

## **About Us**

LyondellBasell (NYSE: LYB) is one of the world's largest plastics, chemical and refining companies and a member of the S&P 500 Index. LyondellBasell products and technologies are used to make items that improve the quality of life for people around the world, including textiles, food packaging, electronics, automotive parts, home furnishings, construction materials and biofuels.

- 55 manufacturing sites in 18 countries
- I 13,100 employees
- Products sold in approximately 100 countries

## 2014 Highlights

- Leading in safety and environmental performance
- \$45.6 billion in annual revenues
- \$6 billion in cash generated from operations
- 63.3 million shares repurchased
- \$1.4 billion in dividends paid

## Content

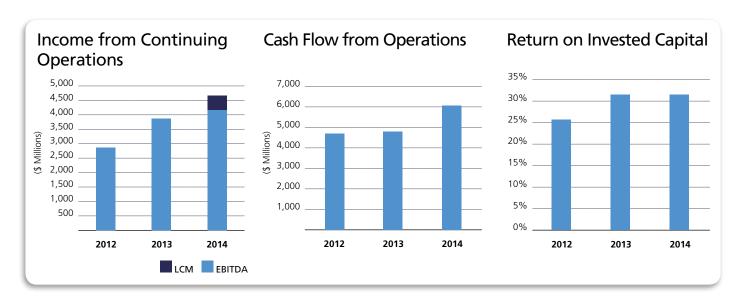
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<sup>\*</sup> LCM stands for lower of cost or market. An explanation of LCM can be found on Page I of this report.

# The Right Results

## **Highlights of Consolidated Financial Statements**

U.S. \$ IN MILLIONS	2012	2013	2014
Sales and other operating revenues	\$45,352	\$44,062	\$45,608
Operating income	\$4,676	\$5,102	\$5,736
Income from equity investments	\$143	\$203	\$257
Income from continuing operations	\$2,858	\$3,860	\$4,172
Diluted EPS from continuing operations	\$4.96	\$6.76	\$8.00
Diluted share count (millions)	577	570	521
Cash flow from operations	\$4,787	\$4,835	\$6,048
Capital expenditures	\$1,060	\$1,561	\$1,499
EBITDA	\$5,808	\$6,311	\$7,050
LCM adjustment	-	-	\$760
EBITDA excluding LCM	\$5,808	\$6,311	\$7,810
Diluted EPS from continuing operations excluding LCM	-	-	\$8.92



<sup>\*</sup> Throughout this publication we use several non-GAAP financial measures, including EBITDA, which means net income from continuing operations plus interest expense (net), provisions for (benefit from) income taxes, and depreciation & amortization. EBITDA, income from continuing operations, diluted earnings per share (EPS) and certain other measures presented have been adjusted for LCM. 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. These measures have been adjusted to remove a non-cash LCM charge of \$760 million pre-tax (\$483 million after tax) for 2014. In addition, we use the term "free cash flow" to refer to net cash provided from operating activities minus capital expenditures. Reconciliations of our non-GAAP measures, including the impact of the LCM adjustment to our operating segments, can be found on our website at www.lyb.com/investorrelations.



# The Right Leader

Dear Shareholders,

The strong foundation built by LyondellBasell over the last five years has positioned the company to perform very well despite the turbulent times we are experiencing in the energy sector. Our dedication to safe and reliable operations, capital and cost discipline, and strong cash flow allow us to compete successfully no matter what the business environment. Much like the game of chess, the key to winning in our business is having the right pieces in the right places and executing flawlessly. As you review the details of this report, I believe you will see that the pieces of our company are in the right places and that we are on course for continued success.

Exceptional safety and environmental performance remain our highest priorities. Last year, the American Chemistry Council (ACC) named LyondellBasell a Responsible Care® Company of the Year in recognition of our outstanding achievements in environmental, health and safety performance. Over the past five years, our Total Recordable Incident Rate (TRIR) dropped by nearly 50 percent and our significant environmental and process safety incidents declined by two-thirds. Our global safety performance is top decile relative to our industry peers, according to ACC reporting. These are impressive achievements, but we have not yet reached our goal of zero injuries and zero incidents. We will not rest until we reach GoalZero performance.

From a financial perspective, we delivered a third consecutive year of record earnings in 2014. We generated income from continuing operations of \$4.7 billion, or \$8.92 diluted earnings per share, and EBITDA of \$7.8 billion, each excluding LCM. Cash from operations was \$6 billion and free cash flow was \$4.5 billion. Generating strong cash flow and maintaining a strong balance sheet are critical components of our business plan. Our financial strength is a distinct competitive advantage.

We are committed to returning value to shareholders. In 2014, we returned \$7.2 billion to shareholders through share repurchases and dividends. We purchased over 63 million of our shares and increased our dividend by 17 percent. Over the past four years, we paid \$7.8 billion in dividends and devoted \$7.7 billion to share repurchases. Our focus is on creating exceptional value for our shareholders and we have demonstrated a strong track record of doing just that.

Simultaneously, we are growing the company. I am pleased to report that our growth projects are advancing. In 2014, we increased polyethylene capacity by 220 million pounds-per-year at our Matagorda, Texas, plant by modifying existing facilities, and we completed an 800 million pounds-per-year ethylene expansion project in La Porte, Texas. We began construction of two large cracking furnaces at the Channelview, Texas, site that will increase ethylene production capacity by 250 million pounds-per-year when it comes on line in mid-2015. An additional 800 million pounds-per-year of capacity is on schedule to start up in mid-2016 at our Corpus Christi, Texas, plant. When fully operational, these projects increase our annual ethylene capacity by 1.85 billion pounds, giving us a total estimated U.S. capacity of 11.8 billion pounds.

We are also developing an expansion project at Channelview to add up to 550 million pounds-per-year of additional ethylene capacity, and we recently announced plans for a world-scale propylene oxide plant on the U.S. Gulf Coast. As we move forward, we will continue to look for opportunities to build on our strengths and take advantage of market opportunities.

In closing, I want to share my personal vision for LyondellBasell. I truly believe that LyondellBasell is already one of the best operators in the chemical industry. The data supports this view. I aspire to make LyondellBasell the most valued chemical company in the world – admired by shareholders, employees, customers and the communities in which we operate, for our innovation, operations, quality and culture. I know the character, integrity and drive of the people of LyondellBasell, and I am confident we can achieve this goal.

I am very proud of the LyondellBasell team and what we have achieved in the past five years: building our company into an industry leader. We have the right pieces in the right places – our foundation is strong, our vision is clear and we are positioned to be a winner today, as we have been in the past, and will be in the future.

Sincerely,

Bhavesh V. (Bob) Patel Chief Executive Officer and

Chairman of the Management Board

# The Right Assets

## **Business Segments**

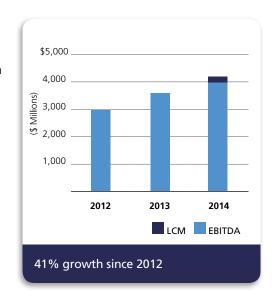
\$ Millions	Olefins and Polyolefins Americas	Olefins and Polyolefins EAI	Intermediates and Derivatives	Refining	Technology
Revenues	\$13,948	\$15,203	\$10,130	\$11,710	\$497
Capital Expenditures	\$912	\$191	\$241	\$123	\$25
EBITDA Excluding LCM	\$4,190	\$1,410	\$1,552	\$409	\$232

## Olefins and Polyolefins - Americas

#### Exceeded \$4.1 billion dollars of EBITDA (excluding LCM adjustment)

Olefins and Polyolefins – Americas continues to benefit from abundant North American shale gas and low-cost natural gas liquids (NGLs). We remain focused on investing in cost-effective expansions that leverage feedstock advantage and are in service ahead of the competition. Expansions at our Texas olefins plants will increase U.S. ethylene capacity by approximately 25% over 2013 and are equivalent to constructing a new standalone cracker.

- 800 MM pounds-per-year expansion at La Porte completed in 2014
- 250 MM pounds-per-year expansion at Channelview to start up mid-2015
- 800 MM pounds-per-year expansion at Corpus Christi scheduled to start up mid-2016
- Developing an additional 550 MM pounds-per-year expansion at Channelview We also completed a 220 MM pound-per-year polyethylene debottleneck at the Matagorda plant in 2014.











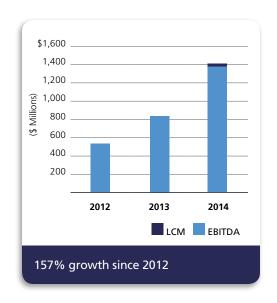
## Olefins and Polyolefins – Europe, Asia, International

#### 68% EBITDA increase over 2013 (excluding LCM adjustment)

In Europe, business unit restructuring and the successful execution of an advantaged feedstock strategy are paying off. More than 50% of European ethylene was produced from cost-advantaged raw materials such as propane, butane and condensates. Lower naphtha costs and an operating rate of 95% of nameplate capacity also contributed to the significant performance improvement. Additionally, our joint ventures in Saudi Arabia, Thailand, Poland, Australia, Japan and South Korea provide raw materials and close proximity to product markets.

#### **Products and Uses**

Our O&P segments are leading global manufacturers of olefins, which include ethylene and propylene, as well as polyolefins. These are the building block chemicals and plastics used in everyday items, such as automotive components, outdoor playground sets, drinking cups, milk jugs, water bottles, food packaging, fibers, pipe, shrink wrap, wiring and thousands of other durable and non-durable goods.











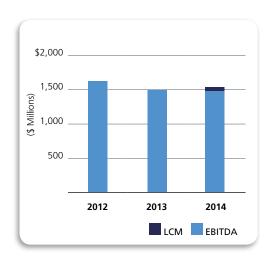
#### Intermediates and Derivatives

#### Generated \$1.5 billion in EBITDA in each of the past three years

Driven by our low-cost proprietary propylene oxide technology, Intermediates and Derivatives consistently generates strong EBITDA. In 2014, this segment also benefitted from a full year of operations of the restarted methanol plant in Channelview, Texas, which utilizes low-cost natural gas feedstock. Plans to build the world's largest propylene oxide plant on the U.S. Gulf Coast are moving forward. Collectively, these projects increase propylene oxide capacity by 35%, methanol capacity by 130% and oxyfuel equivalent capacity by 40% over 2013.

#### **Products and Uses**

This segment produces and markets propylene oxide and its co-products and derivatives, and other intermediate chemicals. Our I&D products are found in insulation, boats, anti-freeze, coolants, aircraft deicers, water-based paint, adhesives, pharmaceuticals, cosmetics, furniture, automotive, textiles, synthetic rubber and gasoline blending components.







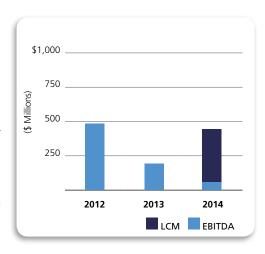


## Refining

# EBITDA more than doubled over 2013 (excluding LCM adjustment)

The Houston Refinery is designed for feedstock flexibility. It can process a wide range of geographically diverse crude oil. Products include gasoline, ultra low sulfur diesel, jet fuel and lube oils.

In late 2014, our refinery received initial shipments of low-cost Canadian crude oil through the Enbridge Flanagan South Pipeline. The infrastructure is in place to increase Canadian crude oil processing up to 40% of the refinery's throughput. Results for 2014 were driven by processing cost-advantaged crudes and a 97% operating rate.





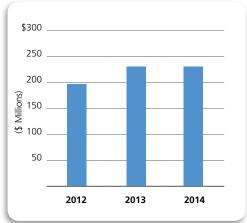


## **Technology**

# Average EBITDA of approximately 45% of revenue for the past 3 years

Our Technology segment develops and licenses industry-leading polyolefin process technologies and develops, manufactures and sells polyolefin catalysts. We market our process technologies and catalysts to external customers and also use them for our own polyolefin manufacturing operations.

LyondellBasell is a leading licensor of polypropylene and polyethylene technologies with more than 250 polyolefin process licenses. More companies use our breakthrough *Spherizone* and *Spheripol* polypropylene process technologies than the technologies of the three closest competitors combined.







# The Right Strategy

## **Operational Excellence**

Operational Excellence is LyondellBasell's fundamental method for achieving safe and reliable performance, which has a direct, positive impact on our bottom line. The safer the plant, the more reliable it becomes – and vice versa. The more efficient the operation, the less raw materials and energy it consumes, the less waste it generates and the more we contribute to a sustainable future. All of this is driven by the implementation of proven, operational processes designed from company and industry best practices.

#### **Reliable Operations**

2014 Operating Rates

- U.S. Ethylene 95%\*
- Europe Ethylene 95%
- Propylene Oxide 90%
- Houston Refinery 97%

Safety

Injury rate down 50% since 2009

Total Recordable Incident Rate of 0.23 for 2014

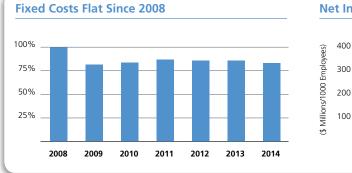
Top decile performance in our industry

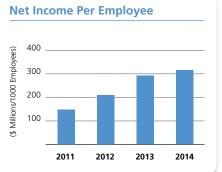
Named a Responsible Care Company of the Year by the American Chemistry Council



## Cost Management

Delivering top performance requires focused cost control regardless of industry conditions. Careful management of fixed costs and a lean, motivated organization are key drivers of our business model.



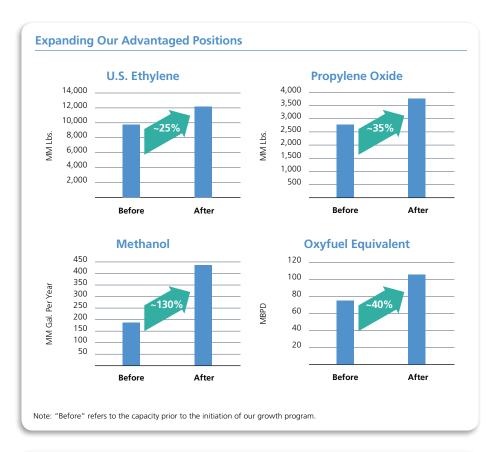


<sup>\*</sup> Excludes La Porte turnaround

# Focused Investment and Growth

Whether we are applying our proprietary technology or leveraging innovations in the chemical and energy sectors, LyondellBasell is investing in growth projects that will expand significantly our advantaged positions now and into the future.

In 2014, we invested \$800 million in growth projects and \$700 million in operational maintenance and reliability.



## **Financial Discipline**

Our management is committed to a financial strategy that positions the company long-term and targets the highest return to shareholders. In 2014, LyondellBasell was an industry leader in share repurchases and dividends.

#### **Return to Shareholders in 2014**

\$7.2 billion in share repurchases and dividends

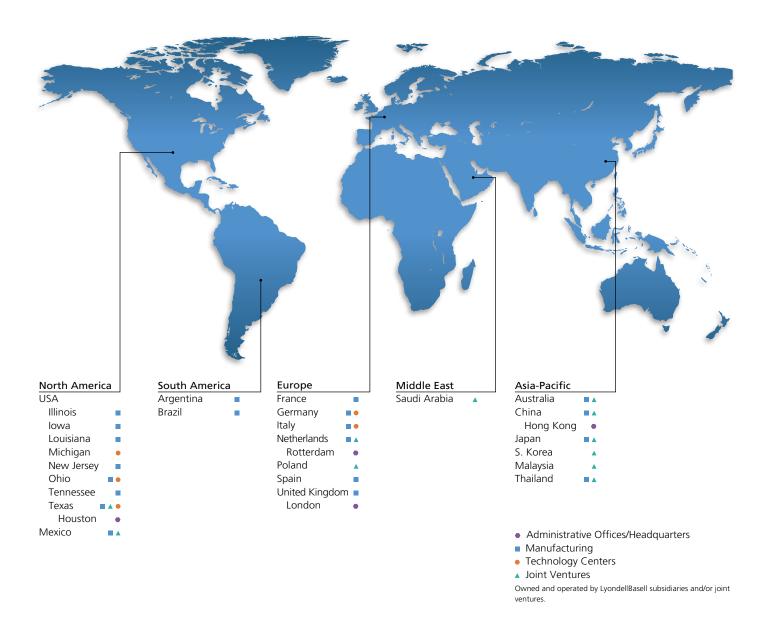
63.3 million shares repurchased (12%) Dividend increased by 17%

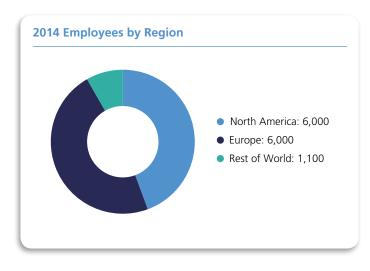
# Strong Balance Sheet and Cash Flow in 2014

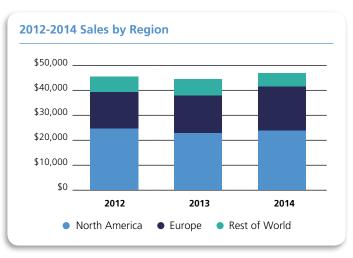
Free Cash Flow: \$4.5 billion
Debt/EBITDA of 0.9x, excluding LCM
Credit Rating of BBB+/Baa1



# The Right Places







# The Right People



#### Victoria Gilbert / Associate Engineer

I interned at LyondellBasell during my junior and senior years at The University of Texas at Austin and was hired immediately after graduating. I thought that my first six months on the job would be all about studying manuals and crunching numbers. But on my second day at work, my mentor told me to harness-up because we were going up a tower to conduct an inspection. I was thrilled to be in the plant, working with the equipment

and applying what I learned in school. My mentor helps me understand how my job responsibilities and the decisions I make affect plant operations. He's providing me with the tools and knowledge needed to succeed in my current job and creating a strong foundation of experience for my future. I came to LyondellBasell because I thought it would be an amazing opportunity – and it is.



#### **Kemal Simpson** / Instrumentation and Electrical Engineer

What sets our company apart from others is that safety isn't just a program at LyondellBasell, it's our culture. We live it. Knowing that your colleagues, contractors and everybody in the field are looking out for your safety and theirs is something that makes me feel good about working here. It's also gratifying

to know that we provide something the world needs. Whether it's gasoline or plastics for car dashboards and bumpers, toys and household products, what I do improves people's lives.



#### **Juste Cimermanaite** / Product Scheduler, European Fuels

I am new to LyondellBasell and the fuels industry. I appreciate that the company is investing in me through training and expanding my knowledge base because it not only benefits our customers, but is also good for me professionally. I enjoy the work environment too. We work hard, our supervisors

encourage us to think out of the box and we maintain a friendly atmosphere in the office. I also enjoy the multicultural work environment. I am from Lithuania, and my colleagues are from Bulgaria, Hungary, France, Portugal, Mexico and other parts of the world. This diversity makes the work environment very enriching.



#### **Tim Carnell** / Olefins Production Manager

As a former U.S. Army pilot, I understand the importance of teamwork, precision and discipline. I've worked at LyondellBasell for 10 years and I can honestly say that I get just as much satisfaction out of this job as I did serving my country. I have overall responsibility for the safe operation of the La Porte, Texas olefins plant and I was most recently focused on our turnaround and expansion project. This project was a significant investment for the company and

an intense two-year effort that pushed my leadership skills. I was responsible for keeping the operations and technical teams organized, focused, motivated, and most importantly, safe. Recognition is also a big part of my job so I regularly communicate with employees about how each of them plays an important role in our success. It's truly an honor to work with the great folks in La Porte.

#### **Global Care Day**

In addition to the many charitable organizations LyondellBasell supports, Global Care Day gives our employees worldwide the opportunity to develop and implement projects that are aligned with the company's community relations focus areas of health, education and environmental stewardship.

Projects have included feeding the hungry at numerous food banks, building repairs at homeless shelters, beautification projects at schools, teaching young students about electricity and chemistry, beach cleanups, urban tree plantings, litter removal in community parks, and hosting an outing at the zoo for nursing home residents, just to name a few.

Since its inception 15 years ago, we have donated more than 162,800 volunteer hours in 20 countries on Global Care Day.



# Supervisory Board of Directors



Robert G. Gwin (Chairman of the Board), Executive Vice President, Finance, and Chief Financial Officer of Anadarko Petroleum Corporation



Jacques Aigrain <sup>1,3</sup>
Partner at Warburg Pincus
and former Chairman of LCH
Clearnet Group, Limited



Jagjeet S. Bindra <sup>2,4</sup> Former President of Chevron Global Manufacturing



Leadership Team

Bhavesh V. (Bob) Patel Chief Executive Officer and Chairman of the Management Board



Karyn Ovelmen Executive Vice President and Chief Financial Officer



**Management Board** 

Jeff Kaplan
Executive Vice President
and Chief Legal Officer



Robin W. T. Buchanan Chairman of Michael Page International plc



Milton Carroll <sup>2,3</sup> Executive Chairman of the Board of CenterPoint Energy, Inc.



Stephen F. Cooper CEO and Director of Warner Music Group



Tim Roberts

Executive Vice President,
Global Olefins and Polyolefins



Pat Quarles

Executive Vice President, I&D,

Supply Chain and Procurement



Kevin Brown

Executive Vice President,

Manufacturing & Refining



Nance K. Dicciani <sup>1,4</sup> Former President and CEO of Honeywell Specialty Materials



Claire S. Farley <sup>2,4</sup>
Member of KKR Management



Isabella D. Goren <sup>1,3</sup> Former Senior Vice President and CFO of AMR Corporation and American Airlines Inc.



Massimo Covezzi Senior Vice President, Research and Development



Richard Roudeix
Senior Vice President, Olefins
and Polyolefins, Europe



Sam Smolik Senior Vice President, Americas Manufacturing and Refining Operations\*



Bruce A. Smith <sup>1,3</sup> CEO of One Cypress Energy and Former Chairman of the Board, President and Chief Executive Officer of Tesoro Corporation



Rudy M.J. van der Meer <sup>2,4</sup> Chairman of the Supervisory Board of Coöperatie VGZ U.A.



Mike VanDerSnick Senior Vice President, Manufacturing – Europe, Asia & International



Sergey Vasnetsov Senior Vice President, Strategic Planning and Transactions



Jackie Wolf Senior Vice President, and Chief Human Resources Officer

#### Ke

- 1. Audit Committee
- 2. Nominating and Governance Committee
- 3. Compensation Committee
- 4. Health, Safety and Environment Committee

Symbols in blue denote committee chairperson

 $<sup>\</sup>hbox{* Also serving as interim Vice President of Health, Safety, Environment and Operational Excellence}\\$ 

## Shareholder Information

#### **Stock Exchange**

LyondellBasell's common stock is listed on the New York Stock Exchange under the symbol "LYB."

#### Website

Shareholders and other interested parties can learn about LyondellBasell by visiting www.lyb.com.

#### **Investor Relations Contact**

Douglas J. Pike +1 713 309 4590

#### **Corporate Governance**

LyondellBasell's Corporate Governance Guidelines and related materials are available by selecting "Investor Relations" on our website at lyb.com.

#### **Online Annual Report**

LyondellBasell's Annual Report is available online at www.lyb.com.

#### **Registrar and Transfer Agent**

Computershare Shareholder Services, Inc. 250 Royall Street
Canton, MA 02021
+1 877 456 7920 (U.S. Toll-Free)
+1 781 575 4337 (U.S. Toll/International)

#### **Cautionary Statement**

Certain disclosures in this annual report may be considered "forward-looking statements." These are made pursuant to "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. The "Cautionary Statement" on page 1 of LyondellBasell's Form 10-K for the fiscal year ended December 31, 2014 should be read in conjunction with such statements.



#### London

4th Floor, One Vine Street London W1J OAH United Kingdom

Tel: +44 207 220 2600

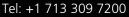
#### **Rotterdam**

Delftseplein 27E 3013 AA Rotterdam Netherlands

Tel: +31 10 275 5500

#### **Houston**

LyondellBasell Tower, Ste. 300 1221 McKinney Street Houston, TX 77010





































www.lyb.com

# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

	Form 10-K			
(Mark One)				
ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934				
For the fiscal year ended Decemb	er 31, 2014			
	OR			
☐ TRANSITION REPORT PURSU EXCHANGE ACT OF 1934	ANT TO SECTION 13 OR 1	15(d) OF THE SECURITIES		
For the transition period from	to			
	Commission file number: 001-347	726		
Lyonde	IIBasell Indust	tries N.V.		
The Netherlands	name of registrant as specified in r	98-0646235		
(State or other jurisdiction of		(I.R.S. Employer		
incorporation or organization)		Identification No.)		
1221 McKinney St., Suite 300 Houston, Texas	4 <sup>th</sup> Floor, One Vine Street London W1J0AH	Stationsplein 45 3013 AK Rotterdam The Netherlands		
USA 77010	The United Kingdom			
(Ad	ldress of principal executive offices) (Zi	p Code)		
(713) 309-7200	+44 (0) 207 220 2600	+31 (0)10 275 5500		
_	ant's telephone numbers, including			
	s registered pursuant to Section 12(			
Title of Each Class		me of Each Exchange On Which Registered		
Ordinary Shares, €0.04 Par Value  New York Stock Exchange				
Securine	s registered pursuant to Section 12( None	g) of the Act:		
Indicate by check mark if the registrant is a Act. ✓ Yes ☐ No	well-known seasoned issuer, as define	ed in Rule 405 of the Securities		
Indicate by check mark if the registrant is not Act. ☐ Yes ☑ No	ot required to file reports pursuant to S	Section 13 or Section 15(d) of the		
	onths (or for such shorter period that	be filed by Section 13 or 15(d) of the Securities the registrant was required to file such reports), and to		
Indicate by check mark whether the registrar Interactive Data File required to be submitted and such shorter period that the registrant was require	l posted pursuant to Rule 405 of Regu	ulation S-T during the preceding 12 months (or for		
	edge, in definitive proxy or informati	Regulation S-K is not contained herein, and will not ion statements incorporated by reference in Part III of		
		lerated filer, a non-accelerated filer, or a smaller and "smaller reporting company" in Rule 12b-2 of		
Large accelerated filer 🗸		Accelerated filer		
Non-accelerated filer		Smaller reporting company		
Indicate by check mark whether the registrat	* * '	· — —		
The aggregate market value of common stoo	k held by non-affiliates of the registr	ant on June 30, 2014, the last business day of the		

The registrant had 477,142,443 shares outstanding at February 13, 2015 (excluding 101,291,588 treasury shares).

registrant's most recently completed second fiscal quarter, based on the closing price on that date of \$97.65, was \$41.8 billion. For purposes of this disclosure, in addition to the registrant's executive officers and members of its Supervisory Board, the registrant has

**Documents incorporated by reference:** 

Portions of the Proxy Statement for the Annual Meeting of Shareholders to be held on May 6, 2015 (Part III)

included Access Industries, LLC and its affiliates as "affiliates."

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# CAUTIONARY STATEMENT FOR THE PURPOSES OF THE "SAFE HARBOR" PROVISIONS OF THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995

This report includes "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 (the "Exchange Act"). You can identify our forward-looking statements by the words "anticipate," "estimate," "believe," "continue," "could," "intend," "may," "plan," "potential," "predict," "should," "will," "expect," "objective," "projection," "forecast," "goal," "guidance," "outlook," "effort," "target" and similar expressions.

We based the forward-looking statements on our current expectations, estimates and projections about ourselves and the industries in which we operate in general. We caution you that these statements are not guarantees of future performance as they involve assumptions about future events that, while made in good faith, may prove to be incorrect, and involve risks and uncertainties we cannot predict. Accordingly, our actual outcomes and results may differ materially from what we have expressed or forecast in the forward-looking statements. Any differences could result from a variety of factors, including the following:

- the cost of raw materials represents a substantial portion of our operating expenses, and energy costs generally follow price trends of crude oil, natural gas liquids and/or natural gas; price volatility can significantly affect our results of operations and we may be unable to pass raw material and energy cost increases on to our customers due to the significant competition that we face, the commodity nature of our products and the time required to implement pricing changes;
- our U.S. operations have benefited from low-cost natural gas and natural gas liquids; decreased availability of these materials (for example, from their export or regulations impacting hydraulic fracturing in the U.S.) could reduce the current benefits we receive;
- if crude oil prices fell materially, or decrease relative to U.S. natural gas prices, we would see less
  benefit from low-cost natural gas and natural gas liquids and it could have a negative effect on our
  results of operations;
- industry production capacities and operating rates may lead to periods of oversupply and low profitability; for example, there has been substantial capacity expansions announced in the U.S. olefins industry;
- we may face operating interruptions (including leaks, explosions, fires, weather-related incidents, mechanical failures, unscheduled downtime, supplier disruptions, labor shortages, strikes, work stoppages or other labor difficulties, transportation interruptions, spills and releases and other environmental incidents) at any of our facilities, which would negatively impact our operating results; for example, because the Houston refinery is our only refining operation, we would not have the ability to increase production elsewhere to mitigate the impact of any outage at that facility;
- regulations may negatively impact our business by, among other things, restricting our operations, increasing costs of operations or requiring significant capital expenditures;
- we may not be able to protect our market position or otherwise pass on cost increases to our customers due to the significant competition we face as a result of the commodity nature of many of our products;
- changes in general economic, business, political and regulatory conditions in the countries or regions in which we operate could increase our costs, restrict our operations and reduce our operating results;
- our ability to implement business strategies and execute our organic growth plans may be negatively
  affected or restricted by, among other things, our ability to complete projects on time and on budget
  and other events that may affect our ability to execute projects and strategies;
- uncertainties associated with worldwide economies could create reductions in demand and pricing, as
  well as increased counterparty risks, which could reduce liquidity or cause financial losses resulting
  from counterparty default;

- the negative outcome of any legal, tax and environmental proceedings or changes in laws or regulations
  regarding legal, tax and environmental matters may increase our costs or otherwise limit our ability to
  achieve savings under current regulations;
- any loss or non-renewal of favorable tax treatment under agreements or treaties, or changes in laws, regulations or treaties, may substantially increase our tax liabilities;
- we may be required to reduce production or idle certain facilities because of the cyclical and volatile
  nature of the supply-demand balance in the chemical and refining industries, which would negatively
  affect our operating results;
- we rely on continuing technological innovation, and an inability to protect our technology, or others' technological developments could negatively impact our competitive position;
- we have substantial international operations, and continued economic uncertainties, fluctuations in
  exchange rates, valuations of currencies and our possible inability to access cash from operations in
  certain jurisdictions on a tax-efficient basis, if at all, could negatively affect our liquidity and our
  results of operations;
- we are subject to the risks of doing business at a global level, including wars, terrorist activities,
  political and economic instability and disruptions and changes in governmental policies, which could
  cause increased expenses, decreased demand or prices for our products and/or disruptions in
  operations, all of which could reduce our operating results;
- if we are unable to comply with the terms of our credit facilities, indebtedness and other financing arrangements, those obligations could be accelerated, which we may not be able to repay; and
- we may be unable to incur additional indebtedness or obtain financing on terms that we deem
  acceptable, including for refinancing of our current obligations; higher interest rates and costs of
  financing would increase our expenses.

Any of these factors, or a combination of these factors, could materially affect our future results of operations and the ultimate accuracy of the forward-looking statements. These forward-looking statements are not guarantees of future performance, and our actual results and future developments may differ materially from those projected in the forward-looking statements. Our management cautions against putting undue reliance on forward-looking statements or projecting any future results based on such statements or present or prior earnings levels.

All subsequent written and oral forward-looking statements attributable to us or any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section and any other cautionary statements that may accompany such forward-looking statements. Except as otherwise required by applicable law, we disclaim any duty to update any forward-looking statements. 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 this report on page 22.

#### **PART I**

#### Items 1 and 2. Business and Properties

#### **OVERVIEW**

LyondellBasell Industries N.V. is a global, independent chemical company and was incorporated under Dutch law on October 15, 2009. Unless otherwise indicated, the "Company," "we," "our," "us" and "LyondellBasell" are used in this report to refer to the businesses of LyondellBasell Industries N.V. and its consolidated subsidiaries. We are one of the world's top five independent chemical companies based on revenues.

We participate globally across the petrochemical value chain and are an industry leader in many of our product lines. Our chemicals businesses consist primarily of large processing plants that convert large volumes of liquid and gaseous hydrocarbon feedstocks into plastic resins and other chemicals. Our chemical products tend to be basic building blocks for other chemicals and plastics, while our plastic products are typically used in large volume applications. Our customers use our plastics and chemicals to manufacture a wide range of products that people use in their everyday lives including food packaging, home furnishings, automotive components, paints and coatings. Our refining business consists of our Houston refinery, which processes crude oil into products such as gasoline, diesel and jet fuel.

Our financial performance is influenced in general by the supply and demand for the products that we produce, the cost and availability of feedstocks, global and regional competitor capacity, our operational efficiency and our ability to control costs. We have a strong operational focus and, as a producer of large volume commodities, continuously strive to differentiate ourselves through safe, reliable and low-cost operations in all our businesses. During recent years the cost of natural gas-derived raw materials in the U.S. versus the global cost of crude oil-derived raw materials has had a significant positive influence on the profitability of our North American operations. To a lesser extent, our differentiated assets and technology also positively influence our performance as compared to our peers and competitors. These include our propylene oxide and polypropylene technologies; flexible feedstock olefins plants in the U.S.; joint venture olefins and polyolefins plants with access to low-cost feedstock, particularly in Saudi Arabia; and our Houston refinery, which is capable of processing heavy, high-sulfur crude.

#### **SEGMENTS**

We manage our operations through five operating segments. Our reportable segments are:

- Olefins and Polyolefins—Americas ("O&P—Americas"). Our O&P—Americas segment produces and markets olefins, including ethylene and ethylene co-products, and polyolefins.
- Olefins and Polyolefins—Europe, Asia, International ("O&P—EAI"). Our O&P—EAI segment produces and markets olefins, including ethylene and ethylene co-products, polyolefins and specialty products, including polybutene-1 and polypropylene compounds.
- Intermediates and Derivatives ("I&D"). Our I&D segment produces and markets propylene oxide and its co-products and derivatives, acetyls including methanol, ethylene oxide and its derivatives, ethanol and oxygenated fuels, or oxyfuels.
- Refining. Our Refining segment refines heavy, high-sulfur crude oil and other crude oils of varied types and sources available on the U.S. Gulf Coast.
- *Technology*. Our Technology segment develops and licenses chemical and polyolefin process technologies and manufactures and sells polyolefin catalysts.

We regularly review our segments and the approach used by management to evaluate performance and resource allocation. At the beginning of 2014, management began using EBITDA (earnings before interest, taxes and depreciation and amortization) as the primary measure for reviewing our segments' profitability. Our comparisons to the prior periods presented were revised to reflect this change.

Financial information about our business segments and geographical areas can be found in Note 22, *Segment and Related Information*, to the Consolidated Financial Statements. Information about the locations where we produce our primary products can be found under "Description of Properties."

In 2014, 2013 and 2012, no single customer accounted for 10% or more of our total revenues.

#### Olefins and Polyolefins Segments Generally

We are one of the leading worldwide producers of olefins, including ethylene and propylene, and polyethylene ("PE"). We are the world's largest producer of polypropylene ("PP") and PP compounds. We manage our olefin and polyolefin business in two reportable segments, O&P—Americas and O&P—EAI.

Olefins—Ethylene is the most significant petrochemical in terms of worldwide production volume and is the key building block for PE and a large number of other chemicals, plastics and synthetics. The production of ethylene results in co-products such as aromatics and other olefins, including propylene and butadiene. Ethylene and its co-products are fundamental to many parts of the economy, including the production of consumer products, packaging, housing and automotive components and other durable and nondurable goods.

Polyolefins—Polyolefins are thermoplastics and comprise approximately two-thirds of worldwide thermoplastics demand. Since their industrial commercialization, thermoplastics have been used in wide-ranging applications and products that improve safety and comfort and enhance the everyday quality of life. Our products are used in consumer, automotive and industrial applications ranging from food and beverage packaging to housewares and construction materials. We produce high density polyethylene ("HDPE"), low density polyethylene ("LDPE") and linear low density polyethylene ("LLDPE"). We also produce PP homopolymers, PP impact copolymers and PP random copolymers. We produce and market several specialty product lines, including PP compounds, Catalloy process resins and polybutene-1 ("PB-1"), focusing on unique polyolefins and compounds that offer a wide range of performance characteristics. Typical properties of such specialty polyolefins and compounds include impact-stiffness balance, scratch resistance, soft touch and heat sealability. End uses include automotive and industrial products and materials. PP compounds are produced from blends of polyolefins and additives and are sold mainly to the automotive and home appliances industries. The Catalloy process is proprietary technology that is not licensed to third parties. As a result, we are the only manufacturer of Catalloy process resins, which are used primarily in roofing, packaging and automotive applications. PB-1 is a family of butane-based polymers and is mainly used in pipe applications and under-floor heating and thermosanitary systems.

PE sales, including HDPE, LDPE and LLDPE, accounted for approximately 18%, 17% and 15% of our total revenues in 2014, 2013 and 2012, respectively. In 2014, we completed an expansion project at our Matagorda plant in Texas, which added 220 million pounds of HDPE production. PP sales, including *Catalloy*, accounted for approximately 16%, 16% and 15% of our total revenues in 2014, 2013 and 2012, respectively.

The following table outlines the primary products of our O&P segments, annual processing capacity as of December 31, 2014, and the primary uses for those products. Capacities, which are presented in pounds unless otherwise indicated, include 100% of the capacity of our joint venture facilities. The joint ventures' proportional share of capacity is shown in the footnote to the table, below.

Product	Ar	nual Capacity(1)		Primary Uses
	Americas	EAI	Total	
Olefins:				
Ethylene	10.7 billion	6.5 billion	17.2 billion	Ethylene is used as a raw material to manufacture polyethylene, ethylene oxide, ethanol, ethylene dichloride, styrene, vinyl acetate monomer ("VAM") and other products.
Propylene	5.5 billion	6.0 billion	11.5 billion	Propylene is used to produce PP, acrylonitrile, propylene oxide ("PO") and other products.
Butadiene	1.1 billion	700 million	1.8 billion	Butadiene is used to manufacture styrene-butadiene rubber and polybutadiene rubber, which are used in the manufacture of tires, hoses, gaskets and other rubber products. Butadiene is also used in the production of paints, adhesives, nylon clothing, carpets, paper coatings and engineered plastics.
<b>Polyolefins:</b>				
HDPE	3.6 billion	4.2 billion	7.8 billion	HDPE is used to manufacture grocery, merchandise and trash bags; food containers for items from frozen desserts to margarine; plastic caps and closures; liners for boxes of cereal and crackers; plastic drink cups and toys; dairy crates; bread trays; pails for items from paint to fresh fruits and vegetables; safety equipment, such as hard hats; house wrap for insulation; bottles for household and industrial chemicals and motor oil; milk, water, and juice bottles; large tanks for storing liquids such as agricultural and lawn care chemicals; and pipe.
LDPE	1.3 billion	2.8 billion	4.1 billion	LDPE is used to manufacture food packaging films; plastic bottles for packaging food and personal care items; dry cleaning bags; ice bags; pallet shrink wrap; heavy-duty bags for mulch and potting soil; boil-in-bags; coatings on flexible packaging products; and coatings on paper board such as milk cartons.

Product	duct Annual Capacity(1)		)	Primary Uses	
<del></del>	Americas	EAI	Total		
LLDPE	1.3 billion		1.3 billion	LLDPE is used to manufacture garbage and lawn-leaf bags; industrial can liners; housewares; lids for coffee cans and margarine tubs; dishpans, home plastic storage containers, and kitchen trash containers; large toys like outdoor gym sets; drip irrigation tubing; insulating resins and compounds used to insulate copper and fiber optic wiring; shrink wrap for multi-packaging canned food, bag-in-box bags, produce bags, and pallet stretch wrap.	
PP	4.4 billion	12.6 billion	17.0 billion	PP is primarily used to manufacture fibers for carpets, rugs and upholstery; housewares; medical products; automotive interior trim, fascia, running boards, battery cases, and bumpers; toys and sporting goods; fishing tackle boxes; and bottle caps and closures.	
<b>Specialty Polyolefins:</b>					
PP compounds	_	2.6 billion	2.6 billion	PP compounds are used to manufacture automotive interior and exterior trims, dashboards, bumpers and under-hood applications; base material for products and parts used in appliances; anti-corrosion coatings for steel piping, wire and cable.	
Catalloy process resins	600 million	600 million	1.2 billion	Catalloy process resins are used primarily in modifying polymer properties in film applications and molded products; for specialty films, geomembrane liners, and roofing materials; in bitumen modification for roofing and asphalt applications; and for automotive bumpers.	
PB-1 resins	_	110 million	110 million	PB-1 resins are used in flexible pipes, resins for seal-peel film, film modification, hot melt applications, consumer packaging and adhesives.	
<b>Aromatics:</b>					
Benzene (in gallons)	195 million	_	195 million	Benzene is used to produce styrene, phenol and cyclohexane. These products are used in the production of nylon, plastics, synthetic rubber and polystyrene. Polystyrene is used in insulation, packaging and drink cups.	

(1) Represents total annual nameplate capacity, which includes approximately 1,650 million pounds of ethylene; approximately 2,500 million pounds of propylene; approximately 1,010 million pounds of HDPE; approximately 780 million pounds of LDPE; approximately 670 million pounds (Americas) and 4,960 million pounds (EAI) of PP; and approximately 200 million pounds of PP compounds of nameplate capacity owned by third parties either through joint venture arrangements or other contractual relationships. In some situations, the Company and the third parties may have access to the other's capacity through certain arrangements.

#### Olefins and Polyolefins—Americas Segment

Overview

Our O&P—Americas segment produces and markets olefins, polyolefins, aromatics, specialty products and ethylene co-products. In addition, we produce specialty products including *Catalloy* and *Plexar* resins.

#### Sales & Marketing / Customers

Our ethylene production is consumed internally as a raw material in the production of polymers and other derivatives, with the balance sold to third party customers under multi-year contracts or on a spot basis. In 2014, we completed an 800 million pound per year ethylene expansion project at our La Porte, Texas facility. We have also announced two ethylene expansion projects for our Channelview, Texas facility and one for our Corpus Christi, Texas facility which are projected for completion in 2015 (Channelview), 2016 (Corpus Christi) and 2017 (Channelview). In total, we expect that these three projects will add additional ethylene capacity of approximately 1.6 billion pounds per year.

We are a net purchaser of propylene, a raw material used in the production of PO, PP and other derivatives. Our butadiene production is sold to the external market under multi-year contracts. All of our benzene production is used as a raw material in the production of styrene by our I&D segment.

In addition to purchases of propylene, at times we purchase ethylene and butadiene for resale, when necessary, to satisfy customer demand above our own production levels. Volumes of any of these products purchased for resale can vary significantly from period to period. However, purchased volumes have not historically had a significant impact on profits.

In the U.S., most of the ethylene and propylene production of our Channelview, Corpus Christi and La Porte, Texas facilities is shipped via a pipeline system, which has connections to numerous U.S. Gulf Coast consumers. This pipeline system, some of which is owned and some of which is leased, extends from Corpus Christi to Mont Belvieu to Port Arthur, Texas, as well as into the Lake Charles, Louisiana area. In addition, exchange agreements with other ethylene and co-products producers allow access to customers who are not directly connected to this pipeline system. Some ethylene is shipped by rail car from Clinton, Iowa to Morris, Illinois and some is shipped directly to customers. A pipeline owned and operated by an unrelated party is used to transport ethylene from Morris, Illinois to Tuscola, Illinois and is used as a raw material in the production of ethanol. Some propylene is shipped by ocean going vessel. Butadiene, benzene, toluene and other products are distributed by pipeline, rail car, truck, barge or ocean going vessel.

Our PP and PE production is typically sold through our sales organization to an extensive base of established customers and distributors servicing both the domestic and export markets either under annual contracts or on a spot basis. We have regional sales offices in various locations in North America and our polyolefins primarily are transported in North America by railcar or truck. Export sales are generally to customers in Central and South America. We also sell PP to our PP compounds business, which is managed worldwide by our O&P—EAI segment.

#### Joint Venture Relationships

We participate in a joint venture arrangement in Mexico, which provides us with capacity for approximately 640 million pounds of PP production. The capacity is based on our percentage ownership of the joint ventures' total capacity. We do not hold a majority interest in or have operational control of this joint venture.

#### Raw Materials

Raw material cost is the largest component of the total cost for the production of ethylene and its coproducts. The primary raw materials that can be used in our Americas olefin facilities are heavy liquids and natural gas liquids ("NGLs"). Heavy liquids include crude oil-based naphtha and gas oil, as well as domestically sourced condensate, a very light crude oil resulting from natural gas production (collectively referred to as "heavy liquids"). NGLs include ethane, propane and butane. The use of heavy liquid raw materials results in the production of a significant amount of co-products such as propylene, butadiene and benzene, as well as gasoline blending components, while the use of NGLs results in the production of a smaller amount of co-products.

Our ability to pass through raw material price increases to our customers is dependent upon market-driven demand for olefins and polyolefins. Sales prices for products sold in the spot market are determined by market forces. Our contract prices are influenced by spot prices, indices published in industry publications and cost recovery formulas in the contracts.

Historically, facilities using heavy liquids as feedstock generated higher margins than those using NGLs. However, in recent years NGLs have had a significant cost advantage over heavy liquids due to technological advances for extracting shale gas which have led to an increased supply of NGLs. A plant's flexibility to consume a wide range of raw materials generally will provide an advantage over plants that are restricted in their processing capabilities. Our Americas facilities can process significant quantities of either heavy liquids or NGLs. We estimate that in the U.S. we can produce up to approximately 90% of our total ethylene output using NGLs. Changes in the raw material feedstock utilized in the production process will result in variances in production capacities among products. We believe our raw material flexibility in the U.S. is a key advantage in our production of ethylene and its co-products.

In North America, we also purchase large amounts of natural gas to be used primarily as an energy source in our business and as the primary feedstock for methanol production by our I&D segment via market-based contractual arrangements from multiple suppliers.

#### Industry Dynamics / Competition

With respect to olefins and polyolefins, competition is based on price, product quality, product delivery, reliability of supply, product performance and customer service. Industry consolidation in North America has led to fewer, although larger, competitors. Profitability is affected not only by supply and demand for olefins and polyolefins, but also by raw material costs and price competition among producers, which may intensify due to, among other things, the addition of new capacity. In general, demand is a function of worldwide economic growth, which fluctuates.

We compete in North America with other large marketers and producers, including global chemical companies, chemical divisions of large oil companies and regional marketers and producers.

Based on published data, we believe we were, as of December 31, 2014:

- the second largest producer of ethylene in North America, with ethylene rated capacity of 10.7 billion pounds per year, or approximately 14% of total North American ethylene production capacity;
- the third largest producer of PE in North America with 6.2 billion pounds per year of capacity, or approximately 14% of North American capacity; and

• the largest producer of PP in North America, including our share of our Indelpro joint venture capacity, with 3.3 billion pounds, or approximately 18% of the North American capacity.

#### Olefins and Polyolefins—Europe, Asia, International Segment

#### Overview

Our O&P—EAI segment produces and markets olefins, including ethylene and ethylene co-products, and polyolefins. In addition, we produce significant quantities of specialty products such as *Catalloy* process resins and PB-1. Our O&P—EAI segment manages our worldwide PP compound business (including our PP compounds facilities in North and South America), our worldwide PB-1 business, and our *Catalloy* process resins produced in Europe.

#### Sales & Marketing / Customers

Our ethylene production is primarily consumed internally as a raw material in the production of polymers and we purchase additional ethylene to meet our production needs. Our propylene production is used as a raw material in the production of PO and PP, and we purchase propylene when our internal needs exceed our internal production. European ethylene production is generally fully integrated with our downstream facilities in Europe.

We produce and sell butadiene to external customers under multi-year contracts and on a spot basis.

With respect to PP and PE, our production is typically sold through our sales organization to an extensive base of established customers under annual contracts or on a spot basis and is also sold through distributors. Our polyolefins are transported in Europe primarily by railcar or truck. We believe that, over a business cycle, average sales prices and profit margins for specialty polymers tend to be higher than average sales prices and profit margins for higher-volume commodity polyolefins or polymers.

Our regional sales offices are in various locations, including The Netherlands, Hong Kong, China, India, Australia and the United Arab Emirates. We also operate through a worldwide network of local sales and representative offices in Europe, Asia and Africa. Our joint ventures typically manage their domestic sales and marketing efforts independently, and we typically operate as their agent/distributor for all or a portion of their exports.

#### Joint Venture Relationships

We participate in several manufacturing joint ventures in Saudi Arabia, Thailand, Poland, Australia, Japan and South Korea. We do not hold majority interests in any of these joint ventures, nor do we have operational control. These ventures provide us with additional production capacity of approximately 2,630 million pounds of PP, approximately 810 million pounds of propylene, approximately 550 million pounds of ethylene, approximately 570 million pounds of HDPE, approximately 340 million pounds of LDPE and approximately 160 million pounds of PP compounds. These capacities are based on our percentage ownership interest in the joint ventures' total capacities. We realize profits or losses from these ventures as income from equity investments.

We generally license our polyolefin process technologies and supply catalysts to our joint ventures through our Technology segment. Some of our joint ventures source cost advantaged raw materials from their local shareholders.

#### Raw Materials

Raw material cost is the largest component of the total cost for the production of ethylene and its coproducts. The primary raw materials used in our European olefin facilities are heavy liquids; however, in recent years we have sourced increased amounts of advantaged NGLs when the opportunity arises. For our Saudi joint venture facilities, locally sourced and cost advantaged NGLs, including ethane, propane and butane are used. The principal raw materials used by our polyolefin and *Catalloy* process resin businesses are propylene and ethylene. In Europe, we have the capacity to produce approximately 50% of the propylene requirements of our European PP business and all of the ethylene requirements of our European PE business. Propylene and ethylene requirements that are not produced internally are generally acquired via spot purchases or pursuant to long-term contracts with third party suppliers.

Our PP compounds facilities generally receive their PP and other polymer raw materials from one of our wholly owned or joint venture facilities. PB-1 raw materials are sourced solely from external supply. Some of our joint ventures receive propylene and ethylene from their local shareholders under long-term contracts.

Our ability to pass through the increased cost of raw materials to customers is dependent on market demand for olefins and polyolefins. In general, the pricing for purchases and sales of most products is determined by market forces, including the impacts of foreign exchange on the pricing of the underlying heavy liquid raw materials, most of which are priced in U.S. dollars. There can be a lag between observed naphtha raw material price changes in a given month and contract product price changes that were settled prior to the beginning of that month. In such cases, volatility in our product margins may occur.

#### Industry Dynamics / Competition

With respect to olefins and polyolefins, competition is based on price, product quality, product delivery, reliability of supply, product performance and customer service. We compete with regional and multinational chemical companies and divisions of large oil companies. The petrochemical market in the European Union ("EU") has been affected by the price volatility of naphtha, the primary feedstock for olefins in the region, as well as fluctuating demand as a result of uncertain economic conditions.

Based on published data and including our proportionate share of our joint ventures, we believe we were, as of December 31, 2014:

- the fifth largest producer of ethylene in Europe with an ethylene rated capacity in Europe of 4.3 billion pounds per year, or approximately 8% of total European ethylene capacity;
- the largest producer of PP in Europe with 5.2 billion pounds per year of capacity, or approximately 22% of European PP capacity;
- the largest producer of PE in Europe with 4.8 billion pounds per year of capacity, or approximately 21% of HDPE and 13% of LDPE European capacity; and
- the largest PP compounds producer in the world with 2.4 billion pounds per year of capacity, with approximately 54% of that capacity in Europe, 20% in North America, and 26% in the rest of the world.

#### Intermediates and Derivatives Segment

#### Overview

Our I&D segment produces and markets PO and its co-products and derivatives, acetyls including methanol, ethylene oxide ("EO") and its derivatives, ethanol, and oxyfuels (methyl tertiary butyl ether ("MTBE") and ethyl tertiary butyl ether ("ETBE")). PO co-products include styrene monomer ("SM") and C4 chemicals (tertiary butyl alcohol ("TBA"), most of which is used to make oxyfuels, isobutylene and tertiary butyl hydro peroxide ("TBHP")). PO derivatives include propylene glycol ("PG"), propylene glycol ethers ("PGE") and butanediol ("BDO"). We believe that our proprietary PO and acetyls production process technologies provide us with a cost advantaged position for these products and their derivatives.

We produce PO through two distinct technologies, one of which yields TBA as the co-product and the other of which yields SM as the co-product. The two technologies are mutually exclusive, meaning that a manufacturing facility must be dedicated to either PO/TBA or to PO/SM.

The following table outlines the primary products, annual capacities, and primary uses for the I&D segment's products. Capacities, which are presented in pounds unless otherwise indicated, include 100% of the capacity of joint venture facilities. The joint ventures' proportional share of capacity is shown in the footnote to the table, below.

Product	Annual Capacity(1)	Primary Uses
Propylene Oxide	5.1 billion	PO is a key component of polyols, PG, PGE and BDO.
PO Co-Products:		
Styrene Monomer	5.9 billion	SM is used to produce plastics, such as expandable polystyrene for packaging, foam cups and containers, insulation products and durables and engineering resins.
Tertiary Butyl Alcohol	5.8 billion	TBA is a precursor to isobutylene, MTBE and ETBE. Isobutylene is used in the manufacture of synthetic rubber and lubricant additives as well as a gasoline blending component. MTBE is a high octane gasoline blending component; ETBE is an alternative gasoline blending component based on agriculturally produced ethanol.
PO Derivatives:		
Propylene Glycol	1.0 billion	PG is used to produce unsaturated polyester resins for bathroom fixtures and boat hulls; antifreeze, coolants and aircraft deicers; and cosmetics and cleaners.
Propylene Glycol Ethers	540 million	PGE are used as solvents for paints, coatings, cleaners and a variety of electronics applications.
Butanediol	465 million	BDO is used in the manufacture of engineering resins, films, personal care products, pharmaceuticals, coatings, solvents and adhesives.
Acetyls:		
Methanol (in gallons)	440 million	Methanol is a raw material used to produce acetic acid, MTBE, formaldehyde and several other products, including adhesives, foams, plywood subfloors, solvents and windshield washer fluid.
Acetic Acid	1.2 billion	Acetic acid is a raw material used to produce VAM, terephthalic acid (used to produce polyester for textiles and plastic bottles), industrial solvents and a variety of other chemicals.
Vinyl Acetate Monomer	700 million	VAM is used to produce a variety of polymers, products used in adhesives, water-based paint, textile coatings and paper coatings.

Product	Annual Capacity(1)	Primary Uses
<b>Ethylene Derivatives:</b>		
Ethylene Oxide	850 million EO equivalents; 400 million as pure EO	EO is used to produce surfactants, industrial cleaners, cosmetics, emulsifiers, paint, heat transfer fluids and ethylene glycol.
Ethylene Glycol ("EG")	650 million	EG is used to produce polyester fibers and film, polyethylene terephthalate resin, heat transfer fluids and automobile antifreeze.
Ethylene Glycol Ethers	220 million	Ethylene glycol ethers are used to produce paint and coatings, polishes, solvents and chemical intermediates.
Ethanol (in gallons)	50 million	Ethanol is used as a fuel and a fuel additive and in the production of solvents as well as household, medicinal and personal care products.

<sup>(1)</sup> The annual capacities include approximately 2,300 million pounds of PO; approximately 2,750 million pounds of SM; approximately 110 million pounds of PGE; and approximately 30 million gallons of methanol production owned by third parties through joint venture or other contractual relationships.

#### Sales & Marketing / Customers

We sell our PO and its co-products and derivatives through multi-year sales agreements and spot sales and have a number of multi-year processing agreements. Some of our contract sales agreements have cost plus pricing terms. We sell most of our SM production into the North American and European merchant markets and to Asian and South American export markets through long-term sales contracts and processing agreements. We purchase SM for resale when necessary to satisfy customer demand that exceeds our production levels. Volumes of SM purchases made for resale can vary significantly from period to period. However, purchased volumes have not historically had a significant impact on profits. PO and SM are transported by barge, ocean going vessel, pipeline, railcar and tank truck.

Our I&D segment converts most of its TBA, which is produced as a co-product of the PO process, to isobutylene. Over half of the isobutylene is reacted with methanol or ethanol to produce either MTBE or ETBE. The remaining isobutylene is sold into the external market as high-purity grade isobutylene.

In August of 2014, we announced our intention to build a world scale PO/TBA plant on the U.S. Gulf Coast with an annual capacity of 1 billion pounds of PO and 2 billion pounds of TBA and its derivatives. The preliminary timetable is to have the plant operational in 2019.

We sell our MTBE and ETBE production under market and cost-based sales agreements and in the spot market. MTBE and ETBE are transported by barge, ocean going vessel and tank truck. Substantially all refiners and blenders have discontinued the use of MTBE in the U.S., partly as a result of governmental initiatives to increase use of bio-ethanol in gasoline and to reduce or effectively ban the use of MTBE. However, MTBE/ ETBE demand for gasoline blending remains strong in most of the remaining worldwide market. Accordingly, we market MTBE and ETBE produced in the U.S. for use outside of the U.S. Japan has opted to use ETBE as a means of meeting its carbon dioxide reduction commitments under the Kyoto Protocol, and we source a significant portion of Japan's bio-fuels needs. Some of our plants have the flexibility to produce either MTBE or ETBE to accommodate market needs.

Sales of MTBE, ETBE, acetyls, PO and PO co-products and derivatives are made by our marketing and sales personnel, and also through distributors and independent agents in the Americas, Europe, the Middle East, Africa and the Asia Pacific region.

Acetyls, including acetic acid and VAM, are consumed internally and sold worldwide under multi-year contracts and on a spot basis. Acetic acid and VAM are shipped by barge, ocean going vessel, pipeline, railcar and tank truck. Sales are made through a direct sales force, agents and distributors. Our acetyls business uses methanol, which we produce internally, as a raw material for our production of acetic acid, solvents and MTBE, and we also sell methanol under annual contracts and on a spot basis to large U.S. customers. Methanol is shipped by barge, railcar and pipeline.

EO and EG typically are sold under multi-year contracts and on a spot basis, with market and cost-based pricing. Glycol ethers are sold primarily into the solvent and distributor markets at market prices. The vast majority of the ethylene derivative products are sold in North America, Europe and Asia, primarily through our sales organizations. EO is shipped by railcar and its derivatives are shipped by railcar, truck, isotank and ocean going vessel.

#### Joint Venture Relationships

We have two PO joint ventures with Bayer Corporation, one in the U.S. and one in Europe. We operate four of our U.S. operating units for the U.S. PO joint venture. Bayer's interest represents ownership of an in-kind portion of the PO production of 1.5 billion pounds per year. We take, in-kind, the remaining PO production and all co-product (SM and TBA) production. We do not share marketing or product sales with Bayer under the U.S. PO joint venture. The parties' rights in the joint venture are based on off take volumes as opposed to ownership percentages. Bayer also has the right to 50% of the PO and SM production of our European PO joint venture. Our proportional additional production capacity provided through this venture is approximately 340 million pounds of PO and approximately 750 million pounds of SM.

We also have joint venture manufacturing relationships in China. These ventures provide us with additional production capacity of approximately 115 million pounds of PO. This capacity is based on our operational share of the joint ventures' total capacities.

In December 2013, we sold our 40% ownership interest in Nihon Oxirane Company, a joint venture in Japan that produces PO, PG and SM. For more information, see Note 9 to the Consolidated Financial Statements.

#### Raw Materials

The cost of raw materials generally is the largest component of total production cost for PO and its co-products and derivatives. Propylene, isobutane, mixed butane, ethylene and benzene are the primary raw materials used in the production of PO and its co-products and derivatives. The market prices of these raw materials historically have been related to the price of crude oil, NGLs and natural gas, as well as supply and demand for the raw materials.

In the U.S. we obtain a large portion of our propylene, benzene and ethylene raw materials needed for the production of PO and its co-products and derivatives from our O&P—Americas segment. Raw materials for the non-U.S. production of PO and its co-products and derivatives are obtained from our O&P—EAI segment and from third parties. We consume a significant portion of our internally-produced PO in the production of PO derivatives.

The raw material requirements not sourced internally are purchased at market-based prices from numerous suppliers in the U.S. and Europe with which we have established contractual relationships, as well as in the spot market.

We purchase our ethanol requirements for the production of ETBE from third parties; the methanol for our MTBE production comes from internal production and third parties. Carbon monoxide and methanol are the primary raw materials required for the production of acetic acid. We purchase carbon monoxide pursuant to a long-term contract with pricing primarily based on the cost of production. All methanol required for our production of acetyls is internally sourced. Natural gas is the primary raw material required for the production of methanol.

In addition to ethylene, acetic acid is a primary raw material for the production of VAM. For the production of VAM, we obtain our entire requirements for acetic acid and ethylene from our internal production. Historically we have used a large percentage of our acetic acid production to produce VAM.

#### Industry Dynamics / Competition

With respect to PO, its co-products and derivatives, competition is based on a variety of factors, including product quality and price, reliability of supply, technical support, customer service and potential substitute materials. Profitability is affected by the worldwide level of demand along with price competition, which may intensify due to, among other things, new industry capacity. PO demand growth could be impacted by further development of alternative bio-based PO derivatives. It is not possible to predict accurately the changes in raw material costs, market conditions and other factors that will affect industry profitability in the future. Our major worldwide competitors for sales of PO, its co-products and derivatives include other multinational chemical companies as well as some regional marketers and producers.

Based on published data, excluding our partners' shares of joint venture capacity, we believe as of December 31, 2014 we were:

- the second largest producer of PO worldwide, with approximately 14% of total worldwide capacity;
- the largest producer of MTBE/ETBE worldwide, with approximately 10% of total worldwide production capacity for these combined oxyfuels;
- the fifth largest producer of SM worldwide, with approximately 4% of total worldwide capacity;
   and
- the ninth and eighth largest producer of acetic acid and VAM, respectively, each with approximately 3% and 4% of total worldwide capacity.

#### Refining Segment

#### Overview

Our Houston refinery, which is located on the Houston Ship Channel in Houston, Texas, has a heavy, high-sulfur crude oil processing capacity of approximately 268,000 barrels per day on a calendar day basis (normal operating basis), or approximately 292,000 barrels per day on a stream day basis (maximum achievable over a 24 hour period). The Houston refinery has a Nelson Complexity Index of 12.5. The Houston refinery is a full conversion refinery designed to refine heavy, high-sulfur crude oil. This crude oil is more viscous and dense than traditional crude oil and contains higher concentrations of sulfur and heavy metals, making it more difficult to refine into gasoline and other high-value fuel products. However, this crude oil has historically been less costly to purchase than light, low-sulfur crude oil such as Brent. In the recent past, certain crudes such as West Texas Intermediate (WTI) and West Texas Sour (WTS) have been priced lower than normal trends due to transportation constraints; however, in 2014 these price differentials have narrowed.

On January 4, 2012, we ceased refinery operations at our Berre refinery in France. The cessation of operations was in accordance with an agreement executed in the fourth quarter of 2011 by certain of our French subsidiaries and union representatives. Additional information about the cessation of operations can be found in "Management's Discussion and Analysis of Financial Condition and Results of Operations" and Note 3, *Discontinued Operations*, to the Consolidated Financial Statements.

The following table outlines the primary products of our Refining segment, annual processing capacities as of as of December 31, 2014, and the primary uses for those products. Capacities are presented in barrels per day.

Product	Capacity(1)	Primary Uses
Gasoline and components	120,000	Automotive fuel
Ultra Low Sulfur Diesel	95,000	Diesel fuel for cars and trucks
Jet Fuel	25,000	Aviation fuel
Lube Oils	4,000	Industrial lube oils, railroad engine additives and white oils for food-grade applications
Aromatics	7,000	Intermediate chemicals

<sup>(1)</sup> Only key products for the Houston refinery are identified and, therefore, the sum of capacities shown does not equal the facility's total capacity.

#### Sales & Marketing / Customers

Gasoline sales accounted for 9% of our total revenues in each of the years 2014 and 2013 and 10% in 2012. The Houston refinery's products primarily are sold in bulk to other refiners, marketers, distributors and wholesalers at market-related prices. Most of the Houston refinery's products are sold under contracts with a term of one year or less or are sold in the spot market. The Houston refinery's products generally are transported to customers via pipelines and terminals owned and operated by other parties.

#### Raw Materials

We purchase the crude oil used as a raw material for the Houston refinery on the open market on a spot basis and under a number of supply agreements with regional producers, generally with terms varying from one to three years.

#### Industry Dynamics / Competition

Our refining competitors are major integrated oil companies, refineries owned or controlled by foreign governments and independent domestic refiners. Based on published data, as of January 2014, there were 142 operable crude oil refineries in the U.S., and total U.S. refinery capacity was approximately 17.9 million barrels per day. During 2014, the Houston refinery processed an average of approximately 259,000 barrels per day of crude oil, representing approximately 1.4% of all U.S. crude processing capacity.

Our refining operations compete for the purchases of crude oil based on price and quality. Supply disruptions could impact the availability and pricing. We compete in gasoline and distillate markets as a bulk supplier of fungible products satisfying industry and government specifications. Competition is based on price and location.

The markets for fuel products tend to be volatile as well as cyclical as a result of the changing global economy and changing crude oil and refined product prices. Crude oil prices are impacted by worldwide political events, the economics of exploration and production and refined products demand. Prices and demand for fuel products are influenced by seasonal and short-term factors such as weather and driving patterns, as well as by longer term issues such as the economy, energy conservation and alternative fuels. Industry fuel products supply is dependent on short-term industry operating capabilities and on long-term refining capacity.

A crack spread is a benchmark indication of refining margins based on the processing of a specific type of crude oil into an assumed selection of refined products. The Houston refinery generally tracks the Maya 2-1-1 crack spread, which represents the difference between the first month futures price of two barrels of Maya crude oil as set by Pemex and one barrel each of U.S. Gulf Coast 87 Octane Conventional Gasoline and of U.S. Gulf

Coast Ultralow-sulfur Diesel ("ULSD"). While these benchmark refining spreads are generally indicative of the level of profitability at the Houston refinery and similarly configured refineries, there are many other factors specific to each refinery and the industry in general, such as the cost of Renewable Identification Numbers ("RINs") and the value of by-products, which influence operating results.

#### **Technology Segment**

Overview

Our Technology segment develops and licenses chemical, polyolefin and other process technologies and provides associated engineering and other services. Our Technology segment also develops, manufactures and sells polyolefin catalysts. We market our process technologies and our polyolefin catalysts to external customers and also use them in our own manufacturing operations.

Our polyolefin process licenses are structured to provide a standard core technology, with individual customer needs met by adding customized modules that provide the required capabilities to produce the defined production grade slate and plant capacity. In addition to the basic license agreement, a range of services can also be provided, including project assistance; training; assistance in starting up the plant; and ongoing technical support after start-up. We may also offer marketing and sales services. In addition, licensees may continue to purchase polyolefin catalysts that are consumed in the production process, generally under long-term catalyst supply agreements with us.

#### Process Technology Licensing

We are a leading licensor of polyolefin process technologies. We also license a selective portfolio of chemical process technologies in the fields of olefin recovery, olefin conversion, aromatics extraction and acetyls.

#### Polyolefin Catalysts

We are a leading manufacturer and supplier of polyolefin catalysts. Approximately 25% of our catalyst sales are intercompany as we are a large polyolefin producer.

#### Research and Development

Our research and development ("R&D") activities are designed to improve our existing products and processes, and discover and commercialize new materials, catalysts and processes. These activities focus on product and application development, process development, catalyst development and fundamental polyolefin focused research.

In 2014, 2013 and 2012, our research and development expenditures were \$127 million, \$150 million and \$172 million, respectively. A portion of these expenses are related to technical support and customer service and are allocated to the other business segments. In 2014, approximately 35% of all R&D costs were allocated to other business segments while in each of 2013 and 2012, the allocations approximated 30%.

#### **GENERAL**

#### Intellectual Property

We maintain an extensive patent portfolio and continue to file new patent applications in the U.S. and other countries. As of December 31, 2014, we owned approximately 5,000 patents and patent applications worldwide. Our patents and trade secrets cover our processes, products and catalysts and are significant to our competitive position, particularly with regard to PO, intermediate chemicals, petrochemicals, polymers and our process

technologies. We own globally registered and unregistered trademarks including the "LyondellBasell," "Lyondell" and "Equistar" trade names. While we believe that our intellectual property provides competitive advantages, we do not regard our businesses as being materially dependent upon any single patent, trade secret or trademark. Some of our heritage production capacity operates under licenses from third parties.

#### **Environmental**

Most of our operations are affected by national, state, regional and local environmental laws. Matters pertaining to the environment are discussed in Part I, Item 1A. *Risk Factors*; Part I, Item 3. *Legal Proceedings*; Part II, Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations*; and Notes 2 and 19 to the Consolidated Financial Statements.

We have made, and intend to continue to make, the expenditures necessary for compliance with applicable laws and regulations relating to environmental, health and safety matters. We incurred capital expenditures of \$114 million in 2014 for health, safety and environmental compliance purposes and improvement programs, and estimate such expenditures to be approximately \$190 million in each of 2015 and 2016.

While capital expenditures or operating costs for environmental compliance, including compliance with potential legislation and potential regulation related to climate change, cannot be predicted with certainty, we do not believe they will have a material effect on our competitive position.

While there can be no assurance that physical risks to our facilities and supply chain due to climate change will not occur in the future, we have reviewed the potential for these risks and have concluded that, because of our facility locations and our existing distribution networks, we do not believe these risks are material in the near term.

#### **Employee Relations**

As of December 31, 2014, we employed approximately 13,100 full-time and part-time employees around the world. Of these, approximately 6,000 were in each of North America and Europe, with the remainder in other locations.

As of December 31, 2014, approximately 820 of our employees in North America were represented by labor unions. The vast majority of our employees in Europe and South America are subject to staff council or works council coverage or collective bargaining agreements. Approximately 55% of our unionized North American employees, working at the Company's Houston refinery, were covered by a collective bargaining agreement (CBA) between the Company and the United Steelworkers Union (USW), which became effective February 1, 2012 and expired February 1, 2015 at 12:01AM. Leading up to the expiration of the CBA we negotiated diligently and in good faith with the USW, but were notified immediately before the CBA expiration date that the international USW had called our employees to strike. We remain committed to negotiating in good faith for a fair and responsible contract.

In addition to our own employees, we use the services of contractors in the routine conduct of our businesses.

#### EXECUTIVE OFFICERS OF THE REGISTRANT

Our executive officers as of February 15, 2015 were as follows:

Name and Age	Significant Experience
Bhavesh V. ("Bob") Patel, 48	Chief Executive Officer and Chairman of the Management Board since January 2015.
	Executive Vice President, Olefins and Polyolefins—EAI and Technology from October 2013 and member of the Management Board from April 2014 to January 2015.
	Senior Vice President, Olefins and Polyolefins—EAI and Technology from November 2010 to October 2013.
	Senior Vice President, Olefins and Polyolefins—Americas from March 2010 to June 2011.
	General Manager, Olefins and NGLs of Chevron Phillips Chemical Company from 2009 to 2010.
Karyn F. Ovelmen, 51	Executive Vice President and Chief Financial Officer since October 2011 and member of the Management Board since April 2014.
	Executive Vice President and Chief Financial Officer of Petroplus Holdings AG from 2006 to 2010. (1)
Craig B. Glidden, 57	Executive Vice President and Chief Legal Officer since August 2009 and member of the Management Board since April 2014.
	Senior Vice President, Legal and Public Affairs, General Counsel and Corporate Secretary of Chevron Phillips Chemical Company from April 2004 to August 2009.
Timothy D. Roberts, 53	Executive Vice President, Olefins and Polyolefins—Global since January 2015 and member of the Management Board since April 2014.
	Executive Vice President, Olefins and Polyolefins—Americas from October 2013 to January 2015.
	Senior Vice President, Olefins and Polyolefins—Americas from June 2011 to October 2013.
	Vice President of Planning and Development for Chevron Phillips Chemical from February 2011 to May 2011.
	President and CEO of Americas Styrenics LLC, a joint venture between the Dow Chemical Company and Chevron Phillips Chemical, from May 2008 to January 2011.

<sup>(1)</sup> In January 2012, Petroplus Holdings AG filed an insolvency petition in Switzerland.

Name and Age	Significant Experience
Kevin W. Brown, 57	Executive Vice President, Manufacturing and Refining since January 2015.
	Senior Vice President, Refining from October 2009 to January 2015.
	Director of Sinclair Oil from January 2006 to September 2009.
	Executive Vice President, Operations of Sinclair Oil from June 2004 to September 2009.
Massimo Covezzi, 57	Senior Vice President, Research and Development since January 2008.
Patrick D. Quarles, 47	Executive Vice President, Intermediates & Derivatives, Supply Chain & Procurement since January 2015 and member of the Management Board since April 2014.
	Senior Vice President, Intermediates & Derivatives from September 2009 to January 2015.
	Senior Vice President, Propylene Oxide & Derivatives from January 2009 to September 2009.
Michael VanDerSnick, 50	Senior Vice President, Manufacturing—EAI since July 2012.
	Site manager of the Company's Channelview, Matagorda, Chocolate Bayou and Bayport, Texas plants from 2004 to 2012.
Sergey Vasnetsov, 51	Senior Vice President, Strategic Planning & Transactions since August 2010.
	Managing Director of Equity Research at Barclays Capital from 1999 to 2010.
Jacquelyn H. Wolf, 53	Senior Vice President and Chief Human Resources Officer since September 2012.
	Senior Vice President and Chief Human Resources Officer for Celanese, Inc. from December 2009 to July 2012.
	Executive Vice President and Chief Human Resources Officer for Comerica Bank from January 2006 to December 2009.
William B. Allen, Jr., 50	Vice President, Finance since February 2013 and Principle Accounting Officer since April 2013.
	Vice President, Corporate Controller and Chief Accounting Officer of Albemarle Corporation from 2009 to 2013.
	Chief Financial Officer of Albemarle Corporation's Catalysts Business Segment from 2007 to 2009 and Fine Chemistry Solutions Business Segment from 2006 to 2007.

Name and Age	Significant Experience
Lawrence C. Somma, 48	Vice President, Treasurer since October 2013.
	Senior Vice President Real Estate and Capital Strategy for Hyatt Hotels Corporation from October 2012 to September 2013.
	Senior Vice President, Treasurer for Hyatt Hotels Corporation from July 2008 to September 2012.
Samuel L. Smolik, 61	Vice President, Health, Safety, Environmental and Operational Excellence since November 2009.
	Vice President, Downstream Health, Safety and Environmental of Royal Dutch Shell from 2004 to October 2009.
Stephen R. Wessels, 63	Vice President, Tax since September 2014.
	Chief Tax Counsel from January 2010 to September 2014.

### Description of Properties

Our principal manufacturing facilities as of December 31, 2014 are set forth below, and are identified by the principal segment or segments using the facility. All of the facilities are wholly owned, except as otherwise noted.

Location	Segment	Principal Products
Americas		
Bayport (Pasadena), Texas	I&D	EO, Ethylene Glycol and other EO derivatives
Bayport (Pasadena), Texas(1)	I&D	PO, PG, PGE, TBA and Isobutylene
Bayport (Pasadena), Texas	O&P—Americas	PP and Catalloy process resins
Channelview, Texas(2)	O&P—Americas	Ethylene, Propylene, Butadiene, Benzene and Toluene
	Refining	Alkylate
Channelview, Texas(1)(2)(3)	I&D	Isopropyl Alcohol, PO, BDO, SM, Isobutylene, Methanol, ETBE and MTBE
Chocolate Bayou, Texas	O&P—Americas	PE (HDPE)
Clinton, Iowa	O&P—Americas	Ethylene and Propylene, PE (LDPE and HDPE)
Corpus Christi, Texas	O&P—Americas	Ethylene, Propylene, Butadiene and Benzene
Ensenada, Argentina	O&P—Americas	PP
Ensenada, Argentina	O&P—EAI	PP compounds
Houston, Texas	Refining	Gasoline, Diesel, Jet Fuel and Lube Oils
La Porte, Texas(4)	O&P—Americas	Ethylene and Propylene PE (LDPE and LLDPE)
La Porte, Texas(4)(5)	I&D	VAM, Acetic Acid and Methanol
Lake Charles, Louisiana	O&P—Americas	PP and Catalloy process resins
Matagorda, Texas	O&P—Americas	PE (HDPE)

Location	Segment	Principal Products
Morris, Illinois	O&P—Americas	PE (LDPE and LLDPE)
Victoria, Texas†	O&P—Americas	PE (HDPE)
Europe		
Bayreuth, Germany	O&P—EAI	PP compounds
Berre l'Etang, France	O&P—EAI	Ethylene, Propylene, Butadiene, PP and PE (LDPE)
Botlek, Rotterdam, The Netherlands†	I&D	PO, PG, PGE, TBA, Isobutylene, BDO, MTBE and ETBE
Brindisi, Italy	O&P—EAI	PP
Ferrara, Italy	O&P—EAI	PP and Catalloy process resins
	Technology	Polyolefin catalysts
Fos-sur-Mer, France†	I&D	PO, PG, TBA, MTBE and ETBE
Frankfurt, Germany†	O&P—EAI	PE (HDPE)
	Technology	Polyolefin catalysts
Knapsack, Germany†	O&P—EAI	PP and PP compounds
Ludwigshafen, Germany†	Technology	Polyolefin catalysts
Maasvlakte (near Rotterdam), The Netherlands(6)	I&D	PO and SM
Moerdijk, The Netherlands†	O&P—EAI	Catalloy process resins and PB-1
Münchsmünster, Germany†	O&P—EAI	Ethylene, Propylene, PE (HDPE)
Tarragona, Spain(7)	O&P—EAI	PP and PP compounds
Wesseling, Germany	O&P—EAI	Ethylene, Propylene and Butadiene, PP and PE (HDPE and LDPE)
Asia Pacific		
Geelong, Australia	O&P—EAI	PP

<sup>†</sup> The facility is located on leased land.

- (1) The Bayport PO/TBA plants and the Channelview PO/SM I plant are held by the U.S. PO joint venture between Bayer and Lyondell Chemical. These plants are located on land leased by the U.S. PO joint venture.
- (2) Equistar Chemicals, LP operates a styrene maleic anhydride unit and a polybutadiene unit, which are owned by an unrelated party and are located within the Channelview facility on property leased from Equistar Chemicals, LP.
- (3) Unrelated equity investors hold a minority interest in the PO/SM II plant at the Channelview facility.
- (4) The La Porte facilities are on contiguous property.
- (5) The La Porte methanol facility is owned by La Porte Methanol Company, a partnership owned 85% by us.
- (6) The Maasvlakte plant is owned by the European PO joint venture and is located on land leased by the European PO joint venture.
- (7) The Tarragona PP facility is located on leased land; the compounds facility is located on co-owned land.

### Other Locations and Properties

We maintain executive offices in London, The United Kingdom, Rotterdam, The Netherlands and Houston, Texas. We maintain research facilities in Lansing, Michigan; Channelview, Texas; Cincinnati, Ohio; Ferrara, Italy and Frankfurt, Germany. Our Asia Pacific headquarters are in Hong Kong. We also have technical support centers in Bayreuth, Germany; Geelong, Australia; and Tarragona, Spain. We have various sales facilities worldwide.

### Website Access to SEC Reports

Our Internet website address is *http://www.lyb.com*. Information contained on our Internet website is not part of this report on Form 10-K.

Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and any amendments to these reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 are available on our website, free of charge, as soon as reasonably practicable after such reports are filed with, or furnished to, the U.S. Securities and Exchange Commission. Alternatively, you may access these reports at the SEC's website at <a href="http://www.sec.gov">http://www.sec.gov</a>.

### Item 1A. Risk Factors.

You should carefully consider the following risk factors in addition to the other information included in this Annual Report on Form 10-K. Each of these risk factors could adversely affect our business, operating results and financial condition, as well as adversely affect the value of an investment in our common stock.

### Our business, including our results of operations and reputation, could be adversely affected by safety or product liability issues.

Failure to appropriately manage safety, human health, product liability and environmental risks associated with our products, product life cycles and production processes could adversely impact employees, communities, stakeholders, our reputation and our results of operations. Public perception of the risks associated with our products and production processes could impact product acceptance and influence the regulatory environment in which we operate. While we have procedures and controls to manage safety risks, issues could be created by events outside of our control, including natural disasters, severe weather events and acts of sabotage.

### Our operations are subject to risks inherent in chemical and refining businesses, and we could be subject to liabilities for which we are not fully insured or that are not otherwise mitigated.

We maintain property, business interruption, product, general liability, casualty and other types of insurance that we believe are in accordance with customary industry practices. However, we are not fully insured against all potential hazards incident to our business, including losses resulting from natural disasters, wars or terrorist acts. Changes in insurance market conditions have caused, and may in the future cause, premiums and deductibles for certain insurance policies to increase substantially and, in some instances, for certain insurance to become unavailable or available only for reduced amounts of coverage. If we were to incur a significant liability for which we were not fully insured, we might not be able to finance the amount of the uninsured liability on terms acceptable to us or at all, and might be obligated to divert a significant portion of our cash flow from normal business operations.

Further, because a part of our business involves licensing polyolefin process technology, our licensees are exposed to similar risks involved in the manufacture and marketing of polyolefins. Hazardous incidents involving our licensees, if they do result or are perceived to result from use of our technologies, may harm our reputation, threaten our relationships with other licensees and/or lead to customer attrition and financial losses. Our policy of covering these risks through contractual limitations of liability and indemnities and through

insurance may not always be effective. As a result, our financial condition and results of operation would be adversely affected, and other companies with competing technologies may have the opportunity to secure a competitive advantage.

### Our ability to source raw materials, including crude oil, may be adversely affected by political instability, civil disturbances or other governmental actions.

We obtain a substantial portion of our principal raw materials from sources in North Africa, the Middle East, Mexico and South America that may be less politically stable than other areas in which we conduct business, such as Europe or the U.S. Political instability, civil disturbances and actions by governments in these areas are likely to substantially increase the price and decrease the supply of raw materials necessary for our operations, which will have a material adverse effect on our results of operations.

Recently, increased incidents of civil unrest, including terrorist attacks and demonstrations that have been marked by violence, have occurred in a number of countries in North Africa and the Middle East. Some political regimes in these countries are threatened or have changed as a result of such unrest. Political instability and civil unrest could continue to spread in the region and involve other areas. Such unrest, if it continues to spread or grow in intensity, could lead to civil wars, regional conflicts, or regime changes resulting in governments that are hostile to countries in which we conduct substantial business, such as in Europe, the U.S., or their respective allies.

#### A substantial decrease in the price of crude oil may adversely impact our results of operations.

Energy costs generally follow price trends of crude oil and natural gas. These price trends may be highly volatile and cyclical. In the past, raw material and energy costs have experienced significant fluctuations that adversely affected our business segments' results of operations. For example, we continue to benefit from the favorable ratio of U.S. natural gas prices to crude oil prices. However, if the price of crude oil decreases relative to U.S. natural gas prices or if the demand for natural gas and NGLs increases, this may have a negative result on our results of operations.

### Costs and limitations on supply of raw materials and energy may result in increased operating expenses.

The costs of raw materials and energy represent a substantial portion of our operating expenses. Due to the significant competition we face and the commodity nature of many of our products we are not always able to pass on raw material and energy cost increases to our customers. When we do have the ability to pass on the cost increases, we are not always able to do so quickly enough to avoid adverse impacts on our results of operations.

Cost increases for raw materials also may increase working capital needs, which could reduce our liquidity and cash flow. Even if we increase our sales prices to reflect rising raw material and energy costs, demand for products may decrease as customers reduce their consumption or use substitute products, which may have an adverse impact on our results of operations. In addition, producers in natural gas cost-advantaged regions, such as the Middle East and North America, benefit from the lower prices of natural gas and NGLs. Competition from producers in these regions may cause us to reduce exports from Europe and elsewhere. Any such reductions may increase competition for product sales within Europe and other markets, which can result in lower margins in those regions.

For some of our raw materials and utilities there are a limited number of suppliers and, in some cases, the supplies are specific to the particular geographic region in which a facility is located. It is also common in the chemical and refining industries for a facility to have a sole, dedicated source for its utilities, such as steam, electricity and gas. Having a sole or limited number of suppliers may limit our negotiating power, particularly in the case of rising raw material costs. Any new supply agreements we enter into may not have terms as favorable as those contained in our current supply agreements.

Additionally, there is growing concern over the reliability of water sources, including around the Texas Gulf Coast where several of our facilities are located. The decreased availability or less favorable pricing for water as a result of population growth, drought or regulation could negatively impact our operations.

If our raw material or utility supplies were disrupted, our businesses may incur increased costs to procure alternative supplies or incur excessive downtime, which would have a direct negative impact on plant operations. Disruptions of supplies may occur as a result of transportation issues including, but not limited to, as a result of natural disasters and water levels that can affect the operations of vessels, barges, rails, trucks and pipeline traffic. These risks are particularly prevalent in the U.S. Gulf Coast area. Additionally, the export of NGLs from the U.S., greater restrictions on hydraulic fracturing or the lifting by the U.S. government of the ban on U.S. crude oil exports could restrict the availability of our raw materials, thereby increasing our costs.

With increased volatility in raw material costs, our suppliers could impose more onerous terms on us, resulting in shorter payment cycles and increasing our working capital requirements.

Economic disruptions and downturns in general, and particularly continued economic uncertainty in Europe or economic turmoil in emerging markets, could have a material adverse effect on our business, prospects, operating results, financial condition and cash flows.

Our results of operations can be materially affected by adverse conditions in the financial markets and depressed economic conditions generally. Economic downturns in the businesses and geographic areas in which we sell our products substantially reduce demand for our products and result in decreased sales volumes and increased credit risk. Recessionary environments adversely affect our business because demand for our products is reduced, particularly from our customers in industrial markets generally and the automotive and housing industries specifically, and may result in higher costs of capital. A significant portion of our revenues and earnings are derived from our business in Europe, including southern Europe. In addition, most of our European transactions and assets, including cash reserves and receivables, are denominated in euros.

Europe's recovery from the economic crisis has continued to be uneven, slow and modest. If the crisis reemerges or meaningful recovery does not materialize across Europe, there will likely be a continued negative
effect on our European business, as well as the businesses of our European customers, suppliers and partners. In
addition, if the crisis leads to a significant devaluation of the euro, the value of our financial assets that are
denominated in euros would be significantly reduced when translated to U.S. dollars for financial reporting
purposes. We also derive significant revenues from our business in emerging markets, particularly the emerging
markets in Asia and Brazil. Any broad-based downturn in these emerging markets, or in a key market such as
China, could require us to reduce export volumes into these markets and could also require us to divert product
sales to less profitable markets. Any of these conditions could ultimately harm our overall business, prospects,
operating results, financial condition and cash flows.

### The cyclicality and volatility of the industries in which we participate may cause significant fluctuations in our operating results.

Our business operations are subject to the cyclical and volatile nature of the supply-demand balance in the chemical and refining industries. Our future operating results are expected to continue to be affected by this cyclicality and volatility. The chemical and refining industries historically have experienced alternating periods of capacity shortages, causing prices and profit margins to increase, followed by periods of excess capacity, resulting in oversupply, declining capacity utilization rates and declining prices and profit margins.

In addition to changes in the supply and demand for products, changes in energy prices and other worldwide economic conditions can cause volatility. These factors result in significant fluctuations in profits and cash flow from period to period and over business cycles.

New capacity additions in Asia, the Middle East and North America may lead to periods of oversupply and lower profitability. A sizable number of expansions have been announced in North America. The timing and extent of any changes to currently prevailing market conditions are uncertain and supply and demand may be unbalanced at any time. As a consequence, we are unable to accurately predict the extent or duration of future industry cycles or their effect on our business, financial condition or results of operations.

### We sell products in highly competitive global markets and face significant price pressures.

We sell our products in highly competitive global markets. Due to the commodity nature of many of our products, competition in these markets is based primarily on price and, to a lesser extent, on product performance, product quality, product deliverability, reliability of supply and customer service. Generally, we are not able to protect our market position for these products by product differentiation and may not be able to pass on cost increases to our customers due to the significant competition in our business.

In addition, we face increased competition from companies that may have greater financial resources and different cost structures or strategic goals than us. These include large integrated oil companies (some of which also have chemical businesses), government-owned businesses, and companies that receive subsidies or other government incentives to produce certain products in a specified geographic region. Increased competition from these companies, especially in our olefin and refining businesses, could limit our ability to increase product sales prices in response to raw material and other cost increases, or could cause us to reduce product sales prices to compete effectively, which could reduce our profitability. Competitors that have greater financial resources than us may be able to invest significant capital into their businesses, including expenditures for research and development.

In addition, specialty products we produce may become commoditized over time. Increased competition could result in lower prices or lower sales volumes, which would have a negative impact on our results of operations.

### Interruptions of operations at our facilities may result in liabilities or lower operating results.

We own and operate large-scale facilities. Our operating results are dependent on the continued operation of our various production facilities and the ability to complete construction and maintenance projects on schedule. Interruptions at our facilities may materially reduce the productivity and profitability of a particular manufacturing facility, or our business as a whole, during and after the period of such operational difficulties. In the past, we had to shut down plants on the U.S. Gulf Coast, including the temporary shutdown of our Houston refinery, as a result of hurricanes striking the Texas coast.

In addition, because the Houston refinery is our only refining operation, an outage at the refinery could have a particularly negative impact on our operating results. Unlike our chemical and polymer production facilities, which may have sufficient excess capacity to mitigate the negative impact of lost production at other facilities, we do not have the ability to increase refining production elsewhere in the U.S.

Although we take precautions to enhance the safety of our operations and minimize the risk of disruptions, our operations are subject to hazards inherent in chemical manufacturing and refining and the related storage and transportation of raw materials, products and wastes. These potential hazards include:

- pipeline leaks and ruptures;
- explosions;
- fires;
- · severe weather and natural disasters;
- · mechanical failure;
- unscheduled downtimes;
- supplier disruptions;
- labor shortages or other labor difficulties;
- transportation interruptions;

- increased restrictions on, or the unavailability of, water for use at our manufacturing sites or for the transport of our products or raw materials;
- remediation complications;
- chemical and oil spills;
- discharges or releases of toxic or hazardous substances or gases;
- shipment of incorrect or off-specification product to customers;
- storage tank leaks;
- other environmental risks; and
- terrorist acts.

Some of these hazards may cause severe damage to or destruction of property and equipment or personal injury and loss of life and may result in suspension of operations or the shutdown of affected facilities.

### Increased IT security threats and more sophisticated and targeted computer crime could pose a risk to our systems, networks, products, facilities and services.

Increased global information security threats and more sophisticated, targeted computer crime pose a risk to the confidentiality, availability and integrity of our data, operations and infrastructure. While we attempt to mitigate these risks by employing a number of measures, including employee training, comprehensive monitoring of our networks and systems, and maintenance of backup and protective systems, our employees, systems, networks, products, facilities and services remain potentially vulnerable to sophisticated espionage or continual cyber-assault. Depending on their nature and scope, such threats could potentially lead to the compromise of confidential information, improper use of our systems and networks, manipulation and destruction of data, defective products, production downtimes and operational disruptions, which in turn could adversely affect our reputation, competitiveness and results of operations.

### We operate internationally and are subject to exchange rate fluctuations, exchange controls, political risks and other risks relating to international operations.

We operate internationally and are subject to the risks of doing business on a global level. These risks include fluctuations in currency exchange rates, economic instability and disruptions, restrictions on the transfer of funds and the imposition of duties and tariffs. Additional risks from our multinational business include transportation delays and interruptions, war, terrorist activities, epidemics, pandemics, political instability, import and export controls, changes in governmental policies, labor unrest and current and changing regulatory environments.

We generate revenues from export sales and operations that may be denominated in currencies other than the relevant functional currency. Exchange rates between these currencies and functional currencies in recent years have fluctuated significantly and may do so in the future. We also could hedge certain revenues and costs using derivative instruments to minimize the impact of changes in the exchange rates of those currencies compared to the respective functional currencies. It is possible that fluctuations in exchange rates will result in reduced operating results. Additionally, we operate with the objective of having our worldwide cash available in the locations where it is needed, including the United Kingdom for our parent company's significant cash obligations as a result of dividend and interest payments. It is possible that we may not always be able to provide cash to other jurisdictions when needed or that such transfers of cash could be subject to additional taxes, including withholding taxes.

Our operating results could be negatively affected by the global laws, rules and regulations, as well as political environments, in the jurisdictions in which we operate. There could be reduced demand for our products, decreases in the prices at which we can sell our products and disruptions of production or other operations.

Additionally, there may be substantial capital and other costs to comply with regulations and/or increased security costs or insurance premiums, any of which could reduce our operating results.

We obtain a substantial portion of our principal raw materials from international sources that are subject to these same risks. Our compliance with applicable customs, currency exchange control regulations, transfer pricing regulations or any other laws or regulations to which we may be subject could be challenged. Furthermore, these laws may be modified, the result of which may be to prevent or limit subsidiaries from transferring cash to us.

Furthermore, we are subject to certain existing, and may be subject to possible future, laws that limit or may limit our activities while some of our competitors may not be subject to such laws, which may adversely affect our competitiveness.

### Changes in tax laws and regulations could affect our tax rate and our results of operations.

We are a tax resident in the United Kingdom and are subject to the United Kingdom corporate income tax system. However, as a holding company, our tax obligations are primarily incurred in the various jurisdictions in which our subsidiaries operate. Recently, there has been an increase in attention, both in the U.S. and in Europe, to the tax practices of multinational companies. Such attention may result in legislative changes that could affect our tax rate. In addition, certain jurisdictions in which we conduct business and incur a tax liability are considering proposals to change their tax laws. While we are not aware of any impending changes to legislation or tax regulations, any change in our tax rate would impact our results of operations.

### Failure to comply with the Foreign Corrupt Practices Act and similar worldwide anti-bribery laws may have an adverse effect on us.

Our international operations require us to comply with a number of U.S. and international laws and regulations, including those involving anti-bribery and anti-corruption. In order to effectively operate in certain foreign jurisdictions, circumstances may require that we establish joint ventures with local operators or find strategic partners. As an issuer with securities listed on a United States stock exchange, we are subject to the regulations imposed by the Foreign Corrupt Practices Act (FCPA), which generally prohibits issuers and their intermediaries (including strategic or local partners or agents, even if those partners or agents are not themselves subject to the FCPA or other similar laws) from making improper payments to foreign officials for the purpose of obtaining or keeping business or obtaining an improper business benefit. We have an ongoing program to promote compliance with the FCPA and other similar anti-bribery and anti-corruption laws. Any determination that we have violated the FCPA or other similar laws could have a material effect on our business, results of operations, and cash flows.

# Many of our businesses depend on our intellectual property. Our future success will depend in part on our ability to protect our intellectual property rights, and our inability to do so could reduce our ability to maintain our competitiveness and margins.

We have a significant worldwide patent portfolio of issued and pending patents. These patents, together with proprietary technical know-how, are significant to our competitive position, particularly with regard to PO, performance chemicals, petrochemicals, and polymers, including process technologies such as *Spheripol*, *Spherizone*, *Hostalen*, *Spherilene*, *Lupotech T* and *Avant* catalyst family technology rights. We rely on the patent, copyright and trade secret laws of the countries in which we operate to protect our investment in research and development, manufacturing and marketing. However, we may be unable to prevent third parties from using our intellectual property without authorization. Proceedings to protect these rights could be costly, and we may not prevail.

The protection afforded by patents varies from country to country and depends upon the type of patent and its scope of coverage. While a presumption of validity exists with respect to patents issued to us, our patents may

be challenged, invalidated, circumvented or rendered unenforceable. As patents expire, the products and processes described and claimed under those patents become generally available for use by competitors.

Our continued growth strategy may bring us to regions of the world where intellectual property protection may be limited and difficult to enforce. In addition, patent rights may not prevent our competitors from developing, using or selling products that are similar or functionally equivalent to our products. Moreover, our competitors or other third parties may obtain patents that restrict or preclude our ability to lawfully produce or sell our products in a competitive manner, which could result in significantly lower revenues, reduced profit margins or loss of market share.

We also rely upon unpatented proprietary know-how and continuing technological innovation and other trade secrets to develop and maintain our competitive position. While it is our policy to enter into confidentiality agreements with our employees and third parties to protect our intellectual property, these confidentiality agreements may be breached, may not always be executed, may not provide meaningful protection or adequate remedies may not be available. Additionally, others could obtain knowledge of our trade secrets through independent development or other access by legal or illegal means.

The failure of our patents or confidentiality agreements to protect our processes, apparatuses, technology, trade secrets or proprietary know-how could result in significantly lower revenues, reduced profit margins and cash flows and/or loss of market share. We also may be subject to claims that our technology, patents or other intellectual property infringes on a third party's intellectual property rights. Unfavorable resolution of these claims could result in restrictions on our ability to deliver the related service or in a settlement that could be material to us.

### Shared control or lack of control of joint ventures may delay decisions or actions regarding the joint ventures.

A portion of our operations are conducted through joint ventures, where control may be exercised by or shared with unaffiliated third parties. We cannot control the actions of our joint venture partners, including any nonperformance, default or bankruptcy of joint venture partners. The joint ventures that we do not control may also lack adequate internal controls systems or financial reporting systems to provide adequate and timely information for our reporting purposes.

In the event that any of our joint venture partners do not observe their obligations, it is possible that the affected joint venture would not be able to operate in accordance with our business plans. As a result, we could be required to increase our level of commitment in order to give effect to such plans. Differences in views among the joint venture participants also may result in delayed decisions or in failures to agree on major matters, potentially adversely affecting the business and operations of the joint ventures and in turn our business and operations.

### We cannot predict with certainty the extent of future costs under environmental, health and safety and other laws and regulations, and cannot guarantee they will not be material.

We may face liability arising out of the normal course of business, including alleged personal injury or property damage due to exposure to chemicals or other hazardous substances at our current or former facilities or chemicals that we manufacture, handle or own. In addition, because our products are components of a variety of other end-use products, we, along with other members of the chemical industry, are subject to potential claims related to those end-use products. Any substantial increase in the success of these types of claims could negatively affect our operating results.

We (together with the industries in which we operate) are subject to extensive national, regional, state and local environmental laws, regulations, directives, rules and ordinances concerning

- emissions to the air;
- discharges onto land or surface waters or into groundwater; and

 the generation, handling, storage, transportation, treatment, disposal and remediation of hazardous substances and waste materials.

Many of these laws and regulations provide for substantial fines and potential criminal sanctions for violations. Some of these laws and regulations are subject to varying and conflicting interpretations. In addition, some of these laws and regulations require us to meet specific financial responsibility requirements. Any substantial liability for environmental damage could have a material adverse effect on our financial condition, results of operations and cash flows.

Although we have compliance programs and other processes intended to ensure compliance with all such regulations, we are subject to the risk that our compliance with such regulations could be challenged. Non-compliance with certain of these regulations could result in the incurrence of additional costs, penalties or assessments that could be material.

### Our industry is subject to extensive government regulation, and existing, or future regulations may restrict our operations, increase our costs of operations or require us to make additional capital expenditures.

Compliance with regulatory requirements could result in higher operating costs, such as regulatory requirements relating to emissions, the security of our facilities, and the transportation, export or registration of our products. We generally expect that regulatory controls worldwide will become increasingly more demanding, but cannot accurately predict future developments.

Increasingly strict environmental laws and inspection and enforcement policies, could affect the handling, manufacture, use, emission or disposal of products, other materials or hazardous and non-hazardous waste. Stricter environmental, safety and health laws, regulations and enforcement policies could result in increased operating costs or capital expenditures to comply with such laws and regulations. Additionally, we are required to have permits for our businesses and are subject to licensing regulations. These permits and licenses are subject to renewal, modification and in some circumstances, revocation. Further, the permits and licenses are often difficult, time consuming and costly to obtain and could contain conditions that limit our operations.

### We may incur substantial costs to comply with climate change legislation and regulatory initiatives.

There has been a broad range of proposed or promulgated state, national and international laws focusing on greenhouse gas ("GHG") reduction. These proposed or promulgated laws apply or could apply in countries where we have interests or may have interests in the future. Laws in this field continue to evolve and, while they are likely to be increasingly widespread and stringent, at this stage it is not possible to accurately estimate either a timetable for implementation or our future compliance costs relating to implementation. Within the framework of the EU emissions trading scheme ("ETS"), we were allocated certain allowances of carbon dioxide for the affected plants of our European sites for the period from 2008 to 2012 ("ETS II period"). The ETS II period did not bring additional cost to us as the allowance allocation was sufficient to cover the actual emissions of the affected plants. We were able to build an allowance surplus during the ETS II period which has been banked to the scheme for the period from 2013 to 2020 ("ETS III period"). We expect to incur additional costs for the ETS III period, despite the allowance surplus accrued over the ETS II period, as allowance allocations have been reduced for the ETS III period and more of our plants are affected by the scheme. We maintain an active hedging strategy to cover these additional costs. We expect to incur additional costs in relation to future carbon or GHG emission trading schemes.

In the U.S., the Environmental Protection Agency (the "EPA") has promulgated federal GHG regulations under the Clean Air Act affecting certain sources. The EPA has issued mandatory GHG reporting requirements, requirements to obtain GHG permits for certain industrial plants and proposals for GHG performance standards for some facilities. The recent EPA action could be a precursor to further federal regulation of carbon dioxide emissions and other greenhouse gases, and may affect the outcome of other climate change lawsuits pending in

U.S. courts in a manner unfavorable to our industry. In any event, additional regulation may be forthcoming at the U.S. federal or state level with respect to GHG emissions, and such regulation could result in the creation of additional costs in the form of taxes or required acquisition or trading of emission allowances.

Compliance with these or other changes in laws, regulations and obligations that create a GHG emissions trading scheme or GHG reduction policies generally could significantly increase our costs or reduce demand for products we produce. Additionally, compliance with these regulations may result in increased permitting necessary for the operation of our business or for any of our growth plans. Difficulties in obtaining such permits could have an adverse effect on our future growth. Therefore, any future potential regulations and legislation could result in increased compliance costs, additional operating restrictions or delays in implementing growth projects or other capital investments, and could have a material adverse effect on our business and results of operations.

### We may be required to record material charges against our earnings due to any number of events that could cause impairments to our assets.

We may be required to reduce production at or idle facilities for extended periods of time or exit certain businesses as a result of the cyclical nature of our industry. Specifically, oversupplies of or lack of demand for particular products or high raw material prices may cause us to reduce production. We may choose to reduce production at certain facilities because we have off-take arrangements at other facilities, which make any reductions or idling unavailable at those facilities. Any decision to permanently close facilities or exit a business likely would result in impairment and other charges to earnings.

Temporary outages at our facilities can last for several quarters and sometimes longer. These outages could cause us to incur significant costs, including the expenses of maintaining and restarting these facilities. In addition, even though we may reduce production at facilities, we may be required to continue to purchase or pay for utilities or raw materials under take-or-pay supply agreements.

# Our business is capital intensive and we rely on cash generated from operations and external financing to fund our growth and ongoing capital needs. Limitations on access to external financing could adversely affect our operating results.

We require significant capital to operate our current business and fund our growth strategy. Moreover, interest payments, dividends and the expansion of our business or other business opportunities may require significant amounts of capital. We believe that our cash from operations currently will be sufficient to meet these needs. However, if we need external financing, our access to credit markets and pricing of our capital is dependent upon maintaining sufficient credit ratings from credit rating agencies and the state of the capital markets generally. There can be no assurances that we would be able to incur indebtedness on terms we deem acceptable, and it is possible that the cost of any financings could increase significantly, thereby increasing our expenses and decreasing our net income. If we are unable to generate sufficient cash flow or raise adequate external financing, including as a result of significant disruptions in the global credit markets, we could be forced to restrict our operations and growth opportunities, which could adversely affect our operating results.

We may use our five-year, \$2 billion revolving credit facility, which backs our commercial paper program, to meet our cash needs, to the extent available. As of December 31, 2014, we had no borrowings or letters of credit outstanding under the facility and \$262 million outstanding under our commercial paper program, leaving an unused and available credit capacity of \$1,712 million. We may also meet our cash needs by selling receivables under our \$1,000 million U.S. accounts receivable securitization facility or our €450 million European accounts receivable securitization facility. In the event of a default under our credit facility or any of our senior notes, we could be required to immediately repay all outstanding borrowings and make cash deposits as collateral for all obligations the facility supports, which we may not be able to do. Any default under any of our credit arrangements could cause a default under many of our other credit agreements and debt instruments.

Without waivers from lenders party to those agreements, any such default could have a material adverse effect on our ability to continue to operate.

#### Legislation and regulatory initiatives could lead to a decrease in demand for our products.

New or revised governmental regulations and independent studies relating to the effect of our products on health, safety and the environment may affect demand for our products and the cost of producing our products. Initiatives by governments and private interest groups will potentially require increased toxicological testing and risk assessments of a wide variety of chemicals, including chemicals used or produced by us. For example, in the United States, the National Toxicology Program ("NTP") is a federal interagency program that seeks to identify and select for study chemicals and other substances to evaluate potential human health hazards. In the European Union, the Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals ("REACH") is regulation designed to identify the intrinsic properties of chemical substances, assess hazards and risks of the substances, and identify and implement the risk management measures to protect humans and the environment.

Assessments under NTP, REACH or similar programs or regulations in other jurisdictions may result in heightened concerns about the chemicals we use or produce and may result in additional requirements being placed on the production, handling, labeling or use of those chemicals. Such concerns and additional requirements could also increase the cost incurred by our customers to use our chemical products and otherwise limit the use of these products, which could lead to a decrease in demand for these products. Such a decrease in demand could have an adverse impact on our business and results of operations.

### Our success depends upon our ability to attract and retain key employees and the identification and development of talent to succeed senior management.

Our success depends on our ability to attract and retain key personnel, and we rely heavily on our management team. The inability to recruit and retain key personnel or the unexpected loss of key personnel may adversely affect our operations. In addition, because of the reliance on our management team, our future success depends in part on our ability to identify and develop talent to succeed senior management. The retention of key personnel and appropriate senior management succession planning will continue to be critically important to the successful implementation of our strategies.

### Changes in market conditions may impact any stock repurchases.

To the extent we engage in stock repurchases, such activity is subject to market conditions, such as the trading prices for our stock. Management, in its discretion, will determine the timing and manner of any repurchases in light of prevailing market conditions, our available resources and other factors that cannot be predicted.

#### Adverse results of legal proceedings could materially adversely affect us.

We are subject to and may in the future be subject to a variety of legal proceedings and claims that arise out of the ordinary conduct of our business. Results of legal proceedings cannot be predicted with certainty. Irrespective of its merits, litigation may be both lengthy and disruptive to our operations and may cause significant expenditure and diversion of management attention. We may be faced with significant monetary damages or injunctive relief against us that could materially adversely affect a portion of our business operations or materially and adversely affect our financial position and our results of operations should we fail to prevail in certain matters.

### We may not be able to fully or successfully implement our ongoing plans to improve and globally integrate our business processes and functions.

We continue to seek ways to drive greater productivity, flexibility and cost savings. In particular, we are working towards the improvement and global integration of our business processes and functions. As part of

these efforts, we have been centralizing certain functions, implementing new information technology, and integrating our existing information technology systems.

Our ongoing implementation of organizational improvements is made more difficult by our need to coordinate geographically dispersed operations. Inabilities and delays in implementing improvements can negatively affect our ability to realize projected or expected cost savings. In addition, the process of organizational improvements may cause interruptions of, or loss of momentum in, the activities of our businesses. It may also result in the loss of personnel or other labor issues. These issues, as well as any information technology systems failures, also could impede our ability to timely collect and report financial results in accordance with applicable laws and regulations.

Additionally, from time to time certain aspects of our business processes may be outsourced to third parties. The processes, or the portions thereof, that are outsourced generally will tend to be labor intensive transactional activities. Although we make a diligent effort to ensure that all providers of outsourced services observe proper internal control practices and procedures, we cannot assure that failures will not occur. The failure of such third parties to provide adequate services could adversely affect our results of operations, liquidity, or our ability to provide adequate financial and management reporting.

Significant changes in pension fund investment performance or assumptions relating to pension costs may adversely affect the valuation of pension obligations, the funded status of pension plans, and our pension cost.

Our pension cost is materially affected by the discount rate used to measure pension obligations, the level of plan assets available to fund those obligations at the measurement date and the expected long-term rate of return on plan assets. Significant changes in investment performance or a change in the portfolio mix of invested assets may result in corresponding increases and decreases in the value of plan assets, particularly equity securities, or in a change of the expected rate of return on plan assets. Any change in key actuarial assumptions, such as the discount rate, would impact the valuation of pension obligations, affecting the reported funded status of our pension plans as well as the net periodic pension cost in the following fiscal years.

Certain of our current pension plans could have projected benefit obligations that exceed the fair value of the plan assets. As of December 31, 2014, the aggregate deficit was \$953 million. Any declines in the fair values of the pension plans assets could require additional payments by us in order to maintain specified funding levels.

Our pension plans are subject to legislative and regulatory requirements of applicable jurisdictions, which could include, under certain circumstances, local governmental authority to terminate the plan.

### Our operations could be adversely affected by labor relations.

The vast majority of our employees located in Europe and South America are represented by labor unions and works councils. Approximately 820 of our employees located in North America are represented by labor unions.

Our operations have been in the past, and may be in the future, significantly and adversely affected by strikes, work stoppages and other labor disputes.

### Item 1B. Unresolved Staff Comments.

None.

### Item 3. Legal Proceedings.

#### **Environmental Matters**

From time to time we and our joint ventures receive notices or inquiries from government entities regarding alleged violations of environmental laws and regulations pertaining to, among other things, the disposal, emission and storage of chemical and petroleum substances, including hazardous wastes. Item 103 of the SEC's Regulation S-K requires disclosure of certain environmental matters when a governmental authority is a party to the proceedings and the proceedings involve potential monetary sanctions that we reasonably believe could exceed \$100,000. The matters below are disclosed solely pursuant to that requirement.

In September 2013, the Louisiana Department of Environmental Quality (the "LDEQ") issued a Compliance Order and Notice of Potential Penalty to Equistar Chemicals, LP pertaining to self-reported deviations arising from our Lake Charles, Louisiana polyolefins plant and relating to certain Clean Air Act Title V permit conditions, limits and other requirements. The matter involves deviations reported by us to the LDEQ in semi-annual reports covering 2007 through June 2011. We reasonably believe that LDEQ may assert an administrative penalty demand in this matter in excess of \$100,000.

In September 2013, EPA Region V issued a Notice and Finding of Violation alleging violations at our Morris, Illinois facility related to flaring activity. The Notice generally alleges failures to monitor steam usage and improper flare operations. We reasonably believe that EPA Region V may assert a penalty demand in excess of \$100,000.

In June 2014, EPA Region V issued a Notice and Finding of Violation alleging violations at our Tuscola, Illinois facility related to flaring activity. The Notice generally alleges failure to conduct a valid performance test and improper flare operations. We reasonably believe that EPA Region V may assert a penalty demand in excess of \$100,000.

### **Litigation and Other Matters**

Information regarding our litigation and other legal proceedings can be found in Note 19, *Commitments and Contingencies*, to the Consolidated Financial Statements.

### Item 4. Mine Safety Disclosures.

Not applicable.

#### **PART II**

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

#### Market and Dividend Information

Our shares were listed on the NYSE on October 14, 2010 under the symbol "LYB." The high and low sales prices for our ordinary shares and the cash dividends per share declared for the two most recent fiscal years are shown in the table below.

	High	Low	Cash Dividends Declared
2014			
First Quarter	\$ 91.94	\$74.37	\$0.60
Second Quarter	102.63	85.40	0.70
Third Quarter	115.40	97.09	0.70
Fourth Quarter	107.79	70.06	0.70
2013			
First Quarter	\$ 65.69	\$55.94	\$0.40
Second Quarter	69.45	55.02	0.50
Third Quarter	75.67	64.74	0.50
Fourth Quarter	80.33	72.27	0.60

The payment of dividends or distributions in the future will be subject to the requirements of Dutch law and the discretion of our shareholders (in the case of annual dividends), our Management Board and our Supervisory Board. The declaration of any future cash dividends and, if declared, the amount of any such dividends, will depend upon general business conditions, our financial condition, our earnings and cash flow, our capital requirements, financial covenants and other contractual restrictions on the payment of dividends or distributions.

There can be no assurance that any dividends or distributions will be declared or paid in the future.

### Holders

As of February 13, 2015, there were approximately 4,800 record holders of our shares, including Cede & Co. as nominee of the Depository Trust Company.

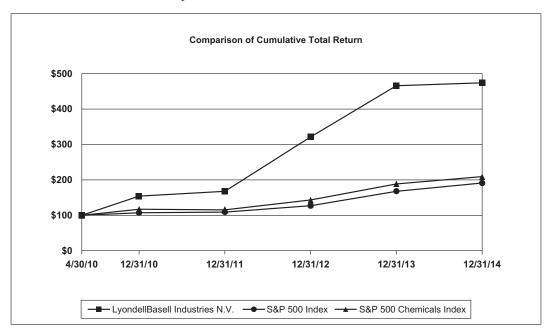
### **United Kingdom Tax Considerations**

In May 2013, we announced the planned migration of the tax domicile of LyondellBasell Industries N.V. from The Netherlands, where LyondellBasell Industries N.V. is incorporated, to the United Kingdom. On August 28, 2013, the Dutch and the United Kingdom competent authorities completed a mutual agreement procedure and issued a ruling that retroactively as of July 1, 2013 LyondellBasell Industries N.V. should be treated solely as a tax resident in the United Kingdom and is subject to the United Kingdom corporate income tax system.

As a result of its United Kingdom tax residency, dividend distributions by LyondellBasell Industries N.V. to its shareholders are not subject to withholding tax, as the United Kingdom currently does not levy a withholding tax on dividend distributions.

### **Performance Graph**

The graph below shows the relative investment performance of LyondellBasell Industries N.V. shares, the S&P 500 Index and the S&P 500 Chemicals Index since April 30, 2010, the first date on which we had issued capital as a publicly traded company. The graph assumes that \$100 was invested on April 30, 2010 and any dividends paid were reinvested at the date of payment. The graph is presented pursuant to SEC rules and is not meant to be an indication of our future performance.



	4/30/2010	12/31/2010	12/31/2011	12/31/2012	12/31/2013	12/31/2014
LyondellBasell Industries N.V	\$100	\$154.26	\$168.22	\$321.94	\$465.95	\$474.47
S&P 500 Index	\$100	\$107.49	\$109.76	\$127.32	\$168.56	\$191.63
S&P 500 Chemicals Index	\$100	\$117.58	\$116.10	\$143.51	\$189.15	\$209.39

### **Issuer Purchases of Equity Securities**

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares That May Yet Be Purchased Under the Plans or Programs
October 1 – October 31	4,908,291	\$93.73	4,908,291	32,186,970
November 1 – November 30	4,615,318	\$88.40	4,615,318	27,571,652
December 1 – December 31	7,679,551	\$77.97	7,679,551	19,892,101
Total	17,203,160	\$85.26	17,203,160	19,892,101

<sup>(1)</sup> On April 16, 2014, we announced a share repurchase program of up to 52,962,202 of our ordinary shares through October 16, 2015. The maximum number of shares that may yet be purchased is not necessarily an indication of the number of shares that will ultimately be purchased.

#### Item 6. Selected Financial Data.

See Management's Discussion and Analysis of Financial Condition and Results of Operations for a discussion of factors that will enhance an understanding of this data.

The following selected financial data of the Company and its predecessor, LyondellBasell Industries AF S.C.A. ("LyondellBasell AF"), should be read in conjunction with the Consolidated Financial Statements and related notes thereto and "Management's Discussion and Analysis of Financial Condition and Results of Operations," below. The selected financial data of the Company and the Predecessor were derived from their consolidated financial statements. Those financial statements were prepared from the books and records of LyondellBasell AF for periods through April 30, 2010 and of the Company upon emergence from bankruptcy after that date. As discussed elsewhere in this annual report on Form 10-K, we became the successor parent holding company of the subsidiaries of LyondellBasell AF and the reporting entity upon completion of the bankruptcy proceedings. Financial information is reported for the Company as the successor on a basis different from financial information of the predecessor, LyondellBasell AF. As a result of the application of fresh-start accounting and restructuring activities pursuant to the Plan of Reorganization, the successor period is not comparable to the predecessor period.

		Predecessor				
	Year Ended December 31,				May 1 through December 31,	January 1 through April 30,
In millions of dollars, except per share data	2014	2013	2012	2011	2010	2010
Results of operations data:						
Sales and other operating revenues	\$45,608	\$44,062	\$45,352	\$48,183	\$26,132	\$12,807
Operating income(a)	5,736	5,102	4,676	4,337	2,292	704
Interest expense(b)	(352)	(309)	(655)	(1,044)	(539)	(711)
Income from equity investments	257	203	143	216	86	84
Income from continuing operations(a)(c)	4,172	3,860	2,858	2,472	1,561	8,262
Earnings per share from continuing operations:						
Basic	8.04	6.81	5.01	4.34	2.76	
Diluted	8.00	6.76	4.96	4.32	2.75	
Income (loss) from discontinued operations,						
net of tax	(4)	(7)	(24)	(332)	19	242
Earnings (loss) per share from discontinued	. ,	. ,	( /	,		
operations:						
Basic	(0.01)	(0.01)	(0.04)	(0.58)	0.03	
Diluted	(0.01)	(0.01)	(0.04)	(0.58)		
Balance sheet data:	, ,	, ,	` ′	` ′		
Total assets	24,283	27,298	24,220	22,839	25,302	
Short-term debt	346	58	95	48	42	
Long-term debt(d)	6,761	5,777	4,305	3,984	6,040	
Cash and cash equivalents	1,031	4,450	2,732	1,065	4,222	
Short-term investments	1,593	_		_		
Accounts receivable	3,448	4,030	3,904	3,778	3,747	
Inventories	4,517	5,279	5,075	5,499	4,824	
Working capital	4,901	5,737	5,694	5,863	5,810	
Cash flow data:						
Cash provided by (used in):						
Operating activities	6,048	4,835	4,787	2,860	2,968	(925)
Investing activities	(3,531)	(1,602)	(1,013)	(1,021)	(323)	(224)
Expenditures for property, plant and						
equipment	(1,499)	` ' '	. , ,	(1,050)	` /	(226)
Financing activities	(5,907)	(1,589)		(4,955)	(1,194)	3,315
Dividends declared per share	2.70	2.00	4.20	5.05		

- (a) Includes a \$760 million pretax, non-cash charge (\$483 million, after tax) related to a lower of cost or market inventory valuation adjustment in 2014 primarily associated with a decline in the price of crude oil and a related decline in the prices of heavy liquids and other correlated products.
- (b) Interest expense in 2012 included charges of \$294 million for premiums related to the refinancing of notes bearing interest rates of 8% and 11% per annum with lower coupon notes. In 2011, interest expense included \$443 million of prepayment premiums and unamortized debt issuance cost write-offs.
- (c) Income from continuing operations for the year ended December 31, 2013 included a \$353 million benefit related to the release of valuation allowances primarily associated with tax losses in our French group. For the years ended December 31, 2012 and 2011, income from continuing operations included after-tax charges of \$210 million and \$279 million, respectively, for premiums and charges on the early repayment of debt. Income from continuing operations for the four months ended April 30, 2010 included after-tax income of \$8,376 million related to reorganization items.
- (d) Includes current maturities of long-term debt.

## Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations. GENERAL

This discussion should be read in conjunction with the information contained in our Consolidated Financial Statements, and the accompanying notes elsewhere in this report. When we use the terms "we," "us," "our" or similar words in this discussion, unless the context otherwise requires, we are referring to LyondellBasell Industries N.V. and its consolidated subsidiaries.

References to industry benchmark prices or costs, including the weighted average cost of ethylene production, are generally to industry prices and costs from third-party consulting data. References to industry benchmarks for refining and oxyfuels market margins are to industry prices reported by Platts, a reporting service of The McGraw-Hill Companies. References to industry benchmark prices for crude oil and natural gas are to Bloomberg.

### **OVERVIEW**

Our performance is driven by, among other things, global economic conditions generally and their impact on demand for our products, raw material and energy prices, as well as industry-specific issues, such as production capacity. Our businesses are generally subject to the cyclicality and volatility seen in the chemicals and refining industries.

We achieved record earnings in 2014 despite the impact of a significant lower of cost or market inventory valuation charge necessitated by the decline in crude oil and correlated product prices in the latter part of the year. We believe our industry position remains favorable and are confident in the fundamentals supporting our businesses. In 2014, we continued to focus on our back-to-basics strategy and high return growth projects, some of which are already contributing to earnings.

Significant items that affected 2014 results include:

- Recognized lower of cost or market ("LCM") inventory valuation charges affecting all but the Technology segment in the third and fourth quarters of 2014 totaling \$760 million, pretax (\$483 million, after tax);
- Improved Olefins and Polyolefins—Americas ("O&P—Americas") and Olefins and Polyolefins— Europe, Asia, International ("O&P—EAI") segment results on higher olefins and polyolefins margins, offset in part by lower North American volumes and supplemented by higher European olefins volumes;
- Steady Intermediates and Derivatives ("I&D") segment results reflect higher acetyls and propylene
  oxide ("PO") and derivatives results offset in part by lower results for oxyfuels, styrene and ethylene
  oxide ("EO") and derivatives; and
- Improved refining margins and higher crude processing rates at our Houston refinery.

Other noteworthy items during 2014 include the following:

- We repurchased approximately 63.3 million of our ordinary shares during 2014;
- We increased our interim dividends in 2014 from \$0.60 to \$0.70;
- Our corporate credit rating and our senior secured debt rating were raised by Standard & Poor's to BBB+ and BBB, respectively;
- Our wholly owned subsidiary, LYB International Finance B.V., issued \$1 billion of 4.875% unsecured notes:

- We continued an ethylene expansion project at our Channelview, Texas facility, completed an 800 million pound per year ethylene expansion at our La Porte, Texas facility in the last half of 2014, and a 220 million pound per year polyethylene ("PE") expansion of our Matagorda, Texas facility in the first quarter of 2014;
- In April 2014, we received a permit issued by the Environmental Protection Agency authorizing us to commence an ethylene expansion project at our Corpus Christi, Texas facility;
- We announced plans to build a world scale PO/TBA plant on the U.S. Gulf Coast with an annual
  capacity of 1 billion pounds of PO and 2 billion pounds of tertiary butyl alcohol ("TBA") and its
  derivatives. Based on a preliminary timetable, the plant is currently slated to be operational in 2019;
- We also announced that we are evaluating a 550 million pounds-per-year ethylene expansion project at our Channelview, Texas facility. Preliminary engineering work is underway to assess expansion feasibility. If we proceed with this project, the anticipated time frame for completion would be 2017.

Results of operations for the periods discussed in these "Results of Operations" are presented in the table below.

	Year Ended December 31,		
Millions of dollars	2014	2013	2012
Sales and other operating revenues	\$45,608	\$44,062	\$45,352
Cost of sales	38,939	37,940	39,595
Selling, general and administrative expenses	806	870	909
Research and development expenses	127	150	172
Operating income	5,736	5,102	4,676
Interest expense	(352)	(309)	(655)
Interest income	33	15	15
Other income (expense), net	38	(15)	6
Income from equity investments	257	203	143
Provision for income taxes	1,540	1,136	1,327
Income from continuing operations	4,172	3,860	2,858
Loss from discontinued operations, net of tax	(4)	(7)	(24)
Net income	\$ 4,168	\$ 3,853	\$ 2,834

### RESULTS OF OPERATIONS

**Revenues**—We had revenues of \$45,608 million in 2014, \$44,062 million in 2013 and \$45,352 million in 2012.

2014 versus 2013—Revenues increased by \$1,546 million, or 4%, in 2014 compared to 2013.

Higher sales volumes for acetyls, styrene, PO and derivatives and refining products, which were offset in part by lower volumes for U.S. olefins and EO and derivatives, contributed to 4% higher revenues in 2014 compared to 2013. Higher acetyls sales volumes in 2014 benefited from the restart of our Methanol plant at Channelview, Texas in December 2013. Sales volumes for styrene improved in 2014 compared to 2013, which was affected by planned maintenance activities in the U.S. and Europe. Industry outages in Europe and Asia in 2014 led to higher volumes for PO and derivatives. An increase in sales volumes of refined products in 2014 reflects higher crude processing rates relative to 2013, which was negatively impacted by planned outages at our Houston refinery. Sales volumes for U.S. polyethylene were favorably affected by firm demand and the completion of an expansion and turnaround of our Matagorda, Texas polyethylene facility. These increases were

offset in part by lower U.S. olefin sales volumes as 2014 volumes were impacted by an expansion-related turnaround at our La Porte, Texas facility. Unplanned outages in 2014 resulted in lower EO and derivative volumes during that period.

In 2014, higher average sales prices for U.S. polyethylene, polypropylene ("PP"), PP compounds, PO and derivatives, except butanediol ("BDO"), and vinyl acetate monomer ("VAM") were offset by lower average sales prices for European polyethylene, butanediol, oxyfuels, C4 chemicals and refining products.

Increased demand and industry supply issues in 2014 led to the increase in U.S. polyethylene prices. The improvements in polypropylene prices reflected more favorable market conditions in 2014 versus 2013. Global industry constraints and limited regional supply led to increased prices for VAM and all of our PO and derivatives products, except butanediol, which declined due to excess industry capacity in Asia and the Middle East. The lower average sales prices for oxyfuels in 2014 reflected the impact of lower Brent crude oil and gasoline prices, which was partially offset by a higher octane blending premium. In 2014, the decline in C4 chemicals prices was driven by the lower energy profile, while the average sales prices for refining products reflected the decline in crude oil prices during the fourth quarter of 2014.

2013 versus 2012—Revenues decreased \$1,290 million, or 3%, in 2013 compared to 2012. Lower sales volumes in 2013 contributed 4% to the decrease in revenues over 2012. This decline in sales volumes primarily reflects the negative impact of lower crude processing rates at the Houston refinery on refining product volumes, which was offset in part by higher olefins sales volumes in our O&P—Americas segment. The impact of lower sales volumes was slightly mitigated by the effect of favorable exchange rates, which increased revenues by 1% in 2013 over 2012. Average sales prices were relatively unchanged in 2013 compared to 2012.

Cost of Sales—Cost of sales were \$38,939 million in 2014, \$37,940 million in 2013 and \$39,595 million in 2012.

2014 versus 2013—Cost of sales increased by \$999 million in 2014 compared to 2013. Non-cash, LCM charges related to inventories in all but our Technology segment were responsible for \$760 million of the \$999 million increase in Cost of sales. These charges, which were recognized in the third and fourth quarters of 2014, were primarily driven by declines in the prices of crude oil and products derived from or correlated to crude oil.

Excluding these LCM adjustments, cost of sales increased \$239 million in 2014 over 2013 primarily due to the impact of the higher sales volumes discussed above. This volume impact was reduced by the lower cost of crude oil and by the lower cost of ethylene production in the U.S. and Europe in 2014 compared to 2013.

2013 versus 2012—Cost of sales declined by \$1,655 million in 2013 compared to 2012. Cost of sales in 2012 included benefits totaling \$152 million from insurance proceeds associated with a 2008 hurricane, a recovery related to a former employee who pled guilty to fraud and the reversal of a reserve for an unfavorable monomer contract. These 2012 benefits were offset in part by charges totaling \$97 million for reorganization activities in Europe, facility closure costs in Australia and Italy and the impairment of a low density polyethylene ("LDPE") plant in Europe.

Apart from these factors, cost of sales was lower in 2013 than in 2012, primarily due the impact of lower sales volumes discussed above and lower feedstock costs. A shift to cracking more natural gas liquids ("NGLs") in our O&P—Americas segment, increased benefits from LPG cracking and the lower cost of naphtha in our O&P—EAI segment, and lower crude oil costs in our Refining segment were the most significant contributors to our lower feedstock costs in 2013. These benefits were offset in part by the higher costs of Renewable Identification Numbers ("RINs") and natural gas in our Refining segment and the higher costs of propylene, benzene and natural gas feedstocks in our I&D segment.

**Operating Income**—Our operating income was \$5,736 million, \$5,102 million and \$4,676 million in 2014, 2013 and 2012, respectively.

2014 versus 2013—Operating income increased by \$634 million in 2014, which includes the impact of the \$760 million LCM inventory valuation adjustment discussed above. This increase primarily reflects the impact of the higher sales volumes discussed above and margins that benefited from lower feedstock costs.

Apart from the LCM adjustment, margins were higher in 2014 across all businesses in our O&P—Americas and O&P—EAI segments, for PO and derivatives, acetyls and oxyfuels in our I&D segment and for refining products in our Refining segment. These higher margins were offset in part by lower margins for C4 chemicals, styrene and EO and derivatives in our I&D segment. Our higher margins generally reflected our lower cost of ethylene production and the lower cost of crude oil, but in some cases were driven by average sales prices that increased relative to the related feedstock costs. Lower margins for styrene and EO and derivatives reflected lower average sales prices compounded by higher feedstock costs and the lower C4 chemicals margins are attributed to falling energy prices.

2013 versus 2012—The increase in 2013 operating income reflects higher margins, offset in part by the decline in volumes and the items specific to 2012 discussed above. The lower average cost of feedstocks led to the improvement in margins in 2013, as average sales prices were relatively unchanged compared to 2012.

The higher margins in 2013 were related to olefins and polyethylene in our O&P—Americas and O&P—EAI segments and styrene, ethylene oxide/ethylene glycol ("EO/EG") and acetyls in our I&D segment. These improvements were partially offset by lower refining margins in our Refining segment and lower margins for oxyfuels, BDO and solvents in our I&D segment.

Operating results for each of our business segments are reviewed further in the "Segment Analysis" section below.

**Interest Expense**—Interest expense was \$352 million in 2014, \$309 million in 2013 and \$655 million in 2012.

2014 versus 2013—The increase in interest expense in 2014 compared to 2013 was primarily due to interest related to the July 2013 issuances of our 4% guaranteed notes due 2023 and 5.25% guaranteed notes due 2043 and the February 2014 issuance of our 4.875% guaranteed notes due 2044. These increases were partially offset by a \$28 million net favorable adjustment related to our fixed-for-floating interest rate swaps. See Note 14 to the Consolidated Financial Statements for additional information on these swaps.

2013 versus 2012—Interest expense was lower in 2013 compared to 2012, largely due to the refinancing of most of our long-term debt to lower coupon notes and the termination of our U.S. asset-based credit facility in 2012. In connection with the refinancing, we paid \$294 million of premiums and wrote off \$18 million of unamortized debt issuance costs. We also wrote off \$17 million of capitalized debt issuance costs as a result of the termination of our U.S. asset-based credit facility. The benefit of lower interest expense from the refinancing was partially offset in 2013 by interest related to the issuance of our 4% Notes due 2023 and 5.25% Notes due 2043 discussed above.

**Other Income** (Expense), net—We had other income, net, of \$38 million in 2014, other expense, net, of \$15 million in 2013 and other income, net, of \$6 million in 2012.

2014 versus 2013—The improvement in Other income, net, in 2014 compared to 2013 reflects a \$20 million benefit related to foreign exchange gains in 2014 versus losses in 2013, approximately \$13 million of dividends from investments accounted for using the cost basis and the absence of the \$16 million loss incurred in 2013 when we sold our investment in the Nihon Oxirane Company.

2013 versus 2012—The increase in Other expense, net, in 2013 versus 2012 primarily reflects the \$16 million loss we incurred on the sale of our investment in the Nihon Oxirane Company.

**Income from Equity Investments**—Our income from equity investments was \$257 million in 2014, \$203 million in 2013 and \$143 million in 2012.

2014 versus 2013—Our 2014 Income from equity investments increased by \$54 million over 2013. This improvement includes higher margins for some of our joint ventures in the Middle East, Europe and Asia, the impact of better operating rates at two of our joint ventures in Asia and one of our joint ventures in the Middle East that experienced significant unplanned maintenance in 2013. In 2014, an improved supply of feedstock at one our Asian joint ventures also contributed to the higher operating rates relative to 2013.

2013 versus 2012—The \$60 million increase in Income from equity investments in 2013 reflected higher margins and improved operations from our joint ventures in the Middle East and Asia. These benefits were offset in part by a \$10 million impairment of our NOC Asia Ltd. joint venture. For additional information related to this impairment, see Note 9 to the Consolidated Financial Statements. Operations improved in 2013 at our Al-Waha Petrochemicals Ltd. ("Al-Waha") joint venture as a result of turnaround activities there in 2012. Results for 2012 were also negatively affected by planned maintenance activities at our HMC Polymers Company Ltd. joint venture and unplanned outages at our Al-Waha joint venture.

Income Taxes—Our effective income tax rates of 27.0% in 2014, 22.7% in 2013 and 31.7% in 2012 resulted in tax provisions of \$1,540 million, \$1,136 million and \$1,327 million, respectively. Our effective income tax rate fluctuates based on, among other factors, changes in pretax income in countries with varying statutory tax rates, the amount of exempt income, the U.S. domestic production activity deduction, changes in valuation allowances, changes in foreign exchange gains/losses, and changes in unrecognized tax benefits associated with uncertain tax positions. The foreign exchange gains/losses have a permanent impact on our effective income tax rate that can cause unpredictable movement in our effective income tax rate. We continue to maintain valuation allowances in various jurisdictions totaling \$134 million, which could impact our effective tax rate in the future.

2014—The 2014 effective income tax rate, which was lower than the U.S. statutory tax rate of 35%, was favorably impacted by the amount of exempt income, the U.S. domestic production activity deduction, foreign exchange losses and a change in the geographic mix of earnings, notably an increase in various European countries with lower statutory tax rates and a decrease in the United States pretax income. These favorable items were partially offset by the effects of state and local income taxes.

2013—The 2013 effective income tax rate, which was lower than the U.S. statutory tax rate of 35%, reflected the release of certain valuation allowances and favorable permanent deductions related to exempt income and the U.S. domestic production activity deduction, partially offset by the effects of state and local taxes and foreign exchange gains. In 2013, we released valuation allowances primarily associated with tax losses in our French tax group resulting in an overall benefit of \$353 million.

2012—The 2012 effective income tax rate, which was lower than the U.S. statutory tax rate of 35%, reflected the release of certain valuation allowances and favorable permanent deductions related to exempt income and the U.S. domestic production activity deduction, partially offset by the effects of state and local taxes.

For further information related to our income taxes, see Note 18 to the Consolidated Financial Statements.

**Comprehensive Income**—We had comprehensive income of \$3,052 million in 2014, \$4,364 million in 2013 and \$2,864 million in 2012.

2014 versus 2013—Comprehensive income decreased by \$1,312 million in 2014 compared to 2013 primarily due to foreign currency translation losses and actuarial losses related to our defined benefit pension and other postretirement benefit plans that were recognized during the period. These losses were offset in part by the increase in 2014 net income over 2013. The predominant functional currency for our operations outside of the U.S. is the euro. Relative to the U.S. dollar, the value of the euro decreased in 2014 versus 2013, resulting in foreign currency translation losses, which decreased Comprehensive income by \$958 million. In 2014, we

recognized net actuarial losses of \$493 million, which compares to a net actuarial gain of \$411 million recognized in 2013. This \$904 million decline in 2014 reflects \$663 million related to discount rate assumption changes and other immaterial liability experience gains and losses and \$241 million primarily related to actual asset return in excess of the expected return compared to 2013.

2013 versus 2012—Comprehensive income increased by \$1,500 million in 2013 compared to 2012 primarily due to higher net income and lower actuarial losses related to our defined benefit pension and other postretirement benefit plans and to a lesser extent, gains on foreign currency translations. In 2013, we recognized a net actuarial gain of \$411 million, which compares to a net actuarial loss of \$198 million recognized in 2012. This \$609 million improvement in 2013 reflects \$515 million related to discount rate assumption changes and other immaterial liability experience gains and losses and \$94 million related to actual asset return in excess of the expected return compared to 2012. Relative to the U.S. dollar, the value of the euro increased in 2013 versus 2012, resulting in higher foreign currency translation gains, which contributed \$88 million to the increase in Comprehensive income.

See "Critical Accounting Policies" below and Note 16 to the Consolidated Financial Statements for additional information on the key assumptions included in calculating the discount rate and expected return on plan assets.

### **Segment Analysis**

We use earnings before interest, income taxes, and depreciation and amortization ("EBITDA") as our measure of profitability for segment reporting purposes. This measure of segment operating results is used by our chief operating decision maker to assess the performance of and allocate resources to our operating segments. Intersegment eliminations and items that are not directly related or allocated to business operations are included in "Other." For additional information related to our operating segments, as well as a reconciliation of EBITDA to its nearest generally accepted accounting principles ("GAAP") measure, Income from continuing operations before income taxes, see Note 22, Segment and Related Information, to our Consolidated Financial Statements.

Our continuing operations are divided into five reportable segments: O&P—Americas; O&P—EAI; I&D; Refining; and Technology. The following tables reflect selected financial information for our reportable segments.

	Year Ended December 31,		
Millions of dollars	2014	2013	2012
Sales and other operating revenues:			
O&P—Americas segment	\$13,948	\$13,089	\$12,934
O&P—EAI segment	15,203	14,685	14,521
I&D segment	10,130	9,472	9,658
Refining segment	11,710	11,698	13,291
Technology segment	497	532	498
Other, including intersegment eliminations	(5,880)	(5,414)	(5,550)
Total	\$45,608	\$44,062	\$45,352
Income (loss) from equity investments:			
O&P—Americas segment	\$ 21	\$ 25	\$ 25
O&P—EAI segment	229	174	121
I&D segment	7	4	(3)
Total	\$ 257	\$ 203	\$ 143
10tai	Ψ 231	Ψ 203	Ψ 1+3
EBITDA:			
O&P—Americas segment	\$ 3,911	\$ 3,573	\$ 2,968
O&P—EAI segment	1,366	839	548
I&D segment	1,459	1,492	1,621
Refining segment	65	182	481
Technology segment	232	232	197
Other, including intersegment eliminations	17	(7)	(7)
Total	\$ 7,050	\$ 6,311	\$ 5,808

### Olefins and Polyolefins—Americas Segment

**Overview**—In calculating the impact of margin and volume on EBITDA, consistent with industry practice, management offsets revenues and volumes related to ethylene co-products against the cost to produce ethylene. Volume and price impacts of ethylene co-products are reported in margin. Ethylene is a major building block of our olefins and polyolefins businesses and as such management assesses the performance of the segment based on ethylene sales volumes and prices and our internal cost of ethylene production.

2014 versus 2013—Segment results were higher in 2014, primarily due to improved polyethylene and olefins results and, to a lesser extent, higher polypropylene margins. Margin improvements and higher sales volumes in 2014 contributed to the increase in polyethylene results over 2013. Our 2014 olefins results reflected higher margins relative to 2013, offset in part by lower sales volumes from the outage at our La Porte, Texas facility prior to the completion of an 800 million pound ethylene expansion in September 2014. Our segment results were negatively impacted by a \$279 million non-cash, LCM inventory valuation adjustment, most of which was recognized in the fourth quarter. Absent this lower of cost or market inventory valuation adjustment, our fourth quarter 2014 segment results would have been similar to our strong third quarter 2014 results.

Prices for heavy liquids, NGLs and olefins declined significantly in December 2014, in many cases to levels that have not been seen in recent years. The price levels for these products were lower than the carrying value of our related inventories as of December 31, 2014 requiring us to record the LCM inventory valuation adjustment discussed above.

Ethylene produced from NGLs in North America has been much lower in cost than that produced from crude oil-based liquids. Naphtha and other crude oil-based liquids are the predominant feedstocks in the rest of the world. Margins in our olefins and polyethylene businesses in 2014, 2013 and 2012 have benefited from this advantage though that benefit may be diminished should the recent lower prices of naphtha and other crude-oil based liquids continue or decline further. In such an event, our olefins and polyethylene margins may be reduced from the record levels of 2014.

2013 versus 2012—Stronger segment earnings in 2013 primarily reflected improved olefins and polyethylene results over 2012. Olefins results in 2013 benefited from a decrease in our cost to produce ethylene and from higher sales volumes. Polyethylene results also improved on higher margins while polypropylene results declined on modestly lower margins.

Ethylene Raw Materials—Benchmark crude oil and natural gas prices generally have been indicators of the level and direction of the movement of raw material and energy costs for ethylene and its co-products in the O&P—Americas segment. Ethylene and its co-products are produced from two major raw material groups:

- NGLs, principally ethane and propane, the prices of which are generally affected by natural gas prices;
   and
- crude oil-based liquids ("liquids" or "heavy liquids"), including naphtha, condensates, and gas oils, the prices of which are generally related to crude oil prices.

Although prices of these raw materials are generally related to crude oil and natural gas prices, during specific periods the relationships among these materials and benchmarks may vary significantly. In the U.S., we have significant capability to change the mix of raw materials used in the production of ethylene and its coproducts to take advantage of the relative costs of heavy liquids and NGLs.

Production economics for the industry favored NGLs during 2014, 2013 and 2012. As a result, we increased our use of NGLs and reduced liquids consumption at our U.S. plants in each year since 2011. Approximately 90% of our U.S. ethylene production was produced from NGLs in each of 2014 and 2013 while in 2012, we produced approximately 85% of our ethylene from NGLs.

The following table shows the average U.S. benchmark prices for crude oil and natural gas for the applicable periods, as well as benchmark U.S. sales prices for ethylene and propylene, which we produce and sell or consume internally. The table also shows the discounted U.S. benchmark prices for certain polyethylene and polypropylene products. These industry benchmark prices are third party estimates that are indicative of contract sales for some key product grades, but do not necessarily describe price trends for our full olefins or polymers product mixes. The benchmark weighted average cost of ethylene production, which reflects credits for coproduct sales, is based on a third party consultant's estimated ratio of heavy liquid raw materials and NGLs used in U.S. ethylene production.

Average Benchmark Price and Percent Change Versus Prior Year Period Average

	Year Ended December 31,				Year Ended December 31,	
	2014	2013	Change	2013	2012	Change
Crude oil, dollars per barrel:						
West Texas Intermediate ("WTI")	92.91	98.06	(5)%	98.06	94.15	4%
Light Louisiana Sweet ("LLS")	96.92	107.31	(10)%	107.31	111.70	(4)%
Natural gas (Henry Hub), dollars per million BTUs	4.51	3.78	19%	3.78	2.90	30%
United States, cents per pound:						
Weighted average cost of ethylene production	15.4	16.2	(5)%	16.2	21.2	(24)%
Ethylene	48.0	46.7	3%	46.7	48.3	(3)%
Polyethylene (high density)	77.0	70.5	9%	70.5	62.3	13%
Propylene—polymer grade	70.9	68.7	3%	68.7	60.4	14%
Polypropylene	86.3	82.2	5%	82.2	72.5	13%

The following table sets forth selected financial information for the O&P—Americas segment including Income from equity investments, which is a component of EBITDA.

	Y ear E	inded Decem	er 31,	
Millions of dollars	2014	2013	2012	
Sales and other operating revenues	\$13,948	\$13,089	\$12,934	
Income from equity investments	21	25	25	
EBITDA	3,911	3,573	2,968	

**Revenues**—Revenues increased by \$859 million, or 7%, in 2014 compared to 2013 and \$155 million, or 1%, in 2013 compared to 2012.

2014 versus 2013—The \$859 million increase in revenues in 2014 is the result of higher average sales prices and higher sales volumes, which account for 6% and 1%, respectively, of the increase over 2013. Average sales prices in 2014 were higher across most products, particularly polyethylene. Higher average polyethylene prices in 2014 reflect increased demand and industry supply issues in the ethylene and polyethylene market. Average polypropylene prices also improved in 2014, reflecting a market environment that was more favorable than in 2013.

The increase in sales volumes in 2014 was primarily due to higher polyethylene sales volumes offset in part by lower ethylene volumes. Higher polyethylene sales volumes reflect the completion of an expansion-related turnaround at our Matagorda, Texas facility in the early part of 2014 and strong industry demand. Firm market demand throughout 2014 also contributed to the increase in polyethylene sales volumes over 2013. Ethylene volumes were negatively impacted by production constraints as a result of the turnaround at our La Porte, Texas facility during 2014. Polypropylene sales volumes were relatively unchanged between the 2014 and 2013 periods.

2013 versus 2012—In 2013, a 2% increase in revenues attributable to higher olefins sales volumes was partly offset by a 1% revenue decrease stemming from lower average sales prices. An increase in 2013 coproduct sales volumes, particularly propylene and butadiene, more than offset the decline in ethylene volumes during that period. The decrease in 2013 revenues attributable to lower average sales prices primarily reflects lower average sales prices for ethylene and butadiene partly offset by higher average sales prices for polyolefins. Polyethylene sales prices were higher in 2013, largely reflecting supply constraints due to competitor outages, while increases in the cost of propylene feedstock led to higher average sales prices for polypropylene.

**EBITDA**—EBITDA increased by \$338 million, or 9%, in 2014 compared to 2013 and by \$605 million, or 20%, in 2013 compared to 2012.

2014 versus 2013—The 9% improvement in EBITDA during 2014 reflects a 19% increase related to higher margins which was offset in part by a 2% decrease related to volumes and an 8% decrease related to the \$279 million lower of cost or market inventory valuation adjustment discussed above.

Margins were higher across all products, especially for olefins and polyethylene. The combination of higher ethylene sales prices discussed above, the lower cost of NGLs and heavy liquids, and higher co-product credits resulted in an improvement in olefins margins in 2014 compared to 2013. Higher polyethylene margins in 2014 reflect higher average sales prices as discussed above offset in part by increases in ethylene feedstock costs. Polypropylene margins also improved in 2014 due to the continued strength in pricing that carried over from late 2013.

The decrease in EBITDA attributable to the lower volumes reflects a decline in olefins volumes which was partially offset by higher polyethylene volumes.

2013 versus 2012—In 2013, the improvement in EBITDA was primarily driven by a 25% increase related to margins. This benefit was offset in part by a 4% decrease associated with volumes and a 1% decrease related to a \$29 million benefit in 2012 associated with a hurricane-related insurance settlement.

Olefins margins benefited from the lower costs of NGL and heavy liquids feedstock, which more than offset the impact of lower average sales prices. Higher polyethylene margins reflected higher average sales prices and to a lesser extent, lower feedstock costs. Although average sales prices were significantly higher for polypropylene in 2013, this benefit was outpaced by the rising cost of its primary feedstock, propylene, resulting in modestly lower margins over 2012.

The decline in 2013 EBITDA attributed to volumes was largely due to lower ethylene volumes in 2013 relative to 2012 as a result of increased turnaround activity in 2013.

### Olefins and Polyolefins—Europe, Asia, International Segment

### Overview

2014 versus 2013—Operating results in 2014 reflect improved results for our olefins and European polyolefins businesses and, to a lesser extent, better results for our joint ventures that are accounted for using the equity method. Higher margins and operating rates, which surpassed European average industry rates, contributed to the higher olefins results in 2014. The improvement in our polyolefins results in 2014 reflected improved margins versus 2013 and higher polyethylene volumes. Although market conditions for European producers remain highly competitive, the increase in European demand for polyolefins is consistent with the modest overall economic recovery that has been evidenced in the region.

In the fourth quarter of 2014, the declining price of naphtha resulted in a market price lower than the carrying value of our related inventory. Accordingly, we recorded a \$44 million non-cash, LCM inventory valuation charge related to our olefins business. Despite this charge, our fourth quarter results remained consistent with our prior quarterly results during 2014. The fall of our product prices lagged behind the decline in feedstock prices throughout the latter part of 2014.

2013 versus 2012—Although operating results improved in 2013 compared to 2012, market conditions in Europe remained weak. Operating results in 2013 primarily reflected higher results for European olefins and also reflected improved margins in most businesses relative to 2012. Results during 2012 were impacted by a scheduled maintenance turnaround at our Wesseling, Germany plant.

Ethylene Raw Materials—In Europe, heavy liquids are the primary raw materials for our ethylene production. During 2014, we significantly increased the consumption of feedstocks other than naphtha, such as propane, butane and condensates, in our production process. The prices for these other feedstocks have been subject to declines that are of the same or greater magnitude as the declines in the crude oil prices.

The following table shows the average Western Europe benchmark prices for Brent crude oil for the applicable periods, as well as benchmark Western Europe prices for ethylene and propylene, which we produce and consume internally or purchase from unrelated suppliers, and discounted prices for certain polyethylene and polypropylene products. These industry benchmark prices are third party estimates that are indicative of contract sales for some key product grades, but do not necessarily describe price trends for our full olefins or polymers product mixes.

Average Benchmark Price and Percent Change Versus Prior Year Period Average

Year Ended December 31,			Year Ended December 31,		
2014	2013	Change	2013	2012	Change
99.45	108.70	(8)%	108.70	111.68	(3)%
29.2	34.7	(16)%	34.7	38.9	(11)%
52.6	55.8	(6)%	55.8	56.2	(1)%
54.5	58.2	(6)%	58.2	59.4	(2)%
50.5	49.5	2%	49.5	50.7	(2)%
59.9	57.9	3%	57.9	58.3	(1)%
1.3297	1.3280	— %	1.3280	1.2858	3%
	2014 99.45 29.2 52.6 54.5 50.5 59.9	December 31,           2014         2013           99.45         108.70           29.2         34.7           52.6         55.8           54.5         58.2           50.5         49.5           59.9         57.9	December 31,           2014         2013         Change           99.45         108.70         (8)%           29.2         34.7         (16)%           52.6         55.8         (6)%           54.5         58.2         (6)%           50.5         49.5         2%           59.9         57.9         3%	December 31,         December 31,         December 31,         December 31,           2014         2013         Change         2013           99.45         108.70         (8)%         108.70           29.2         34.7         (16)%         34.7           52.6         55.8         (6)%         55.8           54.5         58.2         (6)%         58.2           50.5         49.5         2%         49.5           59.9         57.9         3%         57.9	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

The following table sets forth selected financial information for the O&P—EAI segment including Income from equity investments, which is a component of EBITDA.

	Year Ended December 31,		
Millions of dollars	2014	2013	2012
Sales and other operating revenues	\$15,203	\$14,685	\$14,521
Income from equity investments	229	174	121
EBITDA	1,366	839	548

**Revenues**—Revenues in 2014 increased by \$518 million, or 4%, compared to 2013 and by \$164 million, or 1%, in 2013 compared to 2012.

2014 versus 2013—The increase in 2014 revenues comprises a 2% increase related to higher sales volumes and a 2% increase from higher average sales prices. Improved operations of our crackers in 2014 versus 2013 resulted in higher output, which led to higher olefins sales volumes. Higher polyethylene sales volumes reflect an increase in our low density polyethylene production capacity relative to 2013 due to operational issues during that time. Polypropylene sales volumes were lower in 2014 largely due to lower output as a result of turnaround activities at one of our joint ventures during the first quarter of 2014 and the closure of our Clyde production facility in Australia in late 2013.

In 2014, higher average prices for polypropylene and PP compounds were partially offset by lower average polyethylene prices. Increases in feedstock costs in 2014 led to the higher polypropylene and PP compounds sales prices compared to 2013. The lower polyethylene prices in 2014 reflect a decline in ethylene feedstock costs, primarily in Europe.

2013 versus 2012—In 2013, a 2% increase in revenues driven by the favorable impact of changes in foreign exchange was partially offset by a 1% decrease stemming from lower average sales prices. The decrease in average sales prices was largely attributable to lower sales prices for olefins. These prices are generally correlated with the cost of naphtha, which decreased during 2013 compared to 2012. Sales volumes in 2013 decreased less than 1% from 2012, as a small decrease in olefins volumes was substantially offset by a similar increase in polypropylene sales volumes.

**EBITDA**—EBITDA increased by \$527 million, or 63%, in 2014 compared to 2013 and by \$291 million, or 53%, in 2013 compared to 2012.

2014 versus 2013—The 63% improvement in 2014 EBITDA included a 51% increase related to margins, a 7% increase related to higher volumes and a 7% increase related to improvements in income from our equity investments. These increases were partially offset by a 2% decrease related to a net charge of \$17 million discussed below. In 2014, EBITDA included a \$52 million benefit associated with a settlement for certain existing and future environmental claims under a 2005 indemnification agreement from an insurance settlement, which was offset in part by a \$44 million charge related to an LCM adjustment driven by a decline in naphtha prices. In 2013, EBITDA included a \$25 million benefit from an insurance settlement related to the damage to our LDPE plant described below.

The increase in 2014 results was mainly driven by higher earnings in olefins and European polyolefins compared to 2013. Higher olefins results reflect margin improvements and the impact of higher volumes discussed above. Olefin margins were higher primarily due to the combination of the decline in naphtha feedstock prices during the second half of 2014, higher consumption of advantaged feedstocks and increased propylene sales prices driven by tightness in the European market. Polyethylene results improved during 2014 on higher sales volume, as discussed above, and on higher spreads, primarily due to lower ethylene feedstock costs. Polypropylene results increased in 2014 over the corresponding prior year period as the margin improvements from higher spreads more than offset the impact of the lower volumes discussed above.

The higher contribution to our results by certain of our joint ventures, which is reflected in Income from equity investments in 2014, is mainly driven by improved margins compared to 2013 as a result of favorable market price developments during 2014.

2013 versus 2012—The 53% improvement in 2013 EBITDA mainly consists of a 28% increase related to margins, a 10% improvement related to equity income and a \$76 million, or 14%, net benefit of one-time items in 2013 versus 2012 discussed below. The impact on EBITDA from the volume change in 2013 versus 2012 was negligible. In 2013, EBITDA included a \$25 million benefit from an insurance settlement related to the damage to our LDPE plant described below. In 2012, EBITDA included charges of \$35 million for restructuring activities in Europe, \$22 million for closure costs in Australia and Italy and \$22 million for impairment of assets related to the damage of our LDPE plant in Wesseling, Germany. These 2012 charges were partially offset by a \$28 million benefit in 2012 related to the reversal of a reserve for an unfavorable monomer contract.

The increase in 2013 segment results was driven mainly by higher olefins results. The higher olefins results reflect higher margins as lower naphtha feedstock costs and the benefit of processing advantaged feedstock during the summer months more than offset lower average sales prices during the period. In addition, olefins sales price increases in 2012 lagged steep naphtha feedstock cost increases for several months.

Excluding the impact of the one-time items discussed above, underlying results for polyolefins reflected higher polyethylene margins and an increase in polypropylene volumes. PP compounds margins, which reflected higher sales prices coupled with decreases in the costs of its key raw material, propylene, also improved in 2013 relative to 2012. Higher margins due to higher average sale prices contributed to the better polybutene-1 results in 2013 compared to 2012.

The higher contribution to our 2013 results by certain of our joint ventures is largely due to higher margins and improved operations of our joint ventures in the Middle East and Asia.

#### **Intermediates and Derivatives Segment**

#### Overview

2014 versus 2013—Operating results for our I&D segment were slightly lower in 2014 compared to 2013 due to a \$93 million non-cash, LCM inventory valuation adjustment recognized in the fourth quarter of 2014. This adjustment was a result of the decline of prices for oxyfuels and the raw materials used to produce oxyfuels that fell to levels that were lower than the carrying value of our related inventories at December 31, 2014.

Absent this inventory valuation adjustment, results reflected improvements in acetyls and PO and derivatives that were offset in part by lower results for styrene, EO/EG, oxyfuels and C4 chemicals. Higher acetyls results were primarily driven by the restart of the Channelview, Texas methanol unit in December 2013. Industry outages and the delay of announced capacity additions contributed to the higher PO and derivatives results in 2014. Lower results for styrene in 2014 were driven by excess supply and higher feedstock prices compared to 2013. Unplanned maintenance in the last half of the year contributed to our lower EO/EG results in 2014. The decrease in oxyfuels and C4 chemicals results reflected the impact of lower oxyfuels sales volumes that was partially offset by slightly higher margins.

2013 versus 2012—Our I&D operating results for 2013 were lower relative to 2012, mainly due to a decline in oxyfuels results from the exceptionally strong results reported in 2012. Additions to BDO industry capacity and raw material increases during 2013 contributed to a decline in our PO derivative results. Improved results for styrene, acetyls and EO/EG in 2013 were driven by higher margins as compared to 2012. Results were also negatively impacted during the 2013 period by scheduled maintenance at our facilities in the U.S. and Europe.

The following table sets forth selected financial information for the I&D segment including Income from equity investments, which is a component of EBITDA. In addition, the table shows methyl tertiary butyl ether ("MTBE") margins in Northwest Europe ("NWE").

		Year Ended December 31,		
Millions of dollars	2014	2013	2012	
Sales and other operating revenues	\$10,130	\$9,472	\$9,658	
Income (loss) from equity investments	7	4	(3)	
EBITDA	1,459	1,492	1,621	
Market margins, cents per gallon				
MTBE-NWE	94.0	79.1	118.2	

**Revenues**—Revenues for 2014 increased by \$658 million, or 7%, compared to 2013 and decreased by \$186 million, or 2%, in 2013 compared to 2012.

2014 versus 2013—Sales volumes and average sales prices increased revenues by 6% and 1%, respectively, in 2014 compared to 2013.

Higher sales volumes for acetyls, styrene and PO were offset in part by lower EO and derivatives and oxyfuels sales volumes. The 2014 increase in acetyls sales volumes was primarily driven by the December 2013 restart of our methanol plant in Channelview, Texas. Sales volumes for styrene were higher in 2014 as volumes in 2013 were negatively impacted by planned plant outages at our Channelview, Texas and Maasvlakte, The Netherlands facilities, which limited production capacity during that period. PO sales volumes were higher largely due to industry outages in Asia and Europe in 2014. Due to unplanned outages at our Bayport, Texas facility in 2014, available production capacity was limited, which resulted in lower EO derivatives volumes compared to 2013. Planned and unplanned production constraints in 2014 were also responsible for lower oxyfuels volumes compared to 2013.

In 2014, higher average sales prices for PO and derivatives and VAM were partially offset by declines in the average sales prices for oxyfuels and C4 chemicals in 2014 compared to 2013. Global industry supply constraints and limited regional supply capacity led to higher prices for PO and derivatives as well as VAM in 2014 compared 2013. Oxyfuels sales prices declined in 2014 relative to 2013 with lower Brent crude oil and gasoline prices, which were partially mitigated by an increase in the octane blend premium. Octane blend premiums remained strong in 2014, primarily due to industry supply constraints and regionally strong blending demand.

2013 versus 2012—A 4% decrease in revenues in 2013 stemming from lower sales volumes was offset in part by increases in revenue of 1% due to higher average sales prices and 1% from favorable average foreign exchange impacts. In 2013, lower sales volumes for PO and derivatives and styrene were partially offset by higher oxyfuels and methanol sales volumes, compared to 2012. An oversupplied market, which more than offset the benefit from nominal demand growth, contributed to lower BDO sales volumes in 2013 compared to 2012. Turnaround activities in 2013 led to lower styrene volumes during that period. Improved South American demand resulted in higher oxyfuels sales volumes relative to 2012. The increase in methanol sales volumes was attributable to the restart in December 2013 of our Channelview, Texas, methanol plant, which had been idled since 2004.

Higher average sales prices in 2013 increased revenues by 1% compared to 2012. Average sales prices for PO increased in 2013 largely due to increases in the price of propylene. Supply constraints due to industry outages resulted in higher average sales prices for styrene in 2013 compared to 2012. Higher demand for methanol due to supply constraints in the Middle East and Asia coupled with supply constraints for VAM in Europe, led to increases in acetyls sales prices in 2013 over those seen in 2012. These increases were substantially offset by declines in oxyfuels and BDO sales prices. Oxyfuels sales prices decreased in 2013, reflecting reduced spreads over gasoline relative to a supply-constrained market in 2012, as well as lower gasoline prices and reduced gasoline spread over butane. BDO sales prices also declined due to weak economic conditions and an oversupplied Asian market.

**EBITDA**—EBITDA decreased by \$33 million, or 2%, in 2014 compared to 2013 and decreased by \$129 million, or 8%, in 2013 compared to 2012.

2014 versus 2013—EBITDA decreased in 2014 as a result of the \$93 million LCM inventory valuation adjustment in 2014 related to our oxyfuels business, which represented a 6% decrease in EBITDA compared to 2013. The impact of this charge was offset in part by a 2% increase in EBITDA related to 2013 charges totaling \$26 million associated with the sale of our investment in Nihon Oxirane Company discussed below. In addition to these items, a 10% increase in EBITDA related to higher volumes was offset in part by a decrease of 8% related to lower margins.

Apart from the one-time items discussed above, our 2014 results reflected improvements in PO and derivatives and acetyls, partially offset by lower results for oxyfuels, C4 chemicals, styrene and EO/EG compared to 2013.

Improved PO and derivatives results for 2014 benefitted from Asian start-up delays, industry outages and European industry supply interruptions. These global factors collectively led to higher PO sales volumes and increases in average sales prices in 2014 compared to 2013. In addition, PO and derivatives, particularly propylene glycols, benefited from the unusually cold weather in early 2014 compared to 2013.

Higher acetyls results in 2014 primarily reflect higher methanol volumes due to the restart of our methanol plant in Channelview, Texas in December 2013 combined with improved VAM driven by industry outages and a reduction in overall market supply compared to 2013. Although operational issues during 2014 limited the benefit derived from the restart of our methanol plant discussed above, the plant added approximately 180 million gallons to the overall results during that period. Improved VAM margins in 2014, as increases in average sales prices were partly offset by higher feedstock costs, also contributed to the higher acetyls results compared to 2013.

The lower oxyfuels results were primarily due to decreases in sales volumes in 2014 as a result of planned and unplanned outages discussed above. Margins improved moderately in 2014 compared to 2013 as lower Brent crude oil and gasoline prices were more than offset by the improved spread between gasoline and crude oil, stronger octane blend premiums and lower feedstock prices. Margins were also negatively impacted by a shift in the level of sales between regions; in addition, C4 chemicals results declined on falling energy prices.

The decline in styrene results in 2014 compared to 2013 was attributed to lower margins that were partially offset by the impact of the higher sales volumes discussed above. Styrene margins decreased in 2014 compared to 2013 primarily due to lower average sales prices, reflecting weak demand and excess capacity, and higher benzene and ethylene feedstock prices.

EO/EG results in 2014 declined on lower margins and decreases in sales volumes relative to 2013.

2013 versus 2012—The 8% decline in EBITDA in 2013 reflected decreases of 5% related to margins, the \$44 million, or 3%, net negative impact of the one-time charges in 2013 versus 2012 and a slight decline in volumes.

In 2013, EBITDA included a \$16 million charge related to the sale of our 40% interest in Nihon Oxirane Company and a \$10 million impairment of our investment in our NOC Asia Ltd joint venture. See Note 9 to the Consolidated Financial Statements for additional information related to the sale and impairment of our interests in these joint ventures. In 2012, EBITDA included an \$18 million benefit related to hurricane-related insurance settlement.

Lower results for oxyfuels and PO derivatives were offset in part by higher styrene, acetyls and EO/EG margins. Oxyfuels results in 2013 reflected lower margins relative to the exceptionally strong margins in 2012. Reduced spreads over gasoline relative to a supply-constrained market in 2012, as well as lower gasoline prices and a reduced gasoline spread over butane contributed to the decrease in oxyfuels margins in 2013. Results for PO derivatives declined in 2013 primarily due to lower BDO and solvents results. An oversupplied Asian market, which more than offset nominal demand growth, resulted in lower sales volumes and weaker margins for BDO in 2013 compared to 2012.

These decreases were partially offset by improved styrene margins due to industry outages which constrained global supply and led to increases in average sales prices in 2013, which outpaced the higher costs of benzene feedstock. The improvement in acetyls results reflected the benefit of the restart of our Channelview, Texas methanol plant. Higher average sales prices and the lower cost of ethylene feedstock, the benefits of which were partly offset by higher natural gas costs, also contributed to the increase in acetyls results. Higher margins for EO/EG in 2013 reflected a modest increase in average sales prices and lower ethylene feedstock costs.

### **Refining Segment**

**Overview**—The Refining segment comprises the operations of our full conversion refinery located on the Houston Ship Channel in Houston, Texas. The Berre refinery, which was previously included in the Refining segment through the first quarter of 2012, was classified as discontinued operations in the second quarter of 2012. Accordingly, results of operations for the Berre refinery are not included in the segment discussion.

2014 versus 2013—The results of our Refining segment in 2014 were significantly impacted by a year-end, non-cash charge of \$344 million to reduce the carrying value of our inventories to market value at December 31, 2014. This inventory valuation charge was predicated on a near \$50 per barrel decline in crude oil prices since the third quarter of 2014 and corresponding reductions in refined product prices.

Fourth quarter 2014 results were markedly lower than results in the prior three quarters of 2014 as refined product margins contracted, and the recognition of the LCM inventory valuation adjustment resulted in a loss for the quarter. Excluding this charge, 2014 segment EBITDA reflected an increase over 2013 as refining margins improved, operating rates were higher, and costs for RINs, a U.S. government established credit used to show compliance in meeting the Environmental Protection Agency's Renewable Fuel Standard, declined by \$20 million.

2013 versus 2012—Lower refining margins in 2013 compared to 2012 reflected decreases in the average differential between light and heavy crude oils, lower by-product values and \$87 million of higher costs for RINs. Operating results were unfavorably impacted by lower crude processing rates, largely due to turnaround activities. Operational issues related to our coking units in December 2013 caused a decline in crude processing rates and suboptimal yields in the fourth quarter of 2013, negatively impacting results in 2013. As indicated in our discussion of operating activities included in "Financial Condition," purchases of intermediate feedstocks for our fluid catalytic cracking unit in December 2013 to replace the feedstocks normally provided by our coking units resulted in a temporary increase in accounts payable as of December 31, 2013.

The following table sets forth selected financial information and heavy crude processing rates for the Refining segment and the U.S. refining market margins for the applicable periods. "LLS" is a light crude oil, while "Maya" is a heavy crude oil.

	Year Ended December 31,		
Millions of dollars	2014	2013	2012
Sales and other operating revenues  EBITDA	\$11,710 65	\$11,698 182	\$13,291 481
Heavy crude oil processing rates, thousands of barrels per day	<u>259</u>	232	<u>255</u>
Market margins, dollars per barrel			
Light crude oil—2-1-1	\$ 13.32	\$ 12.89	\$ 12.86
Light crude oil—Maya differential	11.11	10.05	12.05
Total Maya 2-1-1	\$ 24.43	\$ 22.94	\$ 24.91

**Revenues**—Revenues were nearly unchanged in 2014 compared to 2013 and decreased by \$1,593 million, or 12%, in 2013 compared to 2012.

2014 versus 2013—Total revenues increased \$12 million on increased sales volume, which were nearly offset by lower product prices. Sales volumes increased 8% in 2014 relative to 2013 on the benefit of near capacity crude processing rates during most of the year. Processing rates in 2014 reflect an 12% improvement over rates in 2013, which were negatively impacted by planned and unplanned maintenance. This increase was offset by a nearly 8% decrease in revenues driven by lower refined product prices attributable to lower crude oil prices in 2014.

2013 versus 2012—Lower sales volumes in 2013 contributed 9% to the revenue decrease over 2012. This decrease in sales volumes corresponded to a 9% decrease in 2013 crude processing rates, mainly due to a scheduled turnaround during the first quarter of 2013 and unplanned maintenance during the year. In 2013, the increased supply of refined products relative to demand is reflected in a 3% decrease in revenues attributable to lower average refined product sales prices.

**EBITDA**—EBITDA decreased by \$117 million, or 64%, in 2014 compared to 2013 and decreased by \$299 million, or 62%, in 2013 compared to 2012.

2014 versus 2013—The \$344 million LCM inventory valuation adjustment in 2014 represented a 189% decrease in EBITDA during the period. EBITDA was lower in 2014 relative to 2013 by an additional 7% due to a \$14 million one-time recovery and settlement in 2013 discussed below. In addition to these items, our results reflected higher refining margins and higher volumes in 2014, which resulted in increases in EBITDA of 98% and 34%, respectively.

Higher refining margins in 2014 compared to 2013 were generated by improved average differentials between light and heavy crude oils, higher spreads between gasoline and diesel products versus light crude, improved by-product spreads to crude oil cost and lower costs for RINs.

Refinery crude oil processing rates in 2014 were maintained near capacity with the exception of rates in the first quarter of 2014. Processing rates in the first quarter of 2014 were negatively impacted by temporary reductions in coking capacity due to the repair of equipment necessitated by operational issues experienced in December 2013. Planned repairs on a process vessel in April 2014 also resulted in reduced crude processing during that time.

2013 versus 2012—The 62% decline in EBITDA in 2013 reflected decreases of 33% related to margins, 16% related to volumes and the \$63 million, or 13%, net negative impact of the following one-time items that occurred in 2013 and 2012. In 2013, EBITDA included benefits of \$14 million related to recoveries and a settlement associated with a former employee who pled guilty to fraud. In 2012, EBITDA reflected the benefits of a \$53 million insurance settlement associated with a hurricane in 2008 and a recovery of \$24 million related to the employee fraud matter discussed above.

Our refining margins in 2013, which were lower relative to 2012, were impacted by decreases in the average differential between light and heavy crude oils. Lower by-product values and higher natural gas and RINs costs also negatively impacted our margins in 2013.

Crude oil costs at the refinery in 2013 relative to 2012 reflected increased purchases priced in relation to WTI and Brent crude oils and a lesser amount priced relative to Maya, which reduced the comparability of our refined product spreads with the Maya benchmark product spread.

The lower volumes in 2013 were attributable to the lower crude processing rates stemming from the turnaround activity in the first quarter of 2013 as well as unscheduled maintenance during the year.

# **Technology Segment**

**Overview**—The Technology segment recognizes revenues related to the sale of polyolefin catalysts, licensing of chemical, polyolefin and other process technologies and associated engineering and other services. These revenues are offset in part by the costs incurred in the production of catalysts, licensing and services activities and in research and development ("R&D") activities. In 2014, our Technology segment incurred approximately 65% of all R&D costs while in the corresponding periods of 2013 and 2012, it incurred approximately 70% of our R&D costs.

2014 versus 2013—Operating results in 2014 were unchanged compared to 2013, reflecting lower R&D expenses and, to a lesser extent, higher catalyst results, offset by lower licensing and services revenues.

2013 versus 2012—Improved operating results in 2013 compared to 2012 reflected higher licensing and services revenues and lower R&D expenses. Technology segment results for 2012 included an \$18 million charge related to restructuring activities in Europe during that period.

The following table sets forth selected financial information for the Technology segment.

	Year En	ded Dece	mber 31,
Millions of dollars	2014	2013	2012
Sales and other operating revenues	\$497	\$532	\$498
EBITDA	232	232	197

**Revenues**—Revenues decreased by \$35 million, or 7%, in 2014 compared to 2013 and increased by \$34 million, or 7%, in 2013 compared to 2012.

2014 versus 2013—Lower licensing and services revenues contributed 7% to the decrease in revenues in 2014 compared to 2013, which benefited from the one-time, lump-sum settlement associated with a process license agreement discussed below. Higher average catalyst sales prices increased revenues by 1% in 2014 while catalyst sales volumes reflected a corresponding decrease compared to the prior year period.

2013 versus 2012—Higher licensing and services revenues primarily due to a one-time, lump-sum settlement in 2013 associated with a process license agreement entered into in a prior year contributed 7% to the increase in 2013 revenues over 2012. Lower catalyst sales volumes decreased revenues by 2%, while average catalyst sales prices in 2013 remained relatively unchanged from 2012. Favorable foreign exchange rates contributed the remaining 2% increase in 2013 revenues.

**EBITDA**—EBITDA in 2014 and 2013 were comparable at \$232 million and increased by \$35 million, or 18%, in 2013 compared to 2012.

2014 versus 2013—EBITDA in 2014 reflects lower R&D expenses and moderately higher catalyst results, offset by lower licensing and services revenues as discussed above. The improvement in 2014 catalyst results over 2013 was the result of higher margins due to higher average sales prices and lower cost.

2013 versus 2012—The improvement in EBITDA in 2013 reflects higher licensing and services revenues discussed above and lower R&D costs compared to 2012. In 2012, segment results included an \$18 million charge related to R&D restructuring activities in Europe.

# FINANCIAL CONDITION

Operating, investing and financing activities of continuing operations, which are discussed below, are presented in the following table:

	Year E	nded December 31,			
Millions of dollars	2014	2013	2012		
Source (use) of cash:					
Operating activities	\$ 6,048	\$ 4,835	\$ 4,787		
Investing activities	(3,531)	(1,602)	(1,013)		
Financing activities	(5,907)	(1,589)	(2,145)		

**Operating Activities**—Cash of \$6,048 million provided in 2014 primarily reflected earnings, adjusted for non-cash items, distributions from our joint ventures and refunds totaling \$232 million for value added taxes ("VAT") related to prior periods that were received from Italian tax authorities in 2014. These cash inflows were offset in part by cash used by the main components of working capital—accounts receivable, inventories and accounts payable.

The main components of working capital used cash of \$225 million in 2014. Total cash used by the \$205 million increase in Inventories and by the \$378 million decrease in Accounts payable was offset in part by a \$358 million decline in Accounts receivable. The increase in inventories primarily reflects higher olefins raw material inventories, which were offset in part by lower ethylene and propylene inventories due to turnaround activities at our La Porte, Texas facility, and higher levels of inventory for crude oil and work-in-process in our Refining segment. Accounts payable decreased due to lower feedstock costs in 2014 compared to 2013. The decrease in accounts receivable primarily reflects lower ethylene prices in our O&P—EAI segment, lower oxyfuels prices in our I&D segment, lower average sales prices and year end volumes in North American polyolefins and lower prices for refining products. Also contributing to the decline was a larger than usual accounts receivable balance at the end of 2013 attributable to customer remittance timing.

Cash of \$4,835 million provided in 2013 primarily reflected earnings, adjusted for non-cash items, proceeds received from Italian tax authorities for refunds of VAT from prior periods, distributions from our joint ventures, insurance settlements and cash provided by the main components of working capital. These increases were offset in part by company contributions to our pension plans.

The main components of working capital provided cash of \$60 million in 2013. This reflected increases of \$64 million, \$151 million and \$275 million in accounts receivable, inventories and accounts payable, respectively. The increase in inventories was attributable to a build in our O&P—Americas polyethylene inventory at the end of 2013 in preparation for a turnaround scheduled during the first half of 2014 at our La Porte, Texas facility and an increase in crude inventory levels over 2012 levels. These increases were partially offset by decreases in our I&D segment inventories. The increase in accounts receivable reflected higher year end O&P—Americas and I&D segment sales volumes in 2013 compared to 2012. A temporary increase in the purchase of intermediate feedstocks due to operating issues at the Houston refinery at the end of 2013 and an increase in payment terms for crude oil purchases in our Refining segment were the primary drivers for the increase in accounts payable.

Cash of \$4,787 million provided in 2012 primarily reflected earnings, adjusted for non-cash items, proceeds of \$306 million received from income tax refunds, distributions from our joint ventures, insurance settlements and cash provided by the main components of working capital. These increases were offset in part by company contributions to our pension plans and premiums and other fees related to prepayment of debt.

The main components of working capital provided cash of \$151 million in 2012. This reflected a decrease in inventories of \$441 million, partially offset by a \$101 million increase in accounts receivable and a \$189 million decrease in accounts payable. A reduction in the high level of our O&P—Americas olefins inventories that were built at the end of 2011 in preparation for a turnaround scheduled for early July 2012 at our Channelview, Texas facility and the liquidation of refined products and crude oil inventories following the January 2012 shutdown of our Berre refinery were the primary contributors to the \$441 million decrease in inventories. The increase in accounts receivable reflected higher sales volumes at the end of 2012 compared to the same period in 2011, while the lower accounts payable at December 31, 2012 reflected lower outstanding crude oil invoices compared to December 31, 2011.

**Investing Activities**—We used cash of \$3,531 million, \$1,602 million and \$1,013 million in investing activities in 2014, 2013, and 2012, respectively.

In 2014, we invested cash in investment-grade and other high-quality financial instruments that provide flexibility to redeploy funds as needed to meet our cash flow requirements while maximizing yield. We invested \$3,439 million in securities deemed available-for-sale and classified as Short-term investments, and \$425 million in tri-party repurchase agreements classified as short-term loans receivable. In 2014, we also received proceeds of \$1,751 million and \$75 million, respectively, upon the maturity of certain of our available-for-sale securities and repurchase agreements. See Note 14 to the Consolidated Financial Statements for additional information regarding these investments.

The following table summarizes our capital expenditures plan for 2015 and actual capital expenditures for our continuing operations for the periods from 2012 through 2014:

	Plan	Year E	nded Decen	nber 31,
Millions of dollars	2015	2014	2013	2012
Capital expenditures by segment:				
O&P—Americas	\$ 730	\$ 912	\$ 645	\$ 468
O&P—EAI	208	191	229	254
I&D	381	241	443	159
Refining	184	123	209	136
Technology	30	25	30	43
Other	29	7	5	
Consolidated capital expenditures of continuing operations	\$1,562	\$1,499	\$1,561	\$1,060

Capital spending projected for 2015 is expected to increase over 2014 levels. The largest increases are projected for our I&D and Refining segments and include turnaround activities and environmental-related matters. We have also projected modest increases in 2015 capital spending for our O&P—EAI segment. This increased level of spending is offset in part by lower projected spending in 2015 for our O&P—Americas segment as compared to 2014.

Completion of the ethylene expansion and associated turnaround at our La Porte, Texas facility, a debottleneck at our Corpus Christi, Texas facility and the installation of new furnaces at our Channelview, Texas facility are reflected in the increase in 2014 capital spending for the O&P—Americas segment relative to 2013. This increase was offset in part by reduced capital spending for our I&D, Refining and O&P—EAI segments in 2014 relative to 2013 due primarily to the completion in 2013 of the restart of our methanol plant in Channelview, Texas, a major turnaround at our Houston, Texas refinery, and a butadiene expansion project in Wesseling, Germany, respectively.

The higher levels of capital spending for our I&D and O&P—Americas segments in 2013 relative to 2012 were primarily related to the methanol plant restart in Channelview, Texas, and the ethylene expansion project at our La Porte, Texas, facility, respectively.

**Financing Activities**—Financing activities used cash of \$5,907 million, \$1,589 million and \$2,145 million in 2014, 2013 and 2012, respectively.

We made payments totaling \$5,788 million and \$1,949 million in 2014 and 2013, respectively, to acquire a portion of our outstanding ordinary shares. We also made dividend payments totaling \$1,403 million, \$1,127 million and \$2,415 million to our shareholders in 2014, 2013 and 2012, respectively. The dividend payments in 2012 included a special dividend of \$2.75 per share paid on December 11, 2012 to shareholders of record on November 19, 2012. For additional information related to these share repurchases and dividend payments, see Note 20 to the Consolidated Financial Statements.

In October 2014, we entered into a new commercial paper program. We received net proceeds of \$262 million through the issuance and repurchase of commercial paper instruments under this program during 2014. See Note 12 to the Consolidated Financial Statements and the discussion of Liquidity and Capital Resources below for additional information related to our new commercial paper program.

In February 2014, we issued \$1,000 million of 4.875% Notes due 2044 and received net proceeds of \$988 million.

In July 2013, we received net proceeds totaling \$1,468 million from the issuance of \$750 million of 4% guaranteed notes due 2023 and \$750 million of 5.25% guaranteed notes due 2043, and paid fees totaling \$23 million.

We also received \$3,000 million of proceeds in 2012 from the issuance of \$2,000 million of 5% senior notes due 2019 and \$1,000 million of 5.75% senior notes due 2024. Net proceeds from the notes, together with cash on hand, were used to finance the repayment in full of the remaining \$2,676 million of previously outstanding notes and to pay \$294 million for associated premiums and fees, which are reflected in operating cash flows.

In May 2012, we entered into a five-year revolving credit facility, and terminated our asset-based credit facility. As discussed in "Liquidity and Capital Resources" below, we amended and restated this credit facility in June 2014. The revolving credit facility may be used for dollar and euro denominated borrowings and includes a sublimit for up to \$700 million of dollar and euro denominated letters of credit. The balance of outstanding borrowings and letters of credit under the facility may not exceed \$2,000 million at any given time.

In September 2012, we entered into a three-year, \$1,000 million U.S. accounts receivable securitization facility that permits the sale of certain eligible trade receivables to participating financial institutions. The facility also provides for the issuance of letters of credit up to \$200 million.

In the aggregate, we paid fees related to these 2012 financing activities totaling \$53 million.

For additional information related to these financing activities, see Note 12 to the Consolidated Financial Statements.

**Liquidity and Capital Resources**—As of December 31, 2014, we had \$2,624 million unrestricted cash and cash equivalents and marketable securities classified as Short-term investments. For additional information related to our purchases of marketable securities, which currently include certificates of deposit, commercial paper and bonds, see the Investing Activities section above and Note 14 to the Consolidated Financial Statements.

At December 31, 2014, we had \$433 million of cash in jurisdictions outside the U.S., principally in the United Kingdom. Approximately 3% of our outstanding cash balance is held in a country that has established government imposed currency restrictions that could impede the ability of our subsidiary to transfer funds to us. There are currently no other material or legal or economic restrictions that would impede our transfers of cash.

We also had total unused availability under our credit facilities of \$3,253 million at December 31, 2014, which included the following:

- \$1,712 million under our \$2,000 million revolving credit facility, which backs our \$2,000 million commercial paper program. Availability under this facility is net of outstanding borrowings, outstanding letters of credit provided under the facility and notes issued under our \$2,000 million commercial paper program. At December 31, 2014, we had \$262 million of outstanding commercial paper, no outstanding letters of credit and no outstanding borrowings under the facility.
- \$994 million under our \$1,000 million U.S. accounts receivable securitization facility. Availability
  under this facility is subject to a borrowing base of eligible receivables, which is reduced by
  outstanding borrowings and letters of credit, if any. This facility had no outstanding borrowings or
  letters of credit at December 31, 2014.
- €440 million and \$13 million (totaling approximately \$547 million) under our €450 million European receivables securitization facility. Availability under this facility is subject to a borrowing base, net of outstanding borrowings. There were no outstanding borrowings under this facility at December 31, 2014.

See Note 12 to the Consolidated Financial Statements for additional information related to our credit facilities.

We also have outstanding letters of credit and bank guarantees totaling \$688 million at December 31, 2014 issued under uncommitted credit facilities.

At December 31, 2014, we had total debt, including current maturities, of \$7,107 million.

In accordance with our current interest rate risk management strategy and subject to management's evaluation of market conditions and the availability of favorable interest rates among other factors, we may from time to time enter into interest rate swap agreements to economically convert a portion of our fixed rate debt to variable rate debt or convert a portion of variable rate debt to fixed rate debt.

We entered into U.S. dollar interest rate swaps with an aggregate notional value of \$2,000 million during 2014 as part of our current interest rate risk management strategy to achieve a desired proportion of variable

versus fixed rate debt. The swaps, which have been designated as fair value hedges, effectively convert our \$2,000 million 5% senior notes due 2019 to floating debt based on 3 month USD LIBOR. For additional information related to these swaps, see Note 14 to the Consolidated Financial Statements.

In October 2014, we entered into a commercial paper program under which we may issue up to \$2,000 million of privately placed, unsecured short-term promissory notes ("commercial paper"). This program is backed by our \$2,000 million Senior Revolving Credit Facility. Proceeds from the issuance of commercial paper may be used for general corporate purposes, including dividend payments and share repurchases. At December 31, 2014, we had \$262 million of commercial paper outstanding.

In June 2014, we amended and restated our \$2,000 million revolving credit facility to, among other things, reduce undrawn pricing and extend the term of the facility to June 2019.

In February 2014, our direct, 100% owned subsidiary, LYB International Finance B.V., issued \$1,000 million of 4.875% Notes due 2044 at a discounted price of 98.831%. Proceeds from these notes were used for general corporate purposes, including repurchases of our ordinary shares. Interest payments under these notes commenced on September 15, 2014. These unsecured notes, which are fully and unconditionally guaranteed by LyondellBasell Industries N.V., rank equally in right of payment to all of LYB International Finance B.V.'s existing and future unsecured indebtedness and to all of LyondellBasell's existing and future unsubordinated indebtedness. The notes may be redeemed before the date that is six months prior to the scheduled maturity date at a redemption price equal to the greater of 100% of the principal amount of the notes redeemed and the sum of the present values of the remaining scheduled payments of principal and interest (discounted at the applicable Treasury Yield plus 20 basis points) on the notes to be redeemed. The notes may also be redeemed on or after the date that is six months prior to the final maturity date of the notes at a redemption price equal to 100% of the principal amount of the notes redeemed plus accrued and unpaid interest.

On July 16, 2013, our direct, 100% owned subsidiary, LYB International Finance B.V., issued \$750 million of 4% Notes due 2023 and \$750 million of 5.25% Notes due 2043 at discounted prices of 98.678% and 97.004%, respectively. Proceeds from these notes were used for general corporate purposes, including repurchases of our ordinary shares. Interest payments under these notes commenced on January 15, 2014. These unsecured notes, which are fully and unconditionally guaranteed by LyondellBasell Industries N.V., rank equally in right of payment to all of LYB International Finance B.V.'s existing and future unsecured indebtedness and to all of LyondellBasell's existing and future unsubordinated indebtedness. These notes may be redeemed or repaid at any time and from time to time prior to maturity at an amount equal to the greater of 100% of the principal amount of the notes redeemed and repaid, and the sum of the present values of the remaining scheduled payments of principal and interest on the notes to be redeemed (exclusive of interest accrued to the date of redemption) discounted to the date of redemption on a semi-annual basis at the applicable treasury yield plus 25 basis points in the case of the 4% Notes due 2023 and plus 30 basis points in the case of the 5.25% Notes due 2043.

In April 2013, we amended and restated our €450 million European receivables securitization facility to obtain more favorable terms and conditions, including reduced pricing, and to extend the maturity date of the facility to April 2016.

For additional information related to our credit facilities and Notes discussed above, see Note 12 to the Consolidated Financial Statements.

During the second quarter of 2014, we concluded our share repurchase program announced in May 2013 under which we could repurchase up to 10% of our shares outstanding. We purchased 57,584,238 shares under this program for approximately \$4,678 million.

In April 2014, we announced a new share repurchase program under which we may repurchase up to 10% of our shares outstanding over the next eighteen months for a total of approximately 53 million shares. Our share repurchase program does not have a stated dollar amount, and purchases may be made through open market

purchases, private market transactions or other structured transactions. Repurchased shares could be retired or used for general corporate purposes, including for various employee benefit and compensation plans. As of December 31, 2014, we have purchased 33 million shares under this program for approximately \$3,143 million. As of February 13, 2015, we had approximately 10 million shares remaining under the current authorization. The timing and amount of additional shares repurchased will be determined by our Management Board based on its evaluation of market conditions and other factors. For additional information related to our share repurchase programs, see Note 20 to the Consolidated Financial Statements.

As a result of ceasing operations at our Berre refinery in France in January 2012, we expect to make future payments to severed employees and for exit and disposal activities. See Note 3 to the Consolidated Financial Statements for additional information related to this matter.

We may repay or redeem our debt, including purchases of our outstanding bonds in the open market, using cash on hand, cash from operating activities, proceeds from the issuance of debt, proceeds from asset divestitures, or a combination thereof. We plan to fund our ongoing working capital, capital expenditures, debt service and other funding requirements with cash from operations, which could be affected by general economic, financial, competitive, legislative, regulatory, business and other factors, many of which are beyond our control. Cash on hand, cash from operating activities, proceeds from the issuance of debt, or a combination thereof, may be used to fund the repurchase of shares under our share repurchase program.

We intend to continue to declare and pay quarterly dividends, with the goal of increasing the dividend over time, after giving consideration to our cash balances and expected results from operations.

We believe that our cash on hand, cash from operating activities and proceeds from our credit facilities provide us with sufficient financial resources to meet our anticipated capital requirements and obligations as they come due.

**Contractual and Other Obligations**—The following table summarizes, as of December 31, 2014, our minimum payments for long-term debt, including current maturities, short-term debt, and contractual and other obligations for the next five years and thereafter:

		Payments Due By Period					
Millions of dollars	Total	2015	2016	2017	2018	2019	Thereafter
Total debt	\$ 7,157	\$ 350	\$ 5	\$ 1	\$ —	\$2,000	\$ 4,801
Interest on total debt	4,535	360	360	360	360	310	2,785
Advances from customers	142	73	25	22	6	3	13
Other	1,883	1,182	227	114	108	25	227
Deferred income taxes	1,623	50	95	132	126	200	1,020
Other obligations:							
Purchase obligations:							
Take-or-pay contracts	11,027	3,046	1,890	1,897	1,802	1,451	941
Other contracts	14,650	4,320	2,880	2,570	1,792	1,053	2,035
Operating leases	1,805	333	271	236	207	142	616
Total	\$42,822	\$9,714	\$5,753	\$5,332	\$4,401	\$5,184	\$12,438

Total Debt—Our debt includes unsecured senior notes, guaranteed notes and various other U.S. and non-U.S. loans. See Note 12 to the Consolidated Financial Statements for a discussion of covenant requirements under the credit facilities and indentures and additional information regarding our debt facilities.

*Interest on Total Debt*—Our debt and related party debt agreements contain provisions for the payment of monthly, quarterly or semi-annual interest at a stated rate of interest over the term of the debt.

Pension and other Postretirement Benefits—We maintain several defined benefit pension plans, as described in Note 16 to the Consolidated Financial Statements. Many of our U.S. and non-U.S. plans are subject to minimum funding requirements; however, the amounts of required future contributions for all our plans are not fixed and can vary significantly due to changes in economic assumptions, liability experience and investment return on plan assets. As a result, we have excluded pension and other postretirement benefit obligations from the Contractual and Other Obligations table above. Our annual contributions may include amounts in excess of minimum required funding levels. Contributions to our non-U.S. plans in years beyond 2015 are not expected to be materially different than the expected 2015 contributions disclosed in Note 16 to the Consolidated Financial Statements. At December 31, 2014, the projected benefit obligation for our pension plans exceeded the fair value of plan assets by \$953 million. Subject to future actuarial gains and losses, as well as actual asset earnings, we, together with our consolidated subsidiaries, will be required to fund the \$953 million, with interest, in future years. We contributed \$94 million, \$172 million and \$180 million to our pension plans in 2014, 2013 and 2012, respectively. We provide other postretirement benefits, primarily medical benefits to eligible participants, as described in Note 16 to the Consolidated Financial Statements. We pay other unfunded postretirement benefits as incurred.

Advances from Customers—We are obligated to deliver products in connection with long-term sales agreements under which advances from customers were received in prior years. These advances are treated as deferred revenue and will be amortized to earnings as product is delivered over the remaining terms of the respective contracts, which range predominantly from 4 to 8 years. The unamortized long-term portion of such advances totaled \$69 million as of December 31, 2014.

Other—Other primarily consists of accruals for environmental remediation costs, obligations under deferred compensation arrangements, and anticipated asset retirement obligations. See "Critical Accounting Policies" below for a discussion of obligations for environmental remediation costs.

Deferred Income Taxes—The scheduled settlement of the deferred tax liabilities shown in the table is based on the scheduled reversal of the underlying temporary differences. Actual cash tax payments will vary depending upon future taxable income. See Note 18 to the Consolidated Financial Statements for additional information related to our deferred tax liabilities.

Purchase Obligations—We are party to various obligations to purchase products and services, principally for raw materials, utilities and industrial gases. These commitments are designed to assure sources of supply and are not expected to be in excess of normal requirements. The commitments are segregated into take-or-pay contracts and other contracts. Under the take-or-pay contracts, we are obligated to make minimum payments whether or not we take the product or service. Other contracts include contracts that specify minimum quantities; however, in the event that we do not take the contractual minimum, we are only obligated for any resulting economic loss suffered by the vendor. The payments shown for the other contracts assume that minimum quantities are purchased. For contracts with variable pricing terms, the minimum payments reflect the contract price at December 31, 2014.

*Operating Leases*—We lease various facilities and equipment under noncancelable lease arrangements for various periods. See Note 13 to the Consolidated Financial Statements for related lease disclosures.

### **CURRENT BUSINESS OUTLOOK**

Our raw material and product prices continue to be impacted by the substantial decline in energy prices over the past few months. The U.S. NGL advantage enjoyed by our olefins and polymers businesses has been reduced with the decline of global naphtha feedstock prices. This reduction has been partially mitigated by lower U.S. natural gas and NGL prices. There remains uncertainty about the future path and economic impact of energy prices and the resulting impact on global demand for our products.

Although margins for our North America olefins and polymers will likely be lower than the 2014 levels due to a reduced NGL advantage and increased supplies associated with easing of industry capacity restrictions, we continue to expect margins in 2015 to reflect an NGL advantage. We also expect our European olefins margins to decline from high fourth quarter 2014 levels, which were primarily related to feedstock price reductions that outpaced those for product prices. Benefits from significant volumes of advantaged feedstocks and improved product competitiveness with a weaker euro and lower feedstock costs should support EU performance.

Our I&D segment should continue to benefit from extended competitor outages in the PO chain and low feedstock costs in 2015. The Refining business has experienced a margin reduction as a result of the oil and refined product price declines, which is being partly offset by higher volumes of advantaged North American crude oil as pipeline supplies increase.

A continued and sustained decline in crude oil prices and the resulting impact on downstream product prices may result in additional LCM inventory valuation adjustments in all but our Technology segment during the first quarter of 2015.

While we believe most of our growth projects that are currently in progress will be advantageous, we are reevaluating future capital plans related to our new Gulf Coast polyethylene facility, based on the changes in energy prices and rising construction costs in the Gulf Coast.

#### RELATED PARTY TRANSACTIONS

We have related party transactions with certain of our major shareholders and their affiliates and our joint venture partners. We believe that such transactions are effected on terms substantially no more or less favorable than those that would have been agreed upon by unrelated parties on an arm's length basis. See Note 4 to the Consolidated Financial Statements for additional related party disclosures.

# CRITICAL ACCOUNTING POLICIES

Management applies those accounting policies that it believes best reflect the underlying business and economic events, consistent with accounting principles generally accepted in the U.S. (see Note 2 to the Consolidated Financial Statements). Our more critical accounting policies include those related to the valuation of inventory, long-lived assets, the valuation of goodwill, accruals for long-term employee benefit costs such as pension and other postretirement costs, and accruals for taxes based on income. Inherent in such policies are certain key assumptions and estimates made by management. Management periodically updates its estimates used in the preparation of the financial statements based on its latest assessment of the current and projected business and general economic environment.

Inventory—We account for our inventory using the last-in, first-out ("LIFO") method of accounting.

The cost of raw materials, which represents a substantial portion of our operating expenses, and energy costs generally follow price trends for crude oil and/or natural gas. Crude oil and natural gas prices are subject to many factors, including changes in economic conditions. Fluctuation in the prices of crude oil and natural gas from period to period may result in the recognition of charges to adjust the value of inventory to the lower of cost or market in periods of falling prices and the reversal of those charges in subsequent interim periods as market prices recover. Accordingly, our cost of sales and results of operations may be affected by such fluctuations.

In May 1, 2010, upon emergence from bankruptcy, we recorded our inventory, which is primarily crude oil and correlated products derived therefrom, at fair value in accordance with the requirements of fresh-start accounting. The per barrel benchmark price of WTI crude oil at that date was \$86.15.

During 2014, we recorded LCM inventory valuation adjustments totaling \$760 million driven primarily by the decline in the price of crude oil and related declines in the prices of heavy liquids and other correlated

products. A \$45 million charge was taken in the third quarter of 2014 which marked the beginning of the current downward price trend. Since the third quarter of 2014, crude oil and other correlated product price indexes have decreased approximately 50%, leading to the recognition of an additional \$715 million of LCM inventory valuation adjustment in the fourth quarter of 2014. Further sustained price declines in our finished goods and raw materials will likely result in future LCM inventory valuation charges during the first quarter of 2015.

Long-Lived Assets—With respect to long-lived assets, which primarily include property, plant and equipment and intangible assets, key assumptions included estimates of useful lives and the recoverability of carrying values of fixed assets and other intangible assets, as well as the existence of any obligations associated with the retirement of fixed assets. Such estimates could be significantly modified and/or the carrying values of the assets could be impaired by such factors as new technological developments, new chemical industry entrants with significant raw material or other cost advantages, uncertainties associated with the European, U.S. and other world economies, the cyclical nature of the chemical and refining industries, and uncertainties associated with regulatory governmental actions.

When events or changes in circumstances indicate that the carrying value of an asset may not be recoverable, we evaluate definite lived intangible assets for impairment. Long-lived assets are grouped at the lowest level for which there are identifiable cash flows that are largely independent of the cash flows of other groups of assets, which for us is generally at the plant group level (or, at times individual plants in certain circumstances where we have isolated production units with separately identifiable cash flows). When it is probable that the undiscounted cash flows of a tangible asset or asset group will not be sufficient to recover the carrying amount, the asset is written down to its estimated fair value. In-process research and development projects are impaired when abandoned.

During the year ended December 31, 2012, we recognized an impairment charge of \$22 million, related to damage sustained by our LDPE plant in Wesseling, Germany.

The estimated useful lives of long-lived assets range from 3 to 30 years. Depreciation and amortization of these assets, including amortization of capitalized turnaround costs, under the straight-line method over their estimated useful lives totaled \$1,019 million in 2014. If the useful lives of assets are found to be shorter than originally estimated, depreciation and amortization charges would be accelerated over the revised useful life.

Goodwill—Goodwill of \$566 million at December 31, 2014 represents the tax effect of the differences between the tax and book bases of our assets and liabilities resulting from the revaluation of those assets and liabilities to fair value in connection with the Company's emergence from bankruptcy and adoption of fresh-start accounting. We evaluate the recoverability of the carrying value of goodwill annually or more frequently if events or changes in circumstances indicate that the carrying amount of the goodwill of a reporting unit may not be fully recoverable.

We have the option to first assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value. Qualitative factors assessed for each of the reporting units include, but are not limited to, changes in long-term commodity prices, discount rates, competitive environments, planned capacity, cost factors such as raw material prices, and financial performance of the reporting units. If the qualitative assessment indicates that it is more likely than not that the carrying value of a reporting unit exceeds its estimated fair value, a two-step quantitative test is required.

We also have the option to proceed directly to the two-step quantitative impairment test. Under the two-step impairment test, the fair value of each reporting unit is compared to its carrying value, including goodwill. For step one of the impairment test, the fair value of the reporting unit is calculated using a discounted cash-flow model. Such a model inherently utilizes a significant number of estimates and assumptions, including operating margins, tax rates, discount rates, capital expenditures and working capital changes. Step two of the impairment test would be performed should management conclude that the carrying value of a reporting unit, including goodwill, is in excess of its fair value. In step two of the impairment test, the carrying amount of a reporting

unit's goodwill is compared to the implied fair value of its goodwill. Valuation experts may be used in such an assessment. If the carrying value of goodwill exceeds its implied fair value, an impairment charge equal to the excess would be recognized.

For 2013 and 2012, management performed qualitative impairment assessments of our reporting units which indicated that the fair value of our reporting units was greater than their carrying value. Accordingly, a quantitative two-step goodwill impairment test was not required. In 2014, management voluntarily performed a quantitative two-step goodwill impairment test for all reporting units. The fair value of each of our reporting units was substantially in excess of its carrying value. Accordingly, no goodwill impairment was recognized in 2014.

Long-Term Employee Benefit Costs—Our costs for long-term employee benefits, particularly pension and other postretirement medical and life insurance benefits, are incurred over long periods of time, and involve many uncertainties over those periods. The net periodic benefit cost attributable to current periods is based on several assumptions about such future uncertainties, and is sensitive to changes in those assumptions. It is management's responsibility, often with the assistance of independent experts, to select assumptions that in its judgment represent its best estimates of the future effects of those uncertainties. It also is management's responsibility to review those assumptions periodically to reflect changes in economic or other factors that affect those assumptions.

The current benefit service costs, as well as the existing liabilities, for pensions and other postretirement benefits are measured on a discounted present value basis. The discount rate is a current rate, related to the rate at which the liabilities could be settled. Our assumed discount rate is based on yield information for high-quality corporate bonds with durations comparable to the expected cash settlement of our obligations. For the purpose of measuring the benefit obligations at December 31, 2014, we used a weighted average discount rate of 4.04% for the U.S. plans which reflects the different terms of the related benefit obligations. The weighted average discount rate used to measure obligations for non-U.S. plans at December 31, 2014 was 2.84%, reflecting market interest rates. The discount rates in effect at December 31, 2014 will be used to measure net periodic benefit cost during 2015.

The benefit obligation and the periodic cost of other postretirement medical benefits are also measured based on assumed rates of future increase in the per capita cost of covered health care benefits. As of December 31, 2014, the assumed rate of increase for our U.S. plans was 7.3%, decreasing to 4.5% in 2027 and thereafter. A one percentage point change in the health care cost trend rate assumption would have no significant effect on either the benefit liability or the net periodic cost, due to limits on our maximum contribution level under the medical plan.

The net periodic cost of pension benefits included in expense also is affected by the expected long-term rate of return on plan assets assumption. Investment returns that are recognized currently in net income represent the expected long-term rate of return on plan assets applied to a market-related value of plan assets which, for us, is defined as the market value of assets. The expected rate of return on plan assets is a longer term rate, and is expected to change less frequently than the current assumed discount rate, reflecting long-term market expectations, rather than current fluctuations in market conditions.

The weighted average expected long-term rate of return on assets in our U.S. plans of 8.00% is based on the average level of earnings that our independent pension investment advisor had advised could be expected to be earned over time and 4.12%, for our non-U.S. plan assets is based on an expectation and asset allocation that varies by region. The asset allocations are summarized in Note 16 to the Consolidated Financial Statements. The actual returns in 2014 were a gain of 3.50% for U.S. plan assets and a gain of 28.28% for non-U.S. plan assets.

The actual rate of return on plan assets may differ from the expected rate due to the volatility normally experienced in capital markets. Management's goal is to manage the investments over the long term to achieve optimal returns with an acceptable level of risk and volatility.

Net periodic pension cost recognized each year includes the expected asset earnings, rather than the actual earnings or loss. Along with other gains and losses, this unrecognized amount, to the extent it cumulatively exceeds 10% of the projected benefit obligation for the respective plan, is recognized as additional net periodic benefit cost over the average remaining service period of the participants in each plan.

The following table reflects the sensitivity of the benefit obligations and the net periodic benefit costs of our pension plans to changes in the actuarial assumptions:

		obligations Effects of Periodic Pension Effects of Periodic Pension Periodic Pension 2014		
Millions of dollars	U.S.	Non-U.S.	U.S.	Non-U.S.
Projected benefit obligations at December 31, 2014		\$1,408	\$— (12)	\$— 59
Discount rate increases by 100 basis points	(246) 301	(172) 207	2 28	(6) 11

The sensitivity of our postretirement benefit plans obligations and net periodic benefit costs to changes in actuarial assumptions are reflected in the following table:

1		ects on Obligations 2014	Periodic	ts on Net Benefit Costs 2015
Millions of dollars	U.S.	Non-U.S.	U.S.	Non-U.S.
Projected benefit obligations at December 31, 2014		\$ 60	\$— 19	\$— 3
Discount rate increases by 100 basis points	(33)	_	(1)	_
Discount rate decreases by 100 basis points	37	_	3	_

Additional information on the key assumptions underlying these benefit costs appears in Note 16 to the Consolidated Financial Statements.

Accruals for Taxes Based on Income—The determination of our provision for income taxes and the calculation of our tax benefits and liabilities is subject to management's estimates and judgments due to the complexity of the tax laws and regulations in the tax jurisdictions in which we operate. Uncertainties exist with respect to interpretation of these complex laws and regulations.

Deferred tax assets and liabilities are determined based on temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases, and are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to reverse.

We recognize future tax benefits to the extent that the realization of these benefits is more likely than not. Our current provision for income taxes is impacted by the recognition and release of valuation allowances related to net deferred assets in certain non-U.S. jurisdictions. Further changes to these valuation allowances may impact our future provision for income taxes, which will include no tax benefit with respect to losses incurred and no tax expense with respect to income generated in these countries until the respective valuation allowance is eliminated.

We recognize the financial statement benefits with respect to an uncertain income tax position that we have taken or may take on an income tax return when it is more likely than not that the position will be sustained with the tax authorities. For a position that is likely to be sustained, the benefit recognized in the financial statements is measured at the largest amount that is greater than 50 percent likely of being realized.

For further information related to our income taxes, see Note 18 to the Consolidated Financial Statements.

#### ACCOUNTING AND REPORTING CHANGES

For a discussion of the potential impact of new accounting pronouncements on our Consolidated Financial Statements, see Note 2 to the Consolidated Financial Statements.

# Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

See Note 14 to the Consolidated Financial Statements for discussion of LyondellBasell Industries N.V.'s management of commodity price risk, foreign currency exposure and interest rate risk through its use of derivative instruments and hedging activities.

# **Commodity Price Risk**

A substantial portion of our products and raw materials are commodities whose prices fluctuate as market supply and demand fundamentals change. Accordingly, product margins and the level of our profitability tend to fluctuate with changes in the business cycle. We try to protect against such instability through various business strategies. These include provisions in sales contracts allowing us to pass on higher raw material costs through timely price increases, formula price contracts to transfer or share commodity price risk, and increasing the depth and breadth of our product portfolio.

In addition, we selectively use commodity swap and futures contracts with various terms to manage the volatility related to raw materials and product sales. Such contracts are generally limited to durations of one year or less. Hedge accounting has not been elected for any of our commodity contracts in any of the periods presented. Market risks created by these derivative instruments and the mark-to-market valuations of open positions are considered by management prior to execution and monitored daily.

The estimated fair value and notional amounts of our open commodity futures contracts are shown in the table below:

December 31, 2014				
	Notiona	l Amounts		
Fair Value	Value	Volumes	Volume Unit	Maturity Dates
\$ (1)	\$ 28	15	million gallons	January 2015
	_	_	_	February 2015
	Φ. 20		8	, , , , , , , , , , , , , , , , , , ,
\$ 1	\$ 28			
		D	ecember 31, 2013	
	Notiona	l Amounts		
Fair Value	Value	Volumes	Volume Unit	Maturity Dates
\$ (4)	\$257	92	million gallons	February 2014 -
			-	March 2014
_	11	4	million gallons	February 2014
	378	158	_	February 2014 -
			8	May 2014
<u> </u>	Φ			1.14y <b>2</b> 011
<u>\$ (4)</u>	<u>\$646</u>			
	\$ (1) 2 \$ 1 Fair Value	Fair Value         Value           \$ (1) \$ 28         2           2 \$ 1         \$ 28           \$ 1         \$ 28           Fair Value         Notional Value           \$ (4) \$257         11           -         378           -         -           - <t< td=""><td>  Notional Amounts   Value   Volumes    </td><td>  Notional Amounts   Volume Unit    </td></t<>	Notional Amounts   Value   Volumes	Notional Amounts   Volume Unit

The decreased level in open futures positions in 2014 is related to our strategies to manage the impact of future movements in the price of gasoline, distillates and crude oil on our realized product margins.

We use value at risk ("VAR"), stress testing and scenario analysis for risk measurement and control purposes.

VAR estimates the maximum potential loss in fair market values, given a certain move in prices over a certain period of time, using specified confidence levels.

Using sensitivity analysis and hypothetical changes in market prices ranging from 12% to 31%, which represent a three month volatility range of the underlying products, the effect on our pretax income would be less than \$1 million. The quantitative information about market risk is necessarily limited because it does not take into account the effects of the underlying operating transactions.

# Foreign Exchange Risk

We manufacture and market our products in a number of countries throughout the world and, as a result, are exposed to changes in foreign currency exchange rates. We enter into transactions in currencies other than the applicable functional currency.

A significant portion of our reporting entities use the euro as their functional currency. Our reporting currency is the U.S. dollar. The translation gains or losses that result from the process of translating the euro denominated financial statements to U.S. dollars are deferred in accumulated other comprehensive income ("AOCI") until such time as those entities may be liquidated or sold. Changes in the value of the U.S. dollar relative to the euro can therefore have a significant impact on comprehensive income. We generally do not attempt to minimize or mitigate the foreign currency risks resulting from the translation of assets and liabilities of non-U.S. operations into our reporting currency.

Some of our operations enter into transactions denominated in other than their functional currency. This results in exposure to foreign currency risk for financial instruments, including, but not limited to third party and intercompany receivables and payables and intercompany loans.

We maintain risk management control practices to monitor the foreign currency risk attributable to our inter-company and third party outstanding foreign currency balances. These practices involve the centralization of our exposure to underlying currencies that are not subject to central bank and/or country specific restrictions. By centralizing most of our foreign currency exposure into one subsidiary, we are able to take advantage of any natural offsets thereby reducing the overall impact of changes in foreign currency rates on our earnings.

Our policy is to maintain an approximately balanced position in foreign currencies to minimize exchange gains and losses arising from changes in exchange rates. To minimize the effects of our net currency exchange exposures, we enter into foreign currency spot and forward contracts and, in some cases, cross-currency swaps.

We also engage in short-term foreign exchange swaps in order to roll certain hedge positions and to make funds available for intercompany financing. Our net position in foreign currencies is monitored daily.

In 2014, we entered into \$2,000 million non-cancellable cross-currency swaps, which we designated as foreign currency cash flow hedges, to reduce the variability in the functional currency equivalent cash flows of certain foreign currency denominated intercompany notes. For a summary of the estimated fair value and notional amounts for our cross-currency swaps outstanding at December 31, 2014, see Note 14 to the Consolidated Financial Statements.

At December 31, 2014 and 2013, a 10% fluctuation compared to the U.S. dollar in the underlying currencies that have no central bank or other currency restrictions would result in an additional impact to earnings of no

more than approximately \$2 million. A change in the fair value of our cross-currency swaps resulting from a 10% fluctuation in the euro compared to the U.S. dollar, as of December 31, 2014, would have no impact to net income.

For 2014, 2013, and 2012, Other income (expense), net in the Consolidated Statements of Income reflected a gain of \$15 million and losses of \$4 million and \$21 million, respectively, in net exchange rate gains and losses. For forward contracts, including swap transactions, that economically hedge recognized monetary assets and liabilities in foreign currencies, no hedge accounting is applied. Changes in the fair value of foreign currency forward contracts are reported in the Consolidated Statements of Income and offset the currency exchange results recognized on the assets and liabilities.

#### **Interest Rate Risk**

We are exposed to interest rate risk with respect to our fixed and variable rate debt. Fluctuations in interest rates impact the fair value of fixed-rate debt as well as pretax earnings stemming from interest expense on variable-rate debt.

*Fixed-rate debt*—In 2014, we entered into U.S. dollar fixed-for-floating interest rate swaps as part of our interest rate risk management strategy to create a balance of fixed and floating rate debt. These interest rate swaps are designated as fair value hedges. At December 31, 2014, we had outstanding interest rate swap agreements with notional amounts totaling \$2,000 million, maturing on April 15, 2019.

At December 31, 2014, after giving consideration to the \$2,000 million of fixed-rate debt that we have effectively converted to floating through these U.S. dollar fixed-for-floating interest rate swaps, approximately 68% of our debt portfolio, on a gross basis, incurred interest at a fixed-rate and the remaining 32% of the portfolio incurred interest at a variable-rate. We estimate that a 10% change in market interest rates as of December 31, 2014 would change the fair value of our interest rate swaps outstanding and affect our pretax income by approximately \$13 million. For additional information related to these interest rate swaps, see Note 14 to the Consolidated Financial Statements.

Variable-rate debt—Our variable rate debt consists of our \$2,000 million Senior Revolving Credit Facility, our \$1,000 million U.S. Receivables Securitization Facility, our €450 million European Receivables Securitization Facility and amounts outstanding under our Commercial Paper Program. At December 31, 2014, there were no outstanding borrowings under our Senior Revolving Credit Facility and U.S. and European receivables facilities. We had \$262 million of commercial paper outstanding at December 31, 2014. We estimate that a 10% change in interest rates will not have a material impact on earnings.

# Item 8. Financial Statements and Supplementary Data.

# **Index to the Consolidated Financial Statements**

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# MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Management of the Company, including the Chief Executive Officer and the Chief Financial Officer, is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) of the Securities Exchange Act of 1934, as amended. Internal control over financial reporting is a process designed by, or under the supervision of, our Chief Executive Officer and Chief Financial Officer, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Our internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of our assets; (ii) provide reasonable assurance that transactions are recorded as necessary to permit the preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures are being made only in accordance with authorizations of our management and directors; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

We conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2014 based on the Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013. Based on our evaluation, management has concluded that our internal control over financial reporting was effective as of December 31, 2014.

The effectiveness of our internal control over financial reporting as of December 31, 2014 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which is included herein.

### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Supervisory Board of Directors and Stockholders of LyondellBasell Industries N.V.

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of income, comprehensive income, stockholders' equity and cash flows present fairly, in all material respects, the financial position of LyondellBasell Industries N.V. and its subsidiaries at December 31, 2014 and December 31, 2013 and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2014 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2014, based on criteria established in Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express opinions on these financial statements and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers LLP Houston, Texas February 17, 2015

# LYONDELLBASELL INDUSTRIES N.V. CONSOLIDATED STATEMENTS OF INCOME

	Year Ended December 31,		
Millions of dollars, except earnings per share	2014	2013	2012
Sales and other operating revenues:			
Trade	\$44,714	\$43,052	\$44,315
Related parties	894	1,010	1,037
	45,608	44,062	45,352
Operating costs and expenses:			
Cost of sales	38,939	37,940	39,595
Selling, general and administrative expenses	806	870	909
Research and development expenses	127	150	172
	39,872	38,960	40,676
Operating income	5,736	5,102	4,676
Interest expense	(352)	(309)	(655)
Interest income	33	15	15
Other income (expense), net	38	(15)	6
Income from continuing operations before equity investments and income			
taxes	5,455	4,793	4,042
Income from equity investments	257	203	143
Income from continuing operations before income taxes	5,712	4,996	4,185
Provision for income taxes	1,540	1,136	1,327
Income from continuing operations	4,172	3,860	2,858
Loss from discontinued operations, net of tax	(4)	(7)	(24)
	4,168	3,853	2,834
Net income	4,108	3,033 4	2,834
-			
Net income attributable to the Company shareholders	\$ 4,174 ====================================	\$ 3,857	\$ 2,848
Earnings per share: Net income (loss) attributable to the Company shareholders— Basic:			
Continuing operations	\$ 8.04	\$ 6.81	\$ 5.01
Discontinued operations	(0.01)	(0.01)	(0.04)
	\$ 8.03	\$ 6.80	\$ 4.97
P.1 1			
Diluted:	Φ 0.00	¢ (7)	¢ 400
Continuing operations	\$ 8.00	\$ 6.76	\$ 4.96
Discontinued operations	(0.01)	(0.01)	(0.04)
	\$ 7.99	\$ 6.75	\$ 4.92

# CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	Year En	ded Decem	ber 31,
Millions of dollars	2014	2013	2012
Net income	\$ 4,168	\$3,853	\$2,834
Other comprehensive income (loss), net of tax –			
Financial derivatives:			
Loss on forward-starting interest rate swaps	(17)	_	_
Changes due to cross-currency swaps	30	_	_
Reclassification adjustment included in net income	(89)	—	—
Income tax expense	4		
Financial derivatives, net of tax	(80)		
Defined pension and other postretirement benefit plans:			
Prior service cost arising during the period	5	(21)	12
Reclassification adjustment for amortization of prior service cost included			
in net income	_	14	3
Net actuarial gain (loss) arising during the period	(493)	411	(198)
Reclassification adjustment for net actuarial loss included in net			
income	7	30	24
Reclassification adjustment for settlement gain included in net income		(3)	
Defined pension and other postretirement benefit plans, before tax	(481)	431	(159)
Income tax expense (benefit)	(172)	149	(38)
Defined pension and other postretirement benefit plans, net of tax	(309)	282	(121)
Foreign currency translations adjustments:			
Unrealized net change arising during the period	(733)	217	136
Reclassification adjustment included in net income	_	4	_
Foreign currency translations adjustments, before tax	(733)	221	136
Income tax benefit		(4)	(1)
Foreign currency translations, net of tax	(733)	225	137
Total other comprehensive income (loss)	(1,122)	507	16
Comprehensive income	3,046	4,360	2,850
Comprehensive loss attributable to non-controlling interests	6	4	14
Comprehensive income attributable to the Company shareholders	\$ 3,052	\$4,364	\$2,864

# LYONDELLBASELL INDUSTRIES N.V. CONSOLIDATED BALANCE SHEETS

	Decem	ber 31,
Millions of dollars	2014	2013
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 1,031	\$ 4,450
Restricted cash	2	10
Short-term investments	1,593	_
Accounts receivable:		
Trade, net	3,226	3,828
Related parties	222	202
Inventories	4,517	5,279
Prepaid expenses and other current assets	1,054	830
Total current assets	11,645	14,599
Property, plant and equipment, net	8,758	8,457
Investments and long-term receivables:		
Investment in PO joint ventures	384	421
Equity investments	1,636	1,629
Other investments and long-term receivables	44	64
Goodwill	566	605
Intangible assets, net	769	904
Other assets	481	619
Total assets	\$24,283	\$27,298

# LYONDELLBASELL INDUSTRIES N.V. CONSOLIDATED BALANCE SHEETS

	Decem	ber 31,
Millions of dollars, except shares and par value data	2014	2013
LIABILITIES AND EQUITY		
Current liabilities:		
Current maturities of long-term debt	\$ 4	\$ 1
Short-term debt	346	58
Accounts payable:		
Trade	2,239	2,822
Related parties	825	750
Accrued liabilities	1,554	1,299
Deferred income taxes	469	580
Total current liabilities	5,437	5,510
Long-term debt	6,757	5,776
Other liabilities	2,122	1,839
Deferred income taxes	1,623	1,659
Commitments and contingencies		
Stockholders' equity:		
Ordinary shares, €0.04 par value, 1,275 million shares authorized, 486,969,402 and		
548,824,138 shares outstanding, respectively	31	31
Additional paid-in capital	10,387	10,382
Retained earnings	6,775	4,004
Accumulated other comprehensive income (loss)	(1,026)	96
Treasury stock, at cost, 91,463,729 and 29,607,877 ordinary shares, respectively	(7,853)	(2,035)
Total Company share of stockholders' equity	8,314	12,478
Non-controlling interests	30	36
Total equity	8,344	12,514
Total liabilities and equity	\$24,283	\$27,298

# LYONDELLBASELL INDUSTRIES N.V. CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ei	nded Decem	ber 31,
Millions of dollars	2014	2013	2012
Cash flows from operating activities:			
Net income	\$ 4,168	\$ 3,853	\$ 2,834
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	1,019	1,021	983
Asset impairments	_		22
Amortization of debt-related costs	20	21	58
Inventory valuation adjustment	760	_	_
Equity investments –			
Equity income	(257)	(203)	(143)
Distribution of earnings, net of tax	156	186	147
Deferred income taxes	177	(46)	715
Changes in assets and liabilities that provided (used) cash:			
Accounts receivable	358	(64)	(101)
Inventories	(205)	(151)	441
Accounts payable	(378)	275	(189)
Prepaid expenses and other current assets	156	(165)	(98)
Other, net	74	108	118
Net cash provided by operating activities	6,048	4,835	4,787
Cash flows from investing activities:			
Expenditures for property, plant and equipment	(1,499)	(1,561)	(1,060)
Payments for repurchase agreements	(425)	_	_
Proceeds from repurchase agreements	75	_	_
Purchases of available-for-sale securities	(3,439)	_	_
Proceeds from sales and maturities of available-for-sale securities	1,751	_	_
Change in restricted cash	8	(5)	48
Other, net	(2)	(36)	(1)
Net cash used in investing activities	(3,531)	(1,602)	(1,013)

# CONSOLIDATED STATEMENTS OF CASH FLOWS—Continued

	Year Ended December 31,		
Millions of dollars	2014	2013	2012
Cash flows from financing activities:			
Repurchases of Company ordinary shares	(5,788)	(1,949)	_
Dividends paid	(1,403)	(1,127)	(2,415)
Issuance of long-term debt	992	1,472	3,000
Repayments of long-term debt	_	_	(2,679)
Net proceeds from commercial paper	262	_	_
Payments of debt issuance costs	(18)	(23)	(53)
Other, net	48	38	2
Net cash used in financing activities	(5,907)	(1,589)	(2,145)
Effect of exchange rate changes on cash	(29)	74	38
Increase (decrease) in cash and cash equivalents	(3,419)	1,718	1,667
Cash and cash equivalents at beginning of period	4,450	2,732	1,065
Cash and cash equivalents at end of period	\$ 1,031	\$ 4,450	\$ 2,732
Supplemental Cash Flow Information:			
Interest paid	\$ 343	\$ 266	\$ 665
Net income taxes paid	\$ 1,167	\$ 1,213	\$ 261

# LYONDELLBASELL INDUSTRIES N.V. CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

	Ordina	ary Shares	Additional Paid-in	Retained	Accumulated Other Comprehensive	Company Share of Stockholders'	Non- Controlling
Millions of dollars	Issued	Treasury	Capital	Earnings	Income (Loss)	Equity	Interests
Balance, December 31, 2011	\$ 31	\$ (124)	\$10,272	\$ 841	\$ (427)	\$10,593	\$ 54
Net income (loss)	_	_	_	2,848	_	2,848	(14)
Other comprehensive income	_	_	_	_	16	16	_
Warrants exercised		_	43	_	_	43	_
Share-based compensation		31	36	_	_	67	_
Special dividend (\$2.75 per							
share)		_	_	(1,582)	_	(1,582)	_
Dividends (\$1.45 per share)	_	_	_	(833)	_	(833)	_
Repurchases of Company							
ordinary shares		(13)				(13)	
Balance, December 31, 2012	\$ 31	\$ (106)	\$10,351	\$ 1,274	\$ (411)	\$11,139	\$ 40
Net income (loss)	_	_	_	3,857	_	3,857	(4)
Other comprehensive income	_	_	_	_	507	507	
Share-based compensation	_	20	31	_	_	51	
Dividends (\$2.00 per share)	_	_	_	(1,127)	_	(1,127)	_
Repurchases of Company							
ordinary shares		(1,949)				(1,949)	
Balance, December 31, 2013	\$ 31	\$(2,035)	\$10,382	\$ 4,004	\$ 96	\$12,478	\$ 36
Net income (loss)	_	_	_	4,174	_	4,174	(6)
Other comprehensive loss	_	_	_	_	(1,122)	(1,122)	
Share-based compensation	_	55	5	_	_	60	
Dividends (\$2.70 per share)	_	_	_	(1,403)	_	(1,403)	
Repurchases of Company							
ordinary shares		(5,873)				(5,873)	
Balance, December 31, 2014	\$ 31	\$(7,853)	\$10,387	\$ 6,775	\$(1,026)	\$ 8,314	\$ 30

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

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### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

# 1. Description of Company and Operations

LyondellBasell Industries N.V. is a limited liability company (*Naamloze Vennootschap*) incorporated under Dutch law by deed of incorporation dated October 15, 2009. Unless otherwise indicated, the "Company," "we," "us," "our" or similar words are used to refer to LyondellBasell Industries N.V. together with its consolidated subsidiaries ("LyondellBasell N.V.").

LyondellBasell Industries N.V. is the successor to the combination in December 2007 of Lyondell Chemical Company ("Lyondell Chemical") and Basell AF S.C.A. ("Basell"), which created one of the world's largest private petrochemical companies with significant worldwide scale and leading product positions. LyondellBasell Industries AF S.C.A. ("LyondellBasell AF"), the predecessor of LyondellBasell N.V., is no longer part of the Company.

LyondellBasell N.V. is a worldwide manufacturer of chemicals and polymers, a refiner of crude oil, a significant producer of gasoline blending components and a developer and licensor of technologies for production of polymers.

# 2. Summary of Significant Accounting Policies

The following significant accounting policies were applied in the preparation of these Consolidated Financial Statements:

# **Basis of Preparation and Consolidation**

The accompanying Consolidated Financial Statements have been prepared from the books and records of LyondellBasell N.V. under accounting principles generally accepted in the U.S. ("U.S. GAAP"). Subsidiaries are defined as being those companies over which we, either directly or indirectly, have control through a majority of the voting rights or the right to exercise control or to obtain the majority of the benefits and be exposed to the majority of the risks. Subsidiaries are consolidated from the date on which control is obtained until the date that such control ceases. All intercompany transactions and balances have been eliminated in consolidation.

The Consolidated Financial Statements have been prepared under the historical cost convention, as modified for the accounting of financial assets and financial liabilities (including derivative instruments) at fair value through profit or loss. Consolidated financial information, including subsidiaries, equity investments, has been prepared using uniform accounting policies for similar transactions and other events in similar circumstances.

# Cash and Cash Equivalents

Cash equivalents consist of highly liquid debt instruments such as certificates of deposit, commercial paper and money market accounts. Cash equivalents include instruments with maturities of three months or less when acquired. Cash equivalents are stated at cost, which approximates fair value. Cash and cash equivalents exclude restricted cash. Our cash equivalents are placed in certificates of deposit, high-quality commercial paper and money market accounts with major international banks and financial institutions.

We have no requirements for compensating balances in a specific amount at a specific point in time. We maintain compensating balances for some of our banking services and products. Such balances are maintained solely at our discretion.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

#### **Short-Term Investments**

We also have investments in marketable securities classified as available-for-sale. These securities, which are included in Short-term investments on the Consolidated Balance Sheets, are carried at estimated fair value with unrealized gains and losses recorded as a component of Accumulated other comprehensive income ("AOCI"). We periodically review our available-for-sale securities for other-than-temporary declines in fair value below the cost basis, and when events or changes in circumstances indicate the carrying value of an asset may not be recoverable, the investment is written down to fair value, establishing a new cost basis.

# **Trade Receivables**

Trade receivables are amounts due from customers for merchandise sold or services performed in the ordinary course of business.

We calculate provisions for doubtful accounts receivable based on our estimates of amounts that we believe are unlikely to be collected. Collectability of receivables is reviewed and the provision calculated for doubtful accounts is adjusted at least quarterly, based on aging of specific accounts and other available information about the associated customers. Provisions for doubtful accounts are included in Selling, general and administrative expenses.

#### **Inventories**

Inventories are carried at the lower of current market value or cost. Cost is determined using the last-in, first-out ("LIFO") method for raw materials, work in progress ("WIP") and finished goods, and the moving average cost method for materials and supplies.

Inventory exchange transactions, which involve fungible commodities, are not accounted for as purchases and sales. Any resulting volumetric exchange balances are accounted for as inventory, with cost determined using the LIFO method.

### **Property, Plant and Equipment**

Property, plant and equipment are recorded at historical cost. Historical cost includes expenditures that are directly attributable to the acquisition of the items. Costs may also include borrowing costs incurred on debt during construction or major projects exceeding one year, costs of major maintenance arising from turnarounds of major units relating to betterments and committed decommission costs. Routine maintenance costs are expensed as incurred. Land is not depreciated. Depreciation is computed using the straight-line method over the estimated useful asset lives to their residual values.

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

We evaluate property, plant and equipment for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Long-lived assets are grouped at the lowest level for which there are identifiable cash flows that are largely independent of the cash flows of other groups of assets, which, for us, is generally at the plant group level (or, at times, individual plants in certain circumstances where we have isolated production units with separately identifiable cash flows). When it is probable that an asset or asset group's undiscounted future cash flows will not be sufficient to recover the carrying amount, the asset is written down to its estimated fair value.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Upon retirement or sale, we remove the cost of the asset and the related accumulated depreciation from the accounts and reflect any resulting gain or loss in the Consolidated Statements of Income.

# **Equity Investments**

We account for equity investments using the equity method of accounting if we have the ability to exercise significant influence over, but not control of, an investee. Significant influence generally exists if we have an ownership interest representing between 20% and 50% of the voting rights. Under the equity method of accounting, investments are stated initially at cost and are adjusted for subsequent additional investments and our proportionate share of profit or losses and distributions.

We record our share of the profits or losses of the equity method investments, net of income taxes, in the Consolidated Statements of Income. When our share of losses in an equity investment equals or exceeds our interest in the equity investment, including any other unsecured receivables, we do not recognize further losses, unless we have incurred obligations or made payments on behalf of the equity investment.

We evaluate our equity method investments for impairment when events or changes in circumstances indicate, in management's judgment, that the carrying value of such investments may have experienced an other-than-temporary decline in value. When evidence of loss in value has occurred, management compares the estimated fair value of investment to the carrying value of investment to determine whether an impairment has occurred. If the estimated fair value is less than the carrying value and management considers the decline in value to be other-than temporary, the excess of the carrying value over the estimated fair value is recognized in the Consolidated Financial Statements as an impairment.

# Goodwill

We recorded goodwill upon our application of fresh-start accounting on May 1, 2010. Goodwill is not amortized, but is tested for impairment. We assess the recoverability of the carrying value of goodwill during the fourth quarter of each year or whenever events or changes in circumstances indicate that the carrying amount of the goodwill of a reporting unit may not be fully recoverable.

We first assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value. Qualitative factors assessed for each of the reporting units include, but are not limited to, changes in long-term commodity prices, discount rates, competitive environments, planned capacity, cost factors such as raw material prices, and financial performance of the reporting units. If the qualitative assessment indicates that it is more likely than not that the carrying value of a reporting unit exceeds its estimated fair value, a two-step quantitative test is required.

For 2013, management performed qualitative impairment assessments of our reporting units which indicated that the fair value of our reporting units was greater than their carrying value. Accordingly, a quantitative two-step goodwill impairment test was not required. In 2014, management voluntarily performed a quantitative two-step goodwill impairment test for all reporting units. The results of step one of the quantitative impairment test indicated that the fair value of each of our reporting units was substantially in excess of their carrying value. Accordingly, no goodwill impairment was recognized in 2014.

# **Intangible Assets**

*Intangible Assets*—Intangible assets primarily consist of emission allowances, various contracts, in-process research and development and software costs. These assets are amortized using the straight-line method over

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

their estimated useful lives or over the term of the related agreement, if shorter. We evaluate definite-lived intangible assets for impairment whenever events or changes in circumstances indicate that the carrying value of the asset may not be recoverable.

Research and Development—Research and development ("R&D") costs are expensed when incurred. Subsidies for research and development are included in Other income (expense), net. Depreciation expense related to R&D assets is included as a cost of R&D.

# **Income Taxes**

The income tax for the period comprises current and deferred tax. Income tax is recognized in the Consolidated Statements of Income, except to the extent that it relates to items recognized in other comprehensive income or directly in equity. In these cases, the applicable tax amount is recognized in other comprehensive income or directly in equity, respectively.

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes, as well as the net tax effects of net operating loss carryforwards. Valuation allowances are provided against deferred tax assets when it is more likely than not that some portion or all of the deferred tax asset will not be realized.

We recognize uncertain income tax positions in our financial statements when we believe it is more likely than not, based on the technical merits, that the position or a portion thereof will be sustained upon examination.

# **Employee Benefits**

*Pension Plans*—We have both defined benefit (funded and unfunded) and defined contribution plans. For the defined benefit plans, a projected benefit obligation is calculated annually by independent actuaries using the projected unit credit method. Pension costs primarily represent the increase in the actuarial present value of the obligation for pension benefits based on employee service during the year and the interest on this obligation in respect of employee service in previous years, net of expected return on plan assets.

Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to equity and are reflected in Accumulated other comprehensive income in the period in which they arise.

For defined contribution plans, we pay contributions to publicly or privately administered pension insurance plans on a mandatory, contractual or voluntary basis. The contributions are recognized as employee benefit expense when due.

Other Post-Employment Obligations—Certain employees are entitled to postretirement medical benefits upon retirement. The entitlement to these benefits is usually conditional on the employee remaining in service up to retirement age and the completion of a minimum service period. The expected costs of these benefits are accrued over the period of employment applying the same accounting methodology used for defined benefit plans.

Termination Benefits—Contractual termination benefits are payable when employment is terminated due to an event specified in the provisions of a social/labor plan or statutory law. A liability is recognized for one time termination benefits when we are committed to i) make payments and the number of affected employees and the benefits received are known to both parties, and ii) terminating the employment of current employees according to a detailed formal plan without possibility of withdrawal and can reasonably estimate such amount. Benefits falling due more than 12 months after the balance sheet date are discounted to present value.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

### **Other Provisions**

Environmental Remediation Costs—Environmental remediation liabilities include liabilities related to sites we currently own, sites we no longer own, as well as sites where we have operated that belong to other parties. Liabilities for anticipated expenditures related to investigation and remediation of contaminated sites are accrued when it is probable a liability has been incurred and the amount of the liability can be reasonably estimated. Only ongoing operating and monitoring costs, the timing of which can be determined with reasonable certainty, are discounted to present value. Future legal costs associated with such matters, which generally are not estimable, are not included in these liabilities.

Asset Retirement Obligations—At some sites, we are contractually obligated to decommission our plants upon site exit. Asset retirement obligations are recorded at the present value of the estimated costs to retire the asset at the time the obligation is incurred. That cost, which is capitalized as part of the related long-lived asset, is depreciated on a straight-line basis over the useful life of the related asset. Accretion expense in connection with the discounted liability is also recognized over the useful life of the related asset. Such depreciation and accretion expenses are included in Cost of sales.

# **Foreign Currency Translation**

Functional and Reporting Currency—Items included in the financial information of each of LyondellBasell N.V.'s entities are measured using the currency of the primary economic environment in which the entity operates ("the functional currency") and then translated to the U.S. dollar reporting currency through Other comprehensive income.

*Transactions and Balances*—Foreign currency transactions are translated into the functional currency using exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognized in the Consolidated Statements of Income.

In the Consolidated Financial Statements, the results and financial position of all subsidiaries that have a functional currency different from the presentation currency are translated into the reporting currency as follows:

- 1. Assets and liabilities for each balance sheet presented are translated at the closing rate at the date of that balance sheet;
- 2. Income and expenses for each income statement are translated at average exchange rates; and
- 3. All resulting exchange differences are recognized as a separate component within Other comprehensive income (foreign currency translation).

# **Revenue Recognition**

Substantially all of the Company's revenue is derived from product sales. Revenues are recognized when sales are realized or realizable, and the earnings process is complete. Revenue from product sales is recognized when the price is fixed or determinable, collectability is reasonably assured, and the customer has an obligation to pay at the time of transfer of title and risk of loss to the customer, which usually occurs at the time of shipment. Revenue is recognized at the time of delivery if we retain the risk of loss during shipment.

# **Share-Based Compensation**

The Company grants stock-based compensation awards that vest over a specified period upon employees meeting certain service criteria. The fair value of equity instruments issued to employees is measured on the grant date and is recognized over the vesting period.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Obligations related to cash-settled awards are recognized as a liability and re-measured at each balance sheet date through the Consolidated Statements of Income.

#### Leases

We lease land and other assets for use in our operations. All lease agreements are evaluated and classified as either an operating lease or a capital lease. A lease is classified as a capital lease if any of the following criteria are met: transfer of ownership to the lessee by the end of the lease term; the lease contains a bargain purchase option; the lease term is equal to 75% or greater of the asset's useful economic life; or the present value of the future minimum lease payments is equal to or greater than 90% of the asset's fair market value. Capital leases are recorded at the lower of the net present value of the total amount of rent payable under the leasing agreement (excluding finance charges) or fair market value of the leased asset. Capital lease assets are depreciated on a straight-line basis, over a period consistent with our normal depreciation policy for tangible fixed assets, but generally not exceeding the lease term. Operating lease expense is recognized ratably over the entire lease term.

# **Derivative Financial Instruments and Hedging Activities**

We selectively enter into derivative transactions to manage volatility related to market risks associated with changes in commodity pricing, currency exchange rates and interest rates. We categorize assets and liabilities, measured at fair value, into one of three different levels depending on the observability of the inputs employed in the measurement. Level 1 inputs are quoted prices in active markets for identical assets or liabilities. Level 2 inputs are observable inputs other than quoted prices included within Level 1 for the asset or liability, either directly or indirectly through market corroborated inputs. Level 3 inputs are unobservable inputs for the asset or liability reflecting significant modifications to observable related market data or our assumptions about pricing by market participants. For a discussion related to financial instruments and derivatives policies, see Note 14.

# **Non-Controlling Interests**

Non-controlling interests primarily represent the interests of unaffiliated investors in a partnership that owns our PO/SM II plant at the Channelview, Texas complex and a subsidiary owning an equity investment in Al-Waha Petrochemicals Ltd.

#### **Use of Estimates**

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates.

# **Recently Adopted Guidance**

Obligations from Joint and Several Liability Arrangements—In February 2013, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2013-04, Liabilities (Topic 405): Obligations Resulting from Joint and Several Liability Arrangements for Which the Total Amount of the Obligation is Fixed at the Reporting Date. This ASU defines how entities measure obligations from joint and several liability arrangements which are fixed at the reporting date and for which no U.S. GAAP guidance currently exists. The guidance requires entities to disclose the nature, amount and other information about those obligations. Retrospective presentation for all comparative periods presented is required. The ASU was effective for periods beginning after December 15, 2013. The adoption of this amendment did not have a material impact on the presentation of our Consolidated Financial Statements.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Presentation of an Unrecognized Tax Benefit—In July 2013, the FASB issued ASU 2013-11, Income Taxes (Topic 740): Presentation of an Unrecognized Tax Benefit when a Net Operating Loss Carryforward, a Similar Tax Loss, or Tax Credit Carryforward Exists (a consensus of the Emerging Issues Task Force). Previous guidance did not explicitly address the balance sheet presentation of an unrecognized tax benefit when a net operating loss ("NOL") or similar tax loss carryforward, or a tax credit carryforward exists. The amendments to the guidance require an entity to net its unrecognized tax benefits against the deferred tax assets for all same jurisdiction NOLs or similar tax loss carryforwards, or tax credit carryforwards. A gross presentation will be required only if such carryforwards are not available or would not be used by the entity to settle any additional income taxes resulting from disallowance of the uncertain tax position. This ASU requires prospective application and was effective for periods beginning after December 15, 2013. Retrospective presentation is permitted but not required. Our prospective adoption of this amendment did not have a material impact on the presentation of our Consolidated Financial Statements.

Discontinued Operations—In April 2014, the FASB issued ASU 2014-08, Presentation of Financial Statements (Topic 205) and Property, Plant, and Equipment (Topic 360): Reporting Discontinued Operations and Disclosures of Disposals of Components of an Entity. The amendments in this ASU revise the criteria for reporting discontinued operations. Under this new guidance, only disposals representing a strategic shift in operations that have or will have a major effect on a company's operations should be presented as discontinued operations. Additional disclosures about the assets, liabilities, income and expenses of discontinued operations will also be required. Prospective application of this ASU is required for public entities for annual and interim periods beginning on or after December 15, 2014 and early adoption is permitted. Our early adoption of this amendment did not have any impact on the presentation of our Consolidated Financial Statements.

# Accounting Guidance Issued But Not Adopted as of December 31, 2014

Revenue Recognition—In May 2014, the FASB issued ASU 2014-09, Revenue from Contracts with Customers (Topic 606), which supersedes the current revenue recognition requirements in ASC 606, Revenue Recognition. Under this new guidance, entities should recognize revenues to depict the transfer of promised goods or services to customers in an amount that reflects the consideration the entity expects to receive in exchange for those goods or services. This ASU also requires enhanced disclosures. The amendments in this ASU are effective for annual and interim periods beginning after December 15, 2016. Retrospective and modified retrospective application is allowed. We are currently assessing the impact of this amendment on our Consolidated Financial Statements.

Repurchase Agreements—In June 2014, the FASB issued ASU 2014-11, Transfers and Servicing (Topic 860): Repurchase-to-Maturity Transactions, Repurchase Financings, and Disclosure, which changes the accounting for repurchase-to-maturity transactions and other similar transactions. The amendments in this ASU require repurchase-to-maturity transactions to be accounted for as secured borrowings rather than as sales with forward repurchase commitments. In addition, this ASU requires new and expanded disclosures about repurchase agreements and other similar transactions. The amendments in this update are effective for interim and annual periods beginning after December 15, 2014. The application of this amendment is not expected to have a material impact on our Consolidated Financial Statements.

Compensation—In June 2014, the FASB issued ASU 2014-12, Stock Compensation (Topic 718): Accounting for Share-Based Payments When the Terms of an Award Provide That a Performance Target Could Be Achieved after the Requisite Service Period. Under this new guidance, entities are required to treat performance targets that affect vesting and could be achieved after the requisite service period as a performance condition. The amendments in this ASU will be effective for annual and interim periods beginning after December 15, 2015. Early adoption is permitted. The application of this amendment is not expected to have a material impact on our Consolidated Financial Statements.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Going Concern—In August 2014, the FASB issued ASU 2014-15, *Presentation of Financial Statements-Going Concern (Subtopic 205-40): Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern.* Under this new guidance, management is required to perform interim and annual assessments of an entity's ability to continue as a going concern within one year of the date the financial statements are issued (or available to be issued when applicable). Additionally, the entity must provide certain disclosures if conditions or events raise substantial doubt about its ability to continue as a going concern. The amendments in this update are effective for annual periods ending after December 15, 2016 and interim periods thereafter. Early adoption is permitted. The application of this amendment is not expected to have a material impact on our Consolidated Financial Statements.

Extraordinary and Unusual Items—In January 2015, the FASB issued ASU 2015-01, Income Statement-Extraordinary and Unusual Items (Subtopic 225-20), Simplifying Income Statement Presentation by Eliminating the Concept of Extraordinary Items, which eliminates the concept of extraordinary items. Under this new guidance, entities will no longer be required to separately classify, present and disclose extraordinary events and transactions. The amendments in this update are effective for annual and interim periods beginning after December 15, 2015. We are currently assessing the impact of this amendment on our Consolidated Financial Statements but do not believe the application of this amendment will have a material impact on our Consolidated Financial Statements.

### 3. Discontinued Operations

In September 2011, we reported that the management of certain of our indirect subsidiaries intended to initiate consultations with their works councils on the probable cessation of refinery operations at our refinery in Berre and of the associated refined products business. In connection with the intended closure, we recorded pretax charges totaling \$136 million in the fourth quarter of 2011, primarily related to the estimated cost of the social plan for the affected employees. In 2013 and 2012, we reduced the estimated cost of the social plan by \$5 million and \$25 million, respectively.

On January 4, 2012, these operations were suspended in accordance with an agreement with the relevant works councils. Notwithstanding the suspension of the operations and the recording of the charges related to the costs of the social plan for employees and inventory write-downs, we began reporting the Berre refinery as a discontinued operation in the second quarter of 2012. Our determination that the Berre refinery met the definition of a "discontinued operation" in the second quarter of 2012 was based on (i) the ongoing cash flows of the refinery, which became insignificant in the second quarter of 2012 as residual inventory from the refinery was liquidated, and (ii) we and our subsidiaries ceasing to have any significant continuing involvement in the operations of the refinery during the second quarter of 2012.

The amounts included in Loss from discontinued operations of the Berre refinery are summarized as follows:

	Year E	Year Ended December 31,		
Millions of dollars	2014	2013	2012	
Sales and other operating revenues	<u>\$ 1</u>	\$ 9	\$278	
Loss from discontinued operations before income taxes	\$(7)	\$(13)	\$ (24)	
Benefit from income taxes	_(3)	(6)		
Loss from discontinued operations, net of tax	\$(4) ===	\$ (7)	<u>\$ (24)</u>	

Losses from discontinued operations for 2013 and 2012 include benefits related to the liquidation of LIFO-valued inventory of \$9 million and \$73 million, respectively.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Future cash outflows will occur for exit or disposal activities and for payments made to severed employees. Exit and disposal costs are expected to be incurred through the end of 2017. Payments to the affected employees are expected to be substantially complete by 2019. There is uncertainty in the manner, scope and timing of potential future asset disposal or dismantlement activities and their related cash flows. Although some dismantling and remediation activities may be considered or required at a future date, the amounts associated with such activities are not determinable at this time due to such uncertainties.

The following table summarizes the changes in the accrual for the social plan for employees affected by the closure of the Berre refinery at December 31:

Millions of dollars	2014	2013
Beginning balance	\$ 42	\$ 59
Accretion expense	2	5
Cash payments	(13)	(20)
Adjustment for change in estimates	_	(5)
Effect of exchange rate changes	<u>(5)</u>	3
Ending balance	\$ 26	\$ 42

There are no significant assets or liabilities related to the Berre refinery other than those discussed above.

# 4. Related Party Transactions

We have related party transactions with affiliates of one of our major shareholders, Access Industries ("Access") and with the Company's joint venture partners (see Notes 8 and 9). We also had related party transactions with affiliates of Apollo Management LLC ("Apollo"), who was a significant shareholder of the Company until the third quarter of 2013.

Access—In December 2010, we entered into a tax cooperation agreement with Access. The tax cooperation agreement allows either party to provide the other with information and support in connection with tax return preparation and audits on a time and materials basis through 2014. No payments were made to or received from Access under this agreement during 2014, 2013 and 2012. The agreement terminated as of December 31, 2014.

In December 2010, one of our subsidiaries received demand letters from affiliates of Access demanding (i) indemnity for losses, including attorney's fees and expenses, arising out of a pending lawsuit and (ii) payment of (a) \$100 million in management fees under a 2007 management agreement between an Access affiliate and the predecessor of LyondellBasell AF and (b) other unspecified amounts related to advice purportedly given in connection with financing and other strategic transactions. For additional information related to this matter, see Note 19.

Apollo—Transactions with Apollo affiliates include the sales of product under a long-term contract that renews automatically each year, unless a 90 day notice of termination has been received, and other product sales made on the spot market in the ordinary course of business.

Joint Venture Partners—We have related party transactions with our equity investees. These related party transactions include the sales and purchases of goods in the normal course of business as well as certain financing arrangements. In addition, under contractual arrangements with certain of our equity investees, we receive certain services, utilities and materials at some of our manufacturing sites and we provide certain services to our equity investees.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

We have guaranteed \$27 million of the indebtedness of one of our joint ventures as of December 31, 2014. In December 2013, we received payments totaling \$9 million from our joint venture, Saudi Ethylene & Polyethylene Company Ltd., in connection with the repayment of a loan made in 2006.

Related party transactions are summarized as follows:

	Year E	ıber 31,		
Millions of dollars	2014	2013	2012	
The Company billed related parties for:				
Sales of products —				
Apollo affiliates	\$ —	\$ 224	\$ 299	
Joint venture partners	894	786	738	
Shared service agreements —				
Apollo affiliates	_	7	15	
Joint venture partners	18	19	1	
Related parties billed the Company for:				
Sales of products —				
Joint venture partners	3,507	3,340	3,260	
Shared service agreements —				
Joint venture partners	85	94	107	

# **5.** Accounts Receivable

We sell our products primarily to other industrial concerns in the petrochemicals and refining industries. We perform ongoing credit evaluations of our customers' financial conditions and, in certain circumstances, require letters of credit or corporate guarantees from them. Our allowance for doubtful accounts receivable, which is reflected in the Consolidated Balance Sheets as a reduction of accounts receivable, was \$29 million and \$43 million at December 31, 2014 and 2013, respectively. We recorded provisions for doubtful accounts receivable, which are reflected in the Consolidated Statements of Income, of \$1 million, \$14 million and \$7 million in 2014, 2013 and 2012, respectively. In 2014, we wrote off approximately \$10 million of accounts receivable reserved in prior years.

# 6. Inventories

Inventories consisted of the following components at December 31:

Millions of dollars	2014	2013
Finished goods	\$2,919	\$3,297
Work-in-process	304	253
Raw materials and supplies	1,294	1,729
Total inventories	\$4,517	\$5,279

At December 31, 2014 and 2013, approximately 88% and 89%, respectively, of our inventories were valued using the LIFO method and the remainder, excluding materials and supplies, was valued using the first-in, first-out method. The excess of current replacement cost over LIFO cost of inventories amounted to \$270 million and \$688 million at December 31, 2014 and 2013, respectively.

For information related to lower of cost or market inventory valuation charges recognized during 2014, see Note 22.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

## 7. Property, Plant and Equipment, Goodwill and Intangible Assets

*Property, Plant and Equipment*—The components of property, plant and equipment, at cost, and the related accumulated depreciation are as follows at December 31:

Millions of dollars	Estimated Useful Lives (in Years)	2014	2013
Land		\$ 297	\$ 320
Major manufacturing equipment	25	7,268	6,835
Buildings	30	628	642
Light equipment and instrumentation	5-20	1,467	1,315
Office furniture	15	15	16
Turnarounds of major units	4-7	1,185	1,029
Information system equipment	3-5	47	32
Construction in progress		1,143	962
Total property, plant and equipment		12,050	11,151
Less accumulated depreciation		(3,292)	(2,694)
Property, plant and equipment, net		\$ 8,758	\$ 8,457

In 2012, we recognized impairment charges of \$22 million, primarily related to damage to our low density polyethylene ("LDPE") plant in Wesseling, Germany resulting from an explosion in a reactor bay.

*Intangible Assets*—The components of identifiable intangible assets, at cost, and the related accumulated amortization are as follows at December 31:

	2014				2013	
Millions of dollars	Cost	Accumulated Amortization	Net	Cost	Accumulated Amortization	Net
In-process research and development costs	\$ 119	\$ (44)	\$ 75	\$ 136	\$ (40)	\$ 96
Emission allowances	730	(330)	400	728	(263)	465
Various contracts	542	(269)	273	567	(251)	316
Software costs	104	(83)	21	103	(76)	27
Total intangible assets	\$1,495	\$(726)	\$769	\$1,534	\$(630)	\$904

Amortization of these identifiable intangible assets for the next five years is expected to be \$117 million in 2015, \$113 million in 2016, \$112 million in 2017, \$107 million in 2018 and \$106 million in 2019.

Depreciation and Amortization Expense—Depreciation and amortization expense is summarized as follows:

	Year Ended December 31		
Millions of dollars	2014	2013	2012
Property, plant and equipment	\$ 865	\$ 854	\$808
Investment in PO joint ventures	29	32	30
Emission allowances	69	68	70
Various contracts	38	47	51
In-process research and development costs	10	9	11
Software costs	8	11	13
Total depreciation and amortization	\$1,019	\$1,021	\$983

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Asset Retirement Obligations—In certain cases, we are contractually obligated to decommission our plants upon site exit. In such cases, we have accrued the net present value of the estimated costs. The majority of our asset retirement obligations are related to facilities in Europe. The changes in our asset retirement obligations are as follows:

	Year Ended December 31,	
Millions of dollars	2014	2013
Beginning balance	\$92	\$106
Provisions	2	_
Payments	(4)	(14)
Changes in estimates	4	(6)
Accretion expense	3	3
Effects of exchange rate changes	(9)	3
Ending balance	\$88	\$ 92

We believe that there are asset retirement obligations associated with some of our other facilities, but the present value of those obligations is not material in the context of an indefinite expected life of the facilities. We continually review the optimal future alternatives for our facilities. Any decision to retire one or more facilities may result in an increase in the present value of such obligations.

*Goodwill*—Goodwill was \$566 million at December 31, 2014, \$605 million at December 31, 2013 and \$591 million at December 31, 2012. All movements were due to foreign exchange impacts.

### 8. Investment in PO Joint Ventures

We, together with Bayer AG and Bayer Corporation (collectively "Bayer"), share ownership in a U.S. propylene oxide ("PO") manufacturing joint venture (the "U.S. PO joint venture"). The U.S. PO joint venture owns a PO/ styrene monomer ("SM" or "styrene") and a PO tertiary butyl alcohol ("TBA") manufacturing facility. Bayer's ownership interest represents an undivided interest in certain U.S. PO joint venture assets with correlative PO capacity reservation that resulted in ownership of annual in-kind cost-based PO production of 1.5 billion pounds in 2014 and 2013. We take in kind the remaining cost-based PO and co-product production.

In addition, we and Bayer each have a 50% interest in a separate manufacturing joint venture (the "European PO joint venture"), which owns a PO/SM plant at Maasvlakte near Rotterdam, The Netherlands. In substance, each partner's ownership interest represents an undivided interest in all of the European PO joint venture assets with correlative capacity reservation that resulted in ownership of annual in-kind cost-based PO and SM production.

We and Bayer do not share marketing or product sales under the U.S. PO joint venture. We operate the U.S. PO joint venture's and the European PO joint venture's (collectively the "PO joint ventures") plants and arrange and coordinate the logistics of product delivery. The partners share in the cost of production and logistics is based on their product offtake.

We account for both the U.S. PO joint venture and the European PO joint venture using the equity method. We report the cost of our product offtake as inventory and equity loss as cost of sales in our Consolidated Financial Statements. Related production cash flows are reported in the operating cash flow section of the Consolidated Statements of Cash Flows.

Our equity investment in the PO joint ventures represents our share of the manufacturing plants and is decreased by recognition of our share of equity loss, which is equal to the depreciation and amortization of the assets of the

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

PO joint ventures. Other changes in the investment balance are principally due to our additional capital contributions to the PO joint ventures to fund capital expenditures. Such contributions are reported in the investing cash flow section of the Consolidated Statements of Cash Flows.

Our product offtake was 5,878 million, 4,986 million and 5,170 million of pounds of PO and its co-products for the years ended December 31, 2014, 2013 and 2012, respectively.

Changes in our investments in the U.S. and European PO joint ventures for 2014 and 2013 are summarized below:

Millions of dollars	U.S. PO Joint Venture	European PO Joint Venture	Total PO Joint Ventures
Investments in PO joint ventures—January 1, 2014	\$269	\$152	\$421
Cash contributions	9	1	10
Depreciation and amortization	(19)	(10)	(29)
Effect of exchange rate changes		(18)	_(18)
Investments in PO joint ventures—December 31, 2014	<u>\$259</u>	<u>\$125</u>	<u>\$384</u>
Investments in PO joint ventures—January 1, 2013	\$262	\$135	\$397
Cash contributions	28	21	49
Depreciation and amortization	(21)	(11)	(32)
Effect of exchange rate changes		7	7
Investments in PO joint ventures—December 31, 2013	\$269	\$152	\$421

## 9. Equity Investments

Our PO joint ventures, which are also accounted for using the equity method of accounting, are discussed in Note 8 to the accompanying Consolidated Financial Statements and are, therefore, not included in the following discussion.

Our remaining direct and indirect equity investments are as follows at December 31:

Percent of Ownership	2014	2013
Basell Orlen Polyolefins Sp. Z.o.o	50.00%	50.00%
PolyPacific Pty. Ltd	50.00%	50.00%
SunAllomer Ltd	50.00%	50.00%
Saudi Polyolefins Company	25.00%	25.00%
Saudi Ethylene & Polyethylene Company Ltd	25.00%	25.00%
Al-Waha Petrochemicals Ltd	20.95%	20.95%
PolyMirae Co. Ltd	42.59%	42.59%
HMC Polymers Company Ltd	28.56%	28.56%
Indelpro S.A. de C.V.	49.00%	49.00%
Ningbo ZRCC Lyondell Chemical Co. Ltd	26.65%	26.65%
Ningbo ZRCC Lyondell Chemical Marketing Co	50.00%	50.00%
NOC Asia Ltd.	40.00%	40.00%
Geosel	27.00%	27.00%

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The changes in our equity investments are as follows:

	Year Ended December 31,		
Millions of dollars	2014	2013	
Beginning balance	\$1,629	\$1,583	
Investee net income	. 257	213	
Impairment recognized by investor		(10)	
Income from equity investments	. 257	203	
Distribution of earnings, net of tax	(156)	(186)	
Contributions to joint ventures	. —	1	
Divestiture	. —	(18)	
Currency exchange effects	(94)	16	
Other		30	
Ending balance	\$1,636	\$1,629	

In December 2013, we sold our 40% interest in Nihon Oxirane Company. We recognized a \$16 million loss in connection with this sale, which is reflected in our Consolidated Statements of Income in Other income (expense), net.

In connection with this sale, we and our joint venture partner revised the terms of the agreement governing our NOC Asia Ltd. joint venture. Under the new terms of the agreement, our participation in the joint venture is limited to a finite period. To determine whether the change in terms of the agreement gave rise to an impairment of our investment, we assessed the fair value of the investment by using discounted cash flows. The assessment concluded that the excess of carrying value of the investment over its fair value was other than temporary, resulting in the impairment charge indicated above.

The subsidiary that holds the Company's equity interest in Al-Waha Petrochemicals Ltd. has a minority shareholder, which holds 16.21% of its equity. The equity interest held by the minority shareholder can be called by the Company or can be put to the Company by the minority interest shareholder at any time. The price of the call option is the nominal value of the shares (initial \$18 million investment) plus accrued interest based on LIBOR plus 40 basis points, less paid dividends. The price of the put option is €1 plus the minority shareholder's undistributed pro-rata earnings. As of December 31, 2014 and 2013, the put would have a minimal redemption amount and the call could be redeemed for \$22 million, the value of the initial investment plus accrued interest.

Summarized balance sheet information and our share of the Company's investments accounted for under the equity method are as follows at December 31:

	2014		14 2013	
Millions of dollars	100%	Company Share	100%	Company Share
Current assets	\$3,069	\$1,030	\$3,049	\$1,032
Noncurrent assets	5,298	1,728	5,930	1,929
Total assets	8,367	2,758	8,979	2,961
Current liabilities	2,433	791	2,152	755
Noncurrent liabilities	2,208	615	2,366	643
Net assets	\$3,726	\$1,352	\$4,461	\$1,563

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Summarized income statement information and our share of the Company's investments accounted for under the equity method are set forth below:

	Year Ended December 31,					
	20	14	20	13	20	12
Millions of dollars	100%	Company Share	100%	Company Share	100%	Company Share
Revenues	\$ 9,824 (8,366)	\$ 3,177 (2,744)	\$11,017 (9,526)	\$ 3,565 (3,152)	\$10,961 (9,902)	\$ 3,650 (3,328)
Gross profit	1,458 (220)	433 (70)	1,491 (246)	413 (83)	1,059 (258)	322 (91)
Operating income	1,238	363	1,245	330	801	231
Interest income	6	3	5	2	6	3
Interest expense	(83)	(46)	(97)	(75)	(180)	(76)
Foreign currency translation	(13)	(4)	(2)	(1)	74	21
Other income (expense), net	27	8	25	7	(9)	(2)
Income before income taxes	1,175	324	1,176	263	692	177
Provision for income taxes	(229)	(67)	(229)	(50)	(130)	(34)
Net income	\$ 946	\$ 257	\$ 947	\$ 213	\$ 562	\$ 143

The difference between our carrying value and the underlying equity in the net assets of our equity investments are assigned to the investment's assets and liabilities based on an analysis of the factors giving rise to the basis difference. The amortization of the basis difference is included in Income from equity investments in the Consolidated Statements of Income.

## 10. Prepaid Expenses and Other Current Assets and Other Assets

The components of Prepaid expenses and other current assets were as follows at December 31:

Millions of dollars	2014	2013
Repurchase agreements	\$ 350	\$
Advances to suppliers	264	180
Income taxes	126	103
VAT receivables	76	351
Deferred tax assets	67	24
Prepaid insurance	42	49
Other taxes	16	17
Other	113	106
Total prepaid expenses and other current assets	\$1,054	\$830

For information related to our repurchase agreements, see Note 14.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The components of Other assets were as follows at December 31:

Millions of dollars	2014	2013
Deferred tax assets	\$271	\$357
Debt issuance costs	89	103
Company-owned life insurance	53	54
Financial derivatives	40	_
Pension assets	11	73
Other	17	32
Total other assets	\$481	\$619

## 11. Accrued Liabilities

Accrued liabilities consisted of the following components at December 31:

Millions of dollars	2014	2013
Payroll and benefits	\$ 426	\$ 409
Renewable identification numbers	223	124
Product sales rebates	187	211
Taxes other than income taxes	187	207
Income taxes	153	5
Interest	111	83
Share repurchases	85	_
Deferred revenues	73	107
Restructuring	25	58
Priority and administrative claims	13	15
Other	71	80
Total accrued liabilities	\$1,554	\$1,299

For information related to the increase in income taxes, see Note 18. For information related to share repurchases, see Note 20.

# 12. Debt

Long-term loans, notes and other long-term debt consisted of the following:

Millions of dollars	2014	2013
Senior Notes due 2019, \$2,000 million, 5.0%	\$1,993	\$2,000
Senior Notes due 2021, \$1,000 million, 6.0%	1,000	1,000
Senior Notes due 2024, \$1,000 million, 5.75%	1,000	1,000
Guaranteed Notes due 2044, \$1,000 million, 4.875% (\$12 million of		
discount)	988	_
Guaranteed Notes due 2023, \$750 million, 4% (\$9 million of		
discount)	741	740
Guaranteed Notes due 2043, \$750 million, 5.25% (\$22 million of		
discount)	728	728
Guaranteed Notes due 2027, \$300 million, 8.1%	300	300
Other	11	9
Total	6,761	5,777
Less current maturities	(4)	(1)
Long-term debt	\$6,757	\$5,776

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

At December 31, 2014, our 5% Senior Notes due 2019 include a \$7 million adjustment related to our fixed-for-floating interest rate swaps, which is recognized in Interest expense in the Consolidated Statements of Income.

Short-term loans, notes and other short-term debt consisted of the following:

Millions of dollars	2014	2013
\$2,000 million Senior Revolving Credit Facility	\$	\$
\$1,000 million U.S. Receivables Securitization Facility	_	_
€450 million European Receivables Securitization Facility	_	_
Commercial paper	262	_
Financial payables to equity investees	6	9
Precious metal financings	77	48
Other	1	1
Total short-term debt	\$346	\$ 58

Aggregate maturities of debt during the next five years are \$350 million in 2015, \$5 million in 2016, \$1 million in 2017, \$2,000 million in 2019 and \$4,801 million thereafter. There are no scheduled maturities of debt in 2018.

### Long-Term Debt

*Guaranteed Notes due* 2044—In February 2014, LYB International Finance B.V. ("LYB Finance"), a direct, 100% owned finance subsidiary of LyondellBasell Industries N.V., as defined in Rule 3-10(b) of Regulation S-X, issued \$1,000 million of 4.875% Notes due 2044 at a discounted price of 98.831%.

These unsecured notes, which are fully and unconditionally guaranteed by LyondellBasell Industries N.V., rank equally in right of payment to all of LYB Finance's existing and future unsecured indebtedness and to all of LyondellBasell's existing and future unsubordinated indebtedness. There are no significant restrictions that would impede the Guarantor from obtaining funds by dividend or loan from its subsidiaries. Subsidiaries are generally prohibited from entering into arrangements that would limit their ability to make dividends to or enter into loans with the Guarantor.

The indenture governing these notes contains limited covenants, including those restricting our ability and the ability of our subsidiaries to incur indebtedness secured by significant property or by capital stock of subsidiaries that own significant property, enter into certain sale and lease-back transactions with respect to any significant property or enter into consolidations, mergers or sales of all or substantially all of our assets.

The notes may be redeemed before the date that is six months prior to the scheduled maturity date at a redemption price equal to the greater of 100% of the principal amount of the notes redeemed and the sum of the present values of the remaining scheduled payments of principal and interest (discounted at the applicable Treasury Yield plus 20 basis points) on the notes to be redeemed. The notes may also be redeemed on or after the date that is six months prior to the final maturity date of the notes at a redemption price equal to 100% of the principal amount of the notes redeemed plus accrued and unpaid interest.

*Guaranteed Notes due* 2023 and 2043—In July 2013, LYB Finance issued \$750 million of 4% Notes due 2023 and \$750 million of 5.25% Notes due 2043 at discounted prices of 98.678% and 97.004%, respectively.

These unsecured notes, which are fully and unconditionally guaranteed by LyondellBasell Industries N.V., rank equally in right of payment to all of LYB Finance's existing and future unsecured indebtedness and to all of

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

LyondellBasell's existing and future unsubordinated indebtedness. There are no significant restrictions that would impede the Guarantor from obtaining funds by dividend or loan from its subsidiaries. Subsidiaries are generally prohibited from entering into arrangements that would limit their ability to make dividends to or enter into loans with the Guarantor.

The indenture governing these notes contains limited covenants, including those restricting our ability and the ability of our subsidiaries to incur indebtedness secured by significant property or by capital stock of subsidiaries that own significant property, enter into certain sale and lease-back transactions with respect to any significant property or enter into consolidations, mergers or sales of all or substantially all of our assets.

The notes may be redeemed and repaid, in whole or in part, at any time and from time to time prior to maturity at a redemption price equal to the greater of 100% of the principal amount of the notes redeemed, and the sum of the present values of the remaining scheduled payments of principal and interest on the notes to be redeemed. Such interest will be discounted to the date of redemption on a semi-annual basis at the applicable Treasury Yield plus 25 basis points in the case of the 4% Notes due 2023 and plus 30 basis points in the case of the 5.25% Notes due 2043.

Senior Notes due 2019, 2021 and 2024—In April 2012, we issued \$2,000 million aggregate principal amount of 5% senior notes due 2019 and \$1,000 million aggregate principal amount of 5.75% senior notes due 2024, each at an issue price of 100%. In November 2011, we issued \$1,000 million of 6% senior notes due 2021.

The indentures governing the 5%, 5.75% and 6% Senior Notes contain limited covenants, including those restricting the ability of our subsidiaries to incur indebtedness and our ability and the ability of our subsidiaries to incur indebtedness secured by any property or assets, enter into certain sale and lease-back transactions with respect to any assets or enter into consolidations, mergers or sales of all or substantially all of our assets. The covenants contained in the indentures governing the 5%, 5.75% and 6% Senior Notes are different and more restrictive than the covenants contained in the indenture governing the 4% and 5.25% Notes in certain respects.

These notes may be redeemed and repaid, in whole or in part, at any time and from time to time prior to the date that is 90 days prior to the scheduled maturity date of the notes at a redemption price equal to 100% of the principal amount of the notes redeemed plus a premium for each note redeemed equal to the greater of 1.00% of the then outstanding principal amount of the note and the excess of: (a) the present value at such redemption date of (i) the principal amount of the note at maturity plus (ii) all required interest payments due on the note through maturity (excluding accrued but unpaid interest), computed using a discount rate equal to the Treasury Rate as of such redemption date plus 50 basis points; over (b) the outstanding principal amount of the note. These notes may also be redeemed, in whole or in part, at any time on or after the date which is 90 days prior to the final maturity date of the notes, at a redemption price equal to 100% of the principal amount of the notes redeemed plus accrued and unpaid interest and additional interest, if any, to, but not including, the applicable redemption date.

### Short-Term Debt

Senior Revolving Credit Facility—In June 2014, we amended and restated our revolving credit facility to, among other things, reduce undrawn pricing and extend the term of the facility to June 2019. This facility, which may be used for dollar and euro denominated borrowings, has a \$700 million sublimit for dollar and euro denominated letters of credit and supports our commercial paper program. The aggregate balance of outstanding borrowings and letters of credit under the facility may not exceed \$2,000 million at any given time. Borrowings under the facility bear interest at a Base Rate or LIBOR, plus an applicable margin. Additional fees are incurred for the average daily unused commitments.

### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The facility contains customary covenants and warranties, including specified restrictions on indebtedness and liens. In addition, we are required to maintain a leverage ratio at the end of every quarter of 3.50 to 1.00 or less for the period covering the most recent four quarters. We are in compliance with these covenants as of December 31, 2014.

At December 31, 2014, availability under this facility, which backs our \$2,000 million commercial paper program discussed below, was \$1,712 million. Availability under this facility is reduced by outstanding borrowings, outstanding letters of credit provided under the facility and notes issued under our \$2,000 million commercial paper program. At December 31, 2014, we had \$262 million of outstanding commercial paper, no outstanding letters of credit and no outstanding borrowings under the facility.

*U.S. Receivables Securitization Facility*—In September 2012, we entered into a three-year, \$1,000 million accounts receivable securitization facility. Pursuant to the facility, certain of our subsidiaries sell or contribute their trade receivables to a wholly owned, bankruptcy-remote subsidiary on an ongoing basis and without recourse. The bankruptcy-remote subsidiary, which was formed solely to purchase or receive such contributions of receivables from these subsidiaries, may then, at its option and subject to a borrowing base of eligible receivables, sell undivided interests in the pool of trade receivables together with all related security and interests in the proceeds thereof to financial institutions participating in the facility. The receivables sold to the bankruptcy-remote subsidiary are reserved only to satisfy claims of its creditors and are not available to satisfy the claims of creditors of the company and its subsidiaries. In the event of a liquidation, the bankruptcy-remote subsidiary's assets will be used to satisfy the claims of its creditors prior to any assets or value in the bankruptcy-remote subsidiary becoming available to us. We are responsible for servicing the receivables. The facility also provides for the issuance of letters of credit up to \$200 million. The term of the securitization facility may be extended in accordance with the provisions of the agreement.

The facility is also subject to customary warranties and covenants, including limits and reserves and the maintenance of specified financial ratios. We are required to maintain a leverage ratio at the end of every fiscal quarter of 3.50 to 1.00 or less for the period covering the most recent four quarters. Performance obligations under the facility are guaranteed by our parent company.

At December 31, 2014, availability under this facility was \$994 million. There were no borrowings or letters of credit outstanding under the facility.

European Receivables Securitization Facility—In April 2013, we amended and restated our €450 million European receivables securitization facility to obtain more favorable terms and conditions, including reduced pricing, and to extend the maturity date of the facility to April 2016. Under the terms of the amendment, we must maintain a leverage ratio at the end of every fiscal quarter of 3.50 to 1.00 or less for the period covering the most recent four quarters. Failure to maintain the ratio within the stated parameters constitutes a termination event, which left uncured, may result in the termination of the program. At December 31, 2014, availability under this facility was \$547 million.

Commercial Paper Program—In October 2014, we entered into a commercial paper program under which we may issue up to \$2,000 million of privately placed, unsecured, short-term promissory notes ("commercial paper"). This program is backed by our \$2,000 million Senior Revolving Credit Facility. Proceeds from the issuance of commercial paper may be used for general corporate purposes, including dividends and share repurchases.

*Precious Metal Financings*—We enter into lease agreements for precious metals which are used in our production processes. All precious metal borrowings are classified as Short-term debt.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Other—Our weighted average interest rate on outstanding short-term debt was 0.4% in 2014 and 2.1% in 2013.

Debt Issuance Costs Included in Interest Expense

Amortization of debt issuance costs resulted in amortization expense of \$20 million, \$21 million and \$58 million for the years ended December 31, 2014, 2013 and 2012, respectively, which is included in Interest expense in the Consolidated Statements of Income. Amortization expense for 2012 includes the \$35 million write-off of unamortized debt issuance costs associated with the repayment of previously existing 8% and 11% senior notes and the termination of our asset-based credit facility during that period.

#### 13. Lease Commitments

We lease office facilities, railcars, vehicles, and other equipment under operating leases. Some leases contain renewal provisions, purchase options and escalation clauses.

The aggregate future estimated payments under these commitments are:

Millions of dollars		
2015	\$	333
2016		271
2017		236
2018		207
2019		142
Thereafter		616
Total minimum lease payments	\$1	,805

Rental expense for the years ended December 31, 2014, 2013 and 2012 was \$412 million, \$328 million and \$313 million, respectively.

#### 14. Financial Instruments

*Cash Concentration*—Our cash equivalents are placed in high-quality commercial paper, money market funds and time deposits with major international banks and financial institutions.

Market Risks—We are exposed to market risks, such as changes in commodity pricing, currency exchange rates and interest rates. To manage the volatility related to these exposures, we selectively enter into derivative transactions pursuant to our risk management policies. Derivative instruments are recorded at fair value on the balance sheet. Gains and losses related to changes in the fair value of derivative instruments not designated as hedges are recorded in earnings. For derivatives that have been designated as fair value hedges, the gains and losses of the derivatives and hedged instruments are recorded in earnings. For derivatives that have been designated as cash flow hedges, the effective portion of the gains and losses is recorded through Other comprehensive income. The ineffective portion of cash flow hedges is recorded in earnings.

Marketable Securities—We invest cash in investment-grade securities for periods not exceeding two years. Investments in securities with original maturities of three months or less are classified as Cash and cash equivalents. At December 31, 2014 and 2013, we had marketable securities classified as Cash and cash equivalents of \$431 million and \$3,482 million, respectively.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Repurchase Agreements—In 2014, we invested in tri-party repurchase agreements. Under these agreements, we make cash purchases of securities according to a pre-agreed profile from our counterparties. The counterparties have an obligation to repurchase, and we have an obligation to sell, the same or substantially the same securities at a pre-defined date for a price equal to the purchase price plus interest. These securities, which pursuant to our policy are held by a third-party custodian and must generally have a minimum collateral value of 102%, secure the counterparty's obligation to repurchase the securities. Our investment in these tri-party repurchase agreements, which mature within the next twelve months, are treated as short-term loans receivable and are reflected in Prepaid expenses and other current assets on our Consolidated Balance Sheets. The balance of our investment at December 31, 2014 was \$350 million.

Commodity Prices—We are exposed to commodity price volatility related to anticipated purchases of natural gas liquids, crude oil and other raw materials and sales of our products. We selectively use over-the-counter commodity swaps, options and exchange traded futures contracts with various terms to manage the volatility related to these risks. In addition, we are exposed to volatility on the prices of precious metals to the extent that we have obligations, classified as embedded derivatives, tied to the price of precious metals associated with secured borrowings. All aforementioned contracts are generally limited to durations of one year or less.

Foreign Currency Rates—We have significant worldwide operations. The functional currencies of our consolidated subsidiaries through which we operate are primarily the U.S. dollar and the euro. We enter into transactions denominated in currencies other than our designated functional currencies. As a result, we are exposed to foreign currency risk on receivables and payables. We maintain risk management control policies intended to monitor foreign currency risk attributable to both our outstanding foreign currency balances and future commitments. These control policies involve the centralization of foreign currency exposure management, the offsetting of exposures and the estimating of expected impacts of changes in foreign currency rates on our earnings. We enter into foreign currency forward contracts to reduce the effects of our net currency exchange exposures. At December 31, 2014, foreign currency forward contracts in the notional amount of \$787 million, maturing in January 2015 to June 2015, were outstanding.

For forward contracts that economically hedge recognized monetary assets and liabilities in foreign currencies, no hedge accounting is applied. Changes in the fair value of foreign currency forward contracts, which are reported in the Consolidated Statements of Income, are offset in part by the currency translation results recognized on the assets and liabilities.

Foreign Currency Gain (Loss)—Other income (expense), net, in the Consolidated Statements of Income reflected a gain of \$15 million and losses of \$4 million and \$21 million for 2014, 2013 and 2012, respectively.

Cross-Currency Swaps—In October 2014, to reduce our exposure to foreign currency exchange risk associated with certain intercompany loans, we entered into cross-currency swap contracts with an aggregate notional value of \$2,000 million. Under the terms of these contracts, which have been designated as cash flow hedges, we will make interest payments in euros and receive interest in U.S. dollars. Upon the maturities of these contracts, we will pay the principal amount of the loans in euros and receive U.S. dollars from our counterparties.

We use the long-haul method to assess hedge effectiveness using a regression analysis approach under the hypothetical derivative method. We perform the regression analysis over an observation period of three years, utilizing data that is relevant to the hedge duration. We use the dollar offset method under the hypothetical derivative method to measure ineffectiveness.

In accordance with ASC 815, *Derivatives and Hedging*, the effective portion of the unrealized gains and losses on these cross-currency swap contracts will be reported in Accumulated other comprehensive income (loss) and

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

reclassified to earnings over the period that the hedged intercompany loans affect earnings based on changes in spot rates. The ineffective portion of the unrealized gains and losses will be recorded directly to Other income (expense), net in the Consolidated Statements of Income. In addition, the swaps will be marked-to-market each reporting period with the euro notional values measured based on the current foreign exchange spot rate.

There was no ineffectiveness recorded during the period.

The following table summarizes our cross-currency swaps outstanding:

	December 31, 2014					
Millions of dollars, except expiration date and rates	Expiration Date	Average Interest Rate	Notional Value	Fair Value		
Pay Euro	2021	4.55% 6.00%	\$1,000	\$19		
Pay Euro	2024	4.37% 5.75%	1,000	16		

Forward-Starting Interest Rate Swaps—In July 2013, we entered into forward-starting interest rate swaps with notional values totaling \$1,500 million to hedge the intra-day risk of changes in the forward U.S. Treasury rates for fixed-rate debt issuances in 2013. These forward starting interest rate swaps were terminated contemporaneously with the pricing of \$750 million of guaranteed notes due 2023 and \$750 million of guaranteed notes due 2043. In February 2014, we entered into forward-starting interest rate swaps with a total notional value of \$500 million to hedge the risk of fluctuations in the forward USD 30 Year LIBOR Swap rate for anticipated fixed-rate debt issuances in 2014. The swap was terminated upon issuance of the \$1,000 million of guaranteed notes due 2044. We designated these forward-starting interest rate swaps as cash flow hedges.

We paid cash of \$17 million to settle the liabilities related to these swaps agreements. The related deferred losses were recognized in AOCI and are being amortized as an increase to interest expense over the life of the related guaranteed note issuances using the effective interest method.

As of December 31, 2014, less than \$1 million (on a pretax basis) is scheduled to be reclassified as an increase to interest expense over the next twelve months.

Fixed-for-Floating Interest Rate Swaps—During the third quarter of 2014, we entered into U.S. dollar fixed-for-floating interest rate swaps with third party financial institutions to mitigate changes in the fair value of our \$2,000 million 5% senior notes due 2019 associated with the risk of variability in the 3 Month USD LIBOR rate (the benchmark interest rate). These interest rate swaps are used as part of our current interest rate risk management strategy to achieve a desired proportion of variable versus fixed rate debt.

Under these arrangements, we exchange fixed-for-floating rate interest payments to effectively convert our fixed-rate debt to floating-rate debt. The fixed and variable cash payments related to the interest rate swaps are net settled semi-annually and classified as Other, net, in the Cash flows from operating activities section of the Consolidated Statements of Cash Flows.

In accordance with ASC 815, we have elected to designate these fixed-for-floating interest rate swaps as fair value hedges. We use the long-haul method to assess hedge effectiveness using a regression analysis approach. We perform the regression analysis over an observation period of three years, utilizing data that is relevant to the hedge duration. We use the dollar offset method to measure ineffectiveness.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Changes in the fair value of the derivatives and changes in the value of the hedged items based on changes in the benchmark interest rate are recorded as Interest expense in our Consolidated Statements of Income. We evaluate the effectiveness of the hedging relationship periodically and calculate the changes in the fair value of the derivatives and the underlying hedged items separately. During the year ended December 31, 2014, we recognized a net gain of \$17 million, related to the ineffectiveness of our hedging relationships.

At December 31, 2014, we had outstanding interest rate swap agreements with notional amounts of \$2,000 million, maturing in April 15, 2019.

Available-for-Sale Securities—The following table summarizes the amortized cost, gross unrealized gains and losses, and fair value of available-for-sale securities measured on a recurring basis that are outstanding as of December 31, 2014. Refer to Note 15 for additional information regarding the fair value of available-for-sale securities

	December 31, 2014				
Millions of dollars	Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	
Commercial paper	\$1,029	\$ 1	\$	\$1,030	
Bonds	414		(1)	413	
Certificates of deposit	150			150	
Total available-for-sale securities	\$1,593	\$ 1	<u>\$ (1)</u>	\$1,593	

As of December 31, 2014, the commercial paper securities held by the Company had maturities between one and twelve months, bonds had maturities between less than one and thirty-three months and certificates of deposit mature in thirteen months.

The fair value and unrealized losses related to available-for-sale securities that were in an unrealized loss position for less than twelve months as of December 31, 2014 were \$489 million and \$1 million, respectively.

We received gross proceeds of \$1,751 million related to the maturity of certain available-for-sale securities during the year ended December 31, 2014. None of our available-for-sale securities were sold during 2014 and accordingly, there were no realized gains or realized losses recognized during that time.

In addition, no losses related to other-than-temporary impairments of our available-for-sale investments have been recorded in Accumulated other comprehensive income (loss) during the year ended December 31, 2014.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

*Derivatives*—The following table summarizes financial instruments outstanding as of December 31, 2014 and 2013 that are measured at fair value on a recurring basis. Refer to Note 15, *Fair Value Measurement*, for additional information regarding the fair value of derivative financial instruments.

		<b>December 31, 2014</b>		December 31, 2013	
Millions of dollars	Balance Sheet Classification	Notional Amount	Fair Value	Notional Amount	Fair Value
Assets—					
Derivatives designated as cash flow hedges:					
Cross-currency swaps	Other assets	\$2,000	\$ 30	\$	\$
Cross-currency swaps	Prepaid expenses and other current				
	and other current assets	_	5	_	_
Derivatives designated as fair value hedges:	assets		3		
Fixed-for-floating interest rate swaps	Other assets	2,000	10	_	_
Fixed-for-floating interest rate swaps	Prepaid expenses	ŕ			
	and other current				
	assets	_	6	_	_
Derivatives not designated as hedges:	D '1				
Commodities	Prepaid expenses and other current				
	assets		2		
Embedded derivatives	Prepaid expenses		2		
	and other current				
	assets	77	3	47	3
Foreign currency	Prepaid expenses				
	and other current	4.05			
Non-derivatives:	assets	107	_	155	1
Available-for-sale securities	Short-term				
Available-101-sale securities	investments	1,587	1,593		_
		\$5,771	\$1,649	\$202	\$ 1
		====	ψ1,04 <i>9</i>	Ψ <u>202</u>	<del>Φ 4</del>
Liabilities—					
Derivatives not designated as hedges:  Commodities	Accrued liabilities	\$ 28	\$ 1	\$646	\$ 4
Foreign currency	Accrued liabilities	680	13	3040 17	φ <del>4</del> —
Non-derivatives:	riceraea maemines	000	15	17	
Performance share awards	Accrued liabilities	22	22	_	_
Performance share awards	Other liabilities	14	14	14	14
		\$ 744	\$ 50	\$677	\$ 18
					==

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The following table summarizes the pretax effect of derivative instruments charged directly to income:

	<b>Effect of Financial Instruments</b>						
		Year Ended December 31, 2014					
Millions of dollars	Gain (Loss) Recognized in AOCI	Gain (Loss) Reclassified from AOCI to Income	Additional Gain (Loss) Recognized in Income	Income Statement Classification			
Derivatives designated as cash-flow hedges:							
Cross-currency swaps	\$ 30	\$ (89)	\$	Other income (expense), net			
Forward-starting interest rate swaps	(17)	_	(1)	Interest expense			
Derivatives designated as fair value hedges:							
Fixed-for-floating interest rate swaps	_	_	16	Interest expense			
Derivatives not designated as hedges:			(0)				
Commodities	_	_	(8)	Cost of sales			
Embedded derivatives	_	_	2	Cost of sales			
Foreign currency			_(54)	Other income (expense), net			
	\$ 13	<u>\$ (89)</u>	<u>\$ (45)</u>				
			Ended Decem	ber 31, 2013			
Millions of dollars	Gain (Loss) Recognized in AOCI	Gain (Loss) Reclassified from AOCI to Income	Additional Gain (Loss) Recognized in Income	Income Statement Classification			
Derivatives not designated as hedges:							
Commodities	\$	\$	\$(12)	Cost of sales			
Embedded derivatives	_	_	25	Cost of sales			
Foreign currency	_	_	6	Other income (expense), net			
	<del></del>	\$ <u> </u>	\$ 19				
	<u> </u>	<u> </u>	<u> </u>				
		Year	Ended Decem	ber 31, 2012			
Millions of dollars	Gain (Loss) Recognized in AOCI	Gain (Loss) Reclassified from AOCI to Income	Additional Gain (Loss) Recognized in Income	Income Statement Classification			
Derivatives not designated as hedges:							
Commodities	\$—	\$—	\$(23)	Cost of sales			
Embedded derivatives	_	_	5	Cost of sales			
Foreign currency			(15)	Other income (expense), net			
	<u>\$—</u>	<u>\$—</u>	\$(33)				

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

For the year ended December 31, 2014, the pretax effect of additional gain (loss) recognized in income for the fixed-for-floating interest rate swaps includes the net value for accrued interest of \$6 million.

# 15. Fair Value Measurement

The following table presents the financial instruments outstanding as of December 31, 2014 and 2013 that are measured at fair value on a recurring basis.

	December 31, 2014			
Millions of dollars	Fair Value	Level 1	Level 2	Level 3
Assets—				
Derivatives:				
Cross-currency swaps	\$ 35	\$	\$ 35	\$
Fixed-for-floating interest rate swaps	16	_	16	_
Commodities	2	2	—	_
Embedded derivatives	3	_	3	_
Non-derivatives:				
Available-for-sale securities	1,593		1,593	
	\$1,649	\$ 2	\$1,647	\$
Liabilities—				
Derivatives:				
Commodities	\$ 1	\$ 1	\$ —	\$
Foreign currency	13	—	13	<b>—</b>
Non-derivatives:	13		13	
Performance share awards	36	36	_	_
	\$ 50	\$ 37	\$ 13	<u>•</u>
	\$ JU	\$ 31 ===	\$ 13 ====	<u> </u>
		December	31, 2013	
Millions of dollars	Fair Value	Level 1	Level 2	Level 3
Assets—				
Derivatives:				
Embedded derivatives	\$ 3	\$	\$ 3	\$
Foreign currency	1	_	1	_
	\$ 4	<u> </u>	\$ 4	<u></u>
	Ψ I	<u>Ф</u>	<u>Ψ</u>	<u> </u>
Liabilities—				
Derivatives:				
Commodities	\$ 4	\$ 4	\$—	\$
Non-derivatives:	1.4	1.4		
Performance share awards	14	14		
	\$18	\$ 18	<u>\$</u>	<u>\$</u>
	===			

There were no financial instruments measured on a recurring basis using Level 3 inputs and no transfers between Level 1 and Level 2 during the years ended December 31, 2014 and 2013.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The following table presents the carrying value and estimated fair value of our financial instruments that are not measured at fair value on a recurring basis as of December 31, 2014 and 2013. Short-term loans receivable and short-term and long-term debt are recorded at amortized cost in the Consolidated Balance Sheets. The carrying and fair value of short-term and long-term debt excludes capital leases.

	December 31, 2014  Carrying Fair Value Value Level 1 Level 2 Leve				
Millions of dollars				Level 3	
Non-derivatives:					
Assets:					
Short-term loans receivables	\$ 350	\$ 350	<u>\$—</u>	\$ 350	<u>\$—</u>
Liabilities					
Short-term debt	\$ 77	\$ 74	\$	\$ 74	\$
Long-term debt	6,756	7,529		7,523	6
Total	\$6,833	\$7,603	<u>\$—</u>	\$7,597	\$ 6
	December 31, 2013				
Millions of dollars	Carrying Value	Fair Value	Level 1	Level 2	Level 3
Non-derivatives:					
Liabilities					
Short-term debt	\$ 48	\$ 45	\$—	\$ 44	\$1
Long-term debt	5,772	6,382		6,378	_4
Total	\$5,820	\$6,427	<u>\$—</u>	\$6,422	<u>\$5</u>

The fair value of all non-derivative financial instruments included in Current assets, including Cash and cash equivalents, Restricted cash and Accounts receivable, and Current liabilities, including Short-term debt excluding precious metal financings, and Accounts payable, approximates the applicable carrying value due to the short maturity of those instruments.

We use the following inputs and valuation techniques to estimate the fair value of our financial instruments:

*Cross-Currency Swaps*—The fair value of our cross-currency swaps is calculated using the present value of future cash flows discounted using observable inputs with the foreign currency leg revalued using published spot exchange rates on the valuation date.

Fixed-for-Floating Interest Rate Swaps—The fair value of our fixed-for-floating interest rate swaps is calculated using the present value of future cash flows method and is based on observable inputs such as interest rates and market yield curves.

Commodity and Embedded Derivatives—The fair value of our commodity and embedded derivatives is measured using the closing market price at the end of the reporting period obtained from the New York Mercantile Exchange and from third-party broker quotes and pricing providers.

Foreign Currency Derivatives—The fair value of our foreign currency derivatives is based on forward market rates.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Available-for-Sale Securities—Fair value is calculated using observable market data for similar securities and broker quotes from recognized purveyors of market data.

Performance Share Awards—Fair value is determined using the quoted market price of our stock.

Short-Term Loans Receivable—Valuations are based on discounted cash flows, which consider prevailing market rates for the respective instrument maturity in addition to corroborative support from the minimum underlying collateral requirements.

*Short-Term Debt*—Fair value of short-term borrowings related to precious metal financing arrangements are determined based on the price of the associated precious metal.

*Long-Term Debt*—Fair value is calculated using pricing data obtained from well-established and recognized vendors of market data for debt valuations.

The following table summarizes the basis used to measure certain assets and liabilities at fair value on a nonrecurring basis in the Consolidated Balance Sheets.

	I	31, 2013		
Millions of dollars	Fair Value	Level 1	Level 2	Level 3
Equity investment	\$20	\$	\$	\$20
	I	December	31, 2012	
Millions of dollars	Fair Value	Level 1	Level 2	Level 3
Property, plant and equipment (held and used)	\$ 6	\$	\$	\$ 6

In accordance with ASC 323-10, *Equity Method and Joint Ventures*, our NOC Asia Limited joint venture was written down to a fair value of \$20 million following a revision to the terms of the agreement governing the joint venture. As a result, a non-cash impairment charge of \$10 million was included in earnings for the year ended December 31, 2013. For additional information related to this impairment, see Note 9 to these Consolidated Financial Statements.

In accordance with ASC 360-10, *Property, Plant and Equipment*, property, plant and equipment (held and used) at one of our LDPE plants in Wesseling, Germany was written down to a fair value of \$6 million resulting in an impairment charge of \$22 million, which was included in earnings for the year ended December 31, 2012. This asset impairment is related to damage to this LDPE plant in Wesseling, Germany resulting from an explosion in the reactor bay.

## 16. Pension and Other Postretirement Benefits

We have defined benefit pension plans which cover employees in the U.S. and various non-U.S. countries. We also sponsor postretirement benefit plans other than pensions that provide medical benefits to certain of our U.S., Canadian, and French employees. In addition, we provide other postemployment benefits such as early retirement and deferred compensation severance benefits to employees of certain non-U.S. countries. We use a measurement date of December 31 for all of our benefit plans.

Most employees in the U.S. and certain non-U.S. countries are eligible to participate in defined contribution plans ("Employee Savings Plans") by contributing a portion of their compensation. We also make employer contributions, such as matching contributions, to certain of these plans. The Company also sponsors a nonqualified deferred compensation plan that covers senior management in the U.S.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

For 2014, the actual return was a gain of 3.50% and a gain of 28.28% for U.S. and non-U.S. plan assets, respectively.

The following table provides a reconciliation of projected benefit obligations, plan assets and the funded status of our U.S. and non-U.S. defined benefit pension plans:

	Year Ended December 31,			
	20	)14	20	)13
Millions of dollars	U.S.	Non-U.S.	U.S.	Non-U.S.
Change in benefit obligation:				
Benefit obligation, beginning of period	\$1,932	\$1,362	\$2,156	\$1,288
Service cost	43	29	44	30
Interest cost	88	48	80	45
Actuarial loss (gain)	249	188	(226)	13
Plan amendments	(120)	(9)	4	18
Benefits paid	(120)	(40)	(126)	(72)
Participant contributions	(14)	(23)		_
Curtailment	(14) —	(23)		(1)
Foreign exchange effects		(150)	_	38
Benefit obligation, end of period	2,178	1,408	1,932	1,362
	2,176		1,932	
Change in plan assets:	1.050	667	1.600	605
Fair value of plan assets, beginning of period	1,959	667	1,698	625
Actual return on plan assets	65 8	117 86	301 86	12 86
Benefits paid	(120)	(40)	(126)	(72)
Participant contributions	(120) —	3	(120)	3
Settlement	(14)	(23)	_	_
Foreign exchange effects		(75)	_	13
Fair value of plan assets, end of period	1,898	735	1,959	667
Funded status of continuing operations, end of period	\$ (280)	\$ (673)	\$ 27	\$ (695)
	Docomi	ber 31, 2014	Docomb	er 31, 2013
Millions of dollars	U.S.	Non-U.S.	U.S.	Non-U.S.
		1011-0.5.		11011-0.5.
Amounts recognized in the Consolidated Balance Sheets consist of:	. \$ 1	\$ 9	\$ 68	\$ 5
Prepaid benefit cost, long-term		\$ 9 (22)	\$ 08	\$ 3 (56)
Accrued benefit liability, long-term		\ /	(41)	(644)
				<u> </u>
Funded status, end of period	. \$(280)	\$(673)	<u>\$ 27</u>	\$(695)
	Decemb	ber 31, 2014	Decemb	er 31, 2013
Millions of dollars	U.S.	Non-U.S.	U.S.	Non-U.S.
Amounts recognized in Accumulated other comprehensive income				
(loss):	¢ 240	¢ 220	¢ 11	¢ 122
Actuarial and investment loss		\$ 230	\$ 11 4	\$ 132 13
Prior service cost		8		
Balance, end of period	. \$ 351	\$ 238	\$ 15	<u>\$ 145</u>

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The following additional information is presented for our U.S. and non-U.S. pension plans as of December 31:

	Decembe	er 31, 2014	December 31, 2013		
Millions of dollars	U.S.	Non-U.S.	U.S.	Non-U.S.	
Accumulated benefit obligation for defined benefