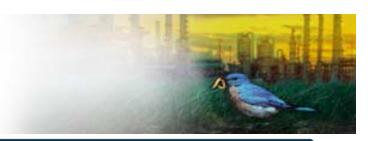
<u>Opportunities</u>	<b>Capital Investments</b>	Estimated Pre-tax Earnings
Operational Improvements	Minimal	~ \$250 – 300 Million
Complete & Active Growth Projects	~ \$1,700 Million	~ \$1,100 – 1,200 Million
Possible/ Developing Growth Projects <sup>(2)</sup>	~ \$400 Million	~ \$100 - \$200 Million

- 2012 Q2'14 spend of ~\$950 million on growth and improvement projects
- Through Q2'14, approximately \$500 600 million run rate pre-tax earnings achieved from completed growth and improvement programs at 2013 industry conditions

<sup>(1)</sup> Capital Investments are based on company estimates and earnings values are based on FY2013 industry benchmark margins.

<sup>(2)</sup> Note: Capital estimates include the possible new PE line but do not include the recently announced PO/TBA plant or possible PO/TBA Joint Venture. Estimated Pre-tax Earnings include a benefit of \$50-100MM for the possible new PE line and \$70-90MM for the Potential PO/TBA Joint Venture. The recently announced PO/TBA plant is not contemplated in these estimates.

## Cash Deployment Hierarchy



#### **Current Status Comments** ~ \$800 - \$900 **Base Capex** million/yr First priorities for cash Interest ~\$375 million/yr<sup>(1)</sup> **Foundation** Interim \$0.70/share per Fund through the cycle with **Dividend** cash flow from operations quarter ~\$750 million avg. High-return in advantaged **Growth Capex** per year over next businesses 2 years **Discretionary** Share Discretionary cash returned to **Opportunities** Repurchases / shareholders Balance of Special M&A if strategic and cash generated Dividend / meaningfully accretive **Acquisitions**



# 2013 – 2014 Reconciliation of Segment Information to Consolidated Financial Information

Reconciliation of Segment Information to Consolidated Financial Information

						2013								2014		
(Millions of U.S. dollars)		Q1		Q2		Q3		Q4	To	tal		Q1		Q2		YTD
Sales and other operating revenues:																
Olefins & Polyolefins - Americas	\$	3,244	\$	3,251	\$	3,315	\$	3,279	\$	13,089	\$	3,357	\$	3,462	\$	6,819
Olefins & Polyolefins - Europe, Asia, International		3,800		3,708		3,594		3,583		14,685		3,778		4,069		7,847
Intermediates & Derivatives		2,282		2,217		2,452		2,521		9,472		2,429		2,706		5,135
Refining		2,468		3,077		3,177		2,976		11,698		2,756		3,250		6,006
Technology		134		132		124		142		532		136		144		280
Other		(1,259)		(1,282)		(1,510)		(1,363)		(5,414)		(1,321)		(1,514)		(2,835)
Continuing Operations	\$	10,669	\$	11,103	\$	11,152	\$	11,138	\$	44,062	\$	11,135	\$	12,117	\$	23,252
Operating income (loss):															_	
Olefins & Polyolefins - Americas	\$	821	\$	872	\$	759	\$	801	\$	3,253	\$	656	\$	898	\$	1,554
Olefins & Polyolefins - Europe, Asia, International		93		189		78		17		377		225		190		415
Intermediates & Derivatives		323		285		371		321		1,300		316		375		691
Refining		(17)		(16)		(37)		92		22		86		95		181
Technology		50		39		35		33		157		60		56		116
Other		(3)		(5)		1				(7)		(3)		(1)		(4)
Continuing Operations	\$	1,267	\$	1,364	\$	1,207	\$	1,264	\$	5,102	\$	1,340	\$	1,613	\$	2,953
Depreciation and amortization:	<u> </u>	1,207	9	1,004		1,207	<u> </u>	1,207	Ψ	0,102	<u> </u>	1,040	<u> </u>	1,010	<u> </u>	2,000
Olefins & Polyolefins - Americas	\$	75	\$	69	\$	73	\$	76	\$	293	\$	73	\$	74	\$	147
Olefins & Polyolefins - Europe, Asia, International	Ψ	77	Ψ	76	Ψ	78	Ψ	56	Ψ	287	Ψ	70	Ψ	67	Ψ	137
Intermediates & Derivatives		48		50		50		56		204		55		56		111
Refining		36		37		45		42		160		42		42		84
Technology		17		20		16		22		75		16		15		31
Other				20						2						
Continuing Operations	•	253	•	254	•	262	0	252	¢	1,021	4	256	<u>c</u>	254	0	510
EBITDA: (a)	<u> </u>	233	9	234	9	202	<u>v</u>	232	<u>v</u>	1,021	Ψ	230	9	234	<u> </u>	310
Olefins & Polyolefins - Americas	\$	898	\$	951	\$	841	•	883	¢	3,573	Φ.	736	•	978	•	1,714
Olefins & Polyolefins - Americas Olefins & Polyolefins - Europe, Asia, International	Ψ	225	Ψ	295	Ψ	204	Ψ	115	Ψ	839	Ψ	356	Ψ	319	Ψ	675
Intermediates & Derivatives		373		338		427		354		1,492		375		430		805
Refining		20		20		8		134		182		129		137		266
Technology		66		59		52		55		232		76		71		147
Other		3		(11)		(1)		2		(7)		(4)		6		2
Continuing Operations	•	1,585	•	1,652	0	1,531	Φ.	1,543	¢	6,311	Φ.	1,668	<u>c</u>	1,941	Φ.	3,609
Capital, turnarounds and IT deferred spending:	<u> </u>	1,363	Ψ	1,032	Ψ	1,001	Ψ	1,545	Ψ	0,311	Ψ	1,000	<u> </u>	1,341	Ψ	3,009
Olefins & Polyolefins – Americas	\$	122	•	122	•	218	¢.	183	œ.	645	¢.	231	œ	306	¢.	537
Olefins & Polyolefins - Americas Olefins & Polyolefins - Europe, Asia, International	Ф	63	Ф		Ф	44	Ф	76	Ф		Ф		Ф	27	Ф	60
				46						229		33				
Intermediates & Derivatives		106		141		119		77		443		45		52		97
Refining		93		67		36		13		209		32		20		52
Technology		7		6		7		10		30		2		6		8
Other	_		_	5		(1)		1		5				4	_	4
Total		391		387		423		360		1,561		343		415		758
Deferred charges included above	_		_		_		_				_		_		_	<del></del>
Continuing Operations	\$	391	\$	387	\$	423	\$	360	\$	1,561	\$	343	\$	415	\$	758

(a) See slide # 23 for EBITDA calculation.

# 2013 – 2014 Reconciliation of EBITDA to Income from Continuing Operations



EDI	TDA	C-1		-4	
	IIDA	Cal	Cu	at	on

						2013								2014		
(Millions of U.S. dollars)		Q1	_	Q2	_	Q3	_	Q4		Total	_	Q1	_	Q2		YTD
Net income attributable to the Company shareholders	\$	901	\$	929	\$	853	\$	1,174	\$	3,857	\$	945	\$	1,178	\$	2,123
Net income (loss) attributable to non-controlling interests		(1)		(2)		(2)		1		(4)		(1)		(2)		(3)
(Income) loss from discontinued operations, net of tax		6		(4)	_	3		2		7	_	(1)		(3)	_	(4)
Income from continuing operations		906		923		854		1,177		3,860		943		1,173		2,116
Provision for income taxes		357		410		339		30		1,136		383		425		808
Depreciation and amortization		253		254		262		252		1,021		256		254		510
Interest expense, net		69		65		76	_	84		294	_	86		89		175
EBITDA	<u>\$</u>	1,585	<u>\$</u>	1,652	\$	1,531	<u>\$</u>	1,543	<u>\$</u>	6,311	<u>\$</u>	1,668	<u>\$</u>	1,941	<u>\$</u>	3,609

# 2011 – 2012 Reconciliation of Segment Information to Consolidated Financial Information

#### Reconciliation of Segment Information to Consolidated Financial Information

(Millions of U.S. dollars)		2011		2012
Sales and other operating revenues:				
Olefins & Polyolefins - Americas	\$	14,880	\$	12,934
Olefins & Polyolefins - Europe, Asia, International		15,591		14,521
Intermediates & Derivatives		9,500		9,658
Refining		13,706		13,291
Technology		506		498
Other		(6,000)		(5,550)
Continuing Operations	\$	48,183	\$	45,352
Operating income (loss):				
Olefins & Polyolefins - Americas	\$	1,855	\$	2,650
Olefins & Polyolefins - Europe, Asia, International		435		127
Intermediates & Derivatives		1,156		1,430
Refining		809		334
Technology		107		122
Other		(25)		13
Continuing Operations	\$	4,337	\$	4,676
Depreciation and amortization:	-			
Olefins & Polyolefins - Americas	\$	246	\$	281
Olefins & Polyolefins - Europe, Asia, International		262		285
Intermediates & Derivatives		186		194
Refining		153		148
Technology		84		73
Other		-		2
Continuing Operations	\$	931	\$	983
EBITDA: (a)				
Olefins & Polyolefins - Americas	\$	2,137	\$	2,968
Olefins & Polyolefins - Europe, Asia, International		865		548
Intermediates & Derivatives		1,410		1,621
Refining		977		481
Technology		191		197
Other		(111)		(7)
Continuing Operations	\$	5,469	\$	5,808
Capital, turnarounds and IT deferred spending:	-			
Olefins & Polyolefins - Americas	\$	425	\$	468
Olefins & Polyolefins - Europe, Asia, International		235		254
Intermediates & Derivatives		101		159
Refining		224		136
Technology		26		43
Other		17		5
Total		1,028		1,065
Deferred charges included above		(7)		(5)
Continuing Operations	\$	1,021	\$	1,060
3 -p	<u>-</u>	,	_	,

<sup>(</sup>a) See slide # 25 for EBITDA calculation.

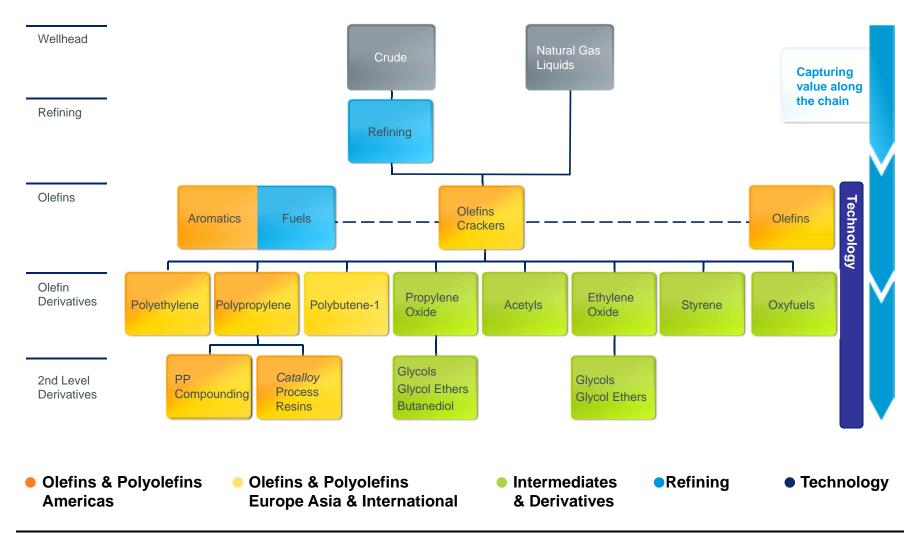
# 2011 – 2012 Reconciliation of EBITDA to Income from Continuing Operations

#### **EBITDA Calculation**

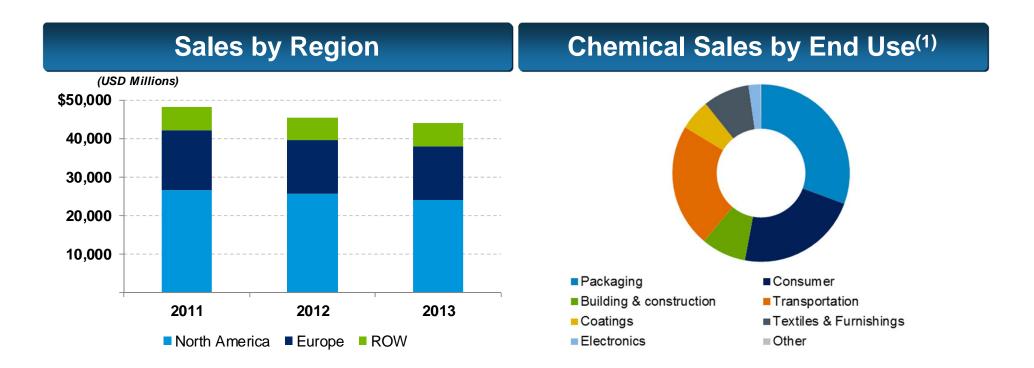
	2011	2012
(Millions of U.S. dollars)	YTD	YTD
Net income attributable to the Company shareholders	\$ 2,147	\$ 2,848
Net income (loss) attributable to non-controlling interests	(7)	(14)
Loss from discontinued operations, net of tax	332	24
Income from continuing operations	2,472	2,858
Provision for income taxes	1,059	1,327
Depreciation and amortization	931	983
Interest expense, net	1,007	640
EBITDA	\$ 5,469	\$ 5,808

# Diversified and Vertically Integrated Portfolio





## LYB Has Diverse Footprint and End Uses



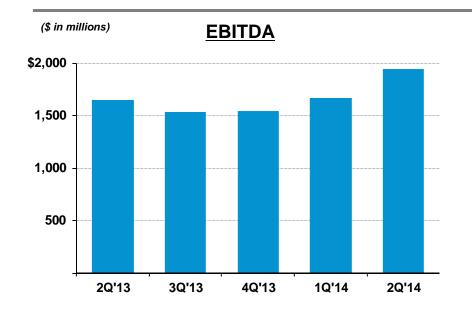
#### N. America sales represent ~ 55% of total company revenues

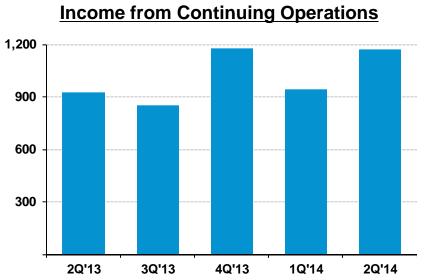
(1) Estimated based on LYB 2012 third party chemical sales (O&P and Intermediates & Derivatives segments excluding olefin fuel products and oxyfuel sales) and third party industry volume estimates of product end uses.

## **Second Quarter Highlights**

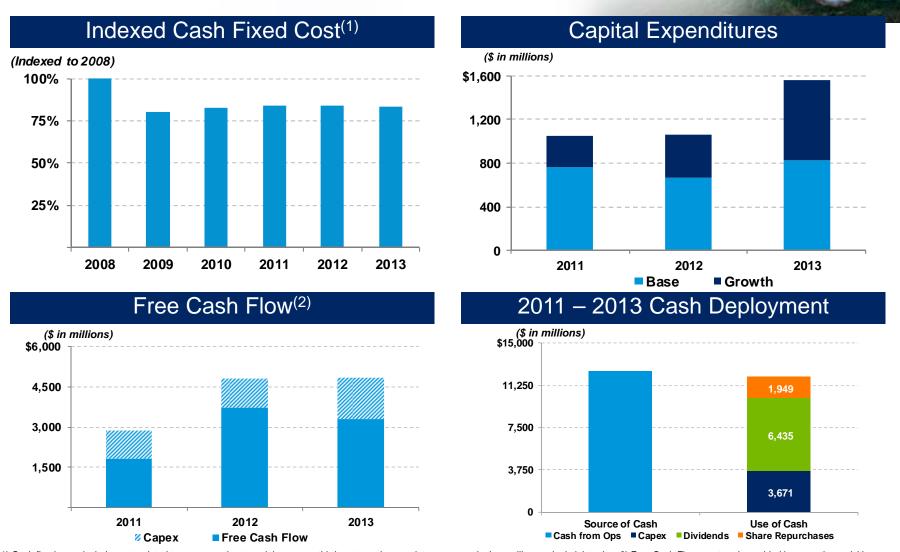
(\$ in millions, except per share data)	2Q'14	1Q'14	2Q'13
EBITDA	\$1,941	\$1,668	\$1,652
Income from Continuing Operations	\$1,173	\$943	\$923
Diluted Earnings (\$ / share) from Continuing Operations	\$2.22	\$1.72	\$1.60

LTM EBITDA - \$6,683 million LTM EPS - \$7.54 per share





## **Key Financial Statistics**



<sup>1)</sup> Cash fixed costs include costs related to compensation, travel, insurance, third party services, maintenance, marketing, selling, and administration; 2) Free Cash Flow = net cash provided by operating activities – capex





- Largest light olefins producer in North America
  - Significant competitive advantage with scale, feedstock supply flexibility and vertical integration
- Third largest polyethylene producer in North America
  - Broad product portfolio
- Largest polypropylene producer in North America
  - High degree of integration
  - Catalloy adds specialty component

#### **Product Capacity Position and Footprint**

Product Light Olefins	Facilities 6 Crackers	Capacity <sup>(1)</sup> NA 9.9 Bn lbs (ethylene)	A Ranking #1
Polypropylene	4 sites <sup>(2)</sup>	4.4 Bn lbs	#1
Polyethylene	6 sites	5.9 Bn lbs	#3



#### Strong Capacity Position + U.S. Natural Gas Liquids Advantage

Sources: Third party consultant, LYB.

(1) - Includes LYB wholly owned capacity and 100% of JV capacity as of December 31, 2013. Light olefins capacity based on combined ethylene and propylene capacities.

(2) - Includes Indelpro JV.

## Olefins & Polyolefins - Europe, Asia, International



 Medium-size light olefins player in Western Europe

#### Large scale polymer capacity position

- Largest polyethylene producer in Western Europe
  - #1 high density polyethylene capacity
  - #3 low density polyethylene capacity
- Largest polypropylene producer in Western Europe with Catalloy adding to differentiation capability
- Largest PP Compounds producer globally

#### Significant Joint Ventures

8 JVs in Middle East and Asia-Pacific

#### **Product Capacity Position and Footprint**

<u>Product</u>	<u>Facilities</u>	Capacity <sup>(1)</sup>	W.E. Ranking
Light Olefins	5 Crackers (1 JV)	6.5 Bn lbs (ethylene)	#6
Butadiene	2 sites	700 Mn lbs	#3
Polypropylene	15 sites (6 JVs)	13.0 Bn lbs	#1
Polyethylene	6 sites (2 JVs)	7.0 Bn lbs	#1
PP Compounding	16 sites (3 JVs)	2.6 Bn lbs	#1



#### Differentiated positions have provided steady results

Sources: Third party consultant, LYB.

(1) - Includes LYB wholly owned capacity and 100% of JV capacity as of December 31, 2013. Light olefins capacity based on combined ethylene and propylene capacities.



- Strong propylene oxide capacity position and leader in PO technology processes
  - #2 propylene oxide producer worldwide
- Several products benefit from natural gas vs. crude oil
  - Acetyls
  - Ethylene oxygenates
  - HP-Isobutylene
  - Oxyfuels



<u>Products</u>	<u>Facilities</u>	Capacity <sup>(1)</sup>
Propylene Oxide	6 Sites	5.1 Bn lbs
Acetic Acid	1 Site	1.2 Bn lbs
Methanol	2 sites	440 Mn gal
Ethylene Glycol	1 Site	0.7 Bn lbs
Isobutylene	3 Site	1.4 Bn lbs
Oxyfuels	4 Sites	75,000 bbls/day
Styrene	3 Sites	5.6 Bn lbs



#### I&D – A robust and diversified portfolio

Sources: Third party consultant, LYB.

(1) - Includes LYB wholly owned capacity and 100% of JV capacity as of December 31, 2013.

## Refining



- Independent gulf coast refinery
  - Crude capacity of 268 MBPD
  - Nelson complexity index of 12.5
- Process heavy, high sulfur crude oil
  - Typically sold at discount
- Benchmark spread
  - Maya 2-1-1
  - Diesel production approximately equal to gasoline

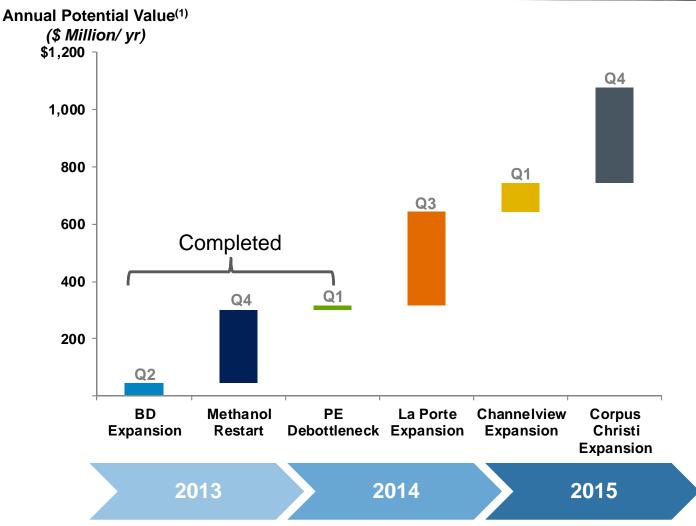
	Houston Refinery	
Refinery Units Crude	Number of Units 2	<u>Capacity</u> 268 MBPD



World class, high conversion, highly integrated refinery

# Projects Annual Potential Values & Completion Timeline





(1) Annual potential values are based on FY 2013 industry benchmark margins.





Project	Cost (\$Million)	Start-up	Potential Pre-Tax Earnings (\$ Million/year)	
Increase Ethane Capability and Midwest debottlenecks	~\$50	2012	\$150 - \$180	
EU Butadiene Expansion	~\$100	Mid 2013	\$40 - \$50	
Methanol Restart	~\$180	Late 2013	\$250 - \$260	
PE Debottleneck	~\$20	Early 2014	\$10 - \$20	
La Porte Expansion	~\$510	Mid 2014	\$300 - \$350	
Channelview Expansion	~\$200	Early 2015	\$90 - \$110	
Corpus Christi Expansion	~\$600	Late 2015	\$300 - \$350	
PP Compounding Growth	~ \$40	2013 - 2016	\$70 - \$90	
Possible New PE line	~ \$400	Mid 2017	\$50 - \$100	
PO/TBA Joint Venture	MOU	2018	\$70 - \$90	
New PO/TBA Plant	TBD	2019	TBD	
Total	~ \$2,100		~ \$1,300 - \$1,600	
Complete In Construction/Permit Obtained In Development				

(1) Costs are based on recent company estimates and potential pre-tax values are based on FY 2013 industry benchmark margins.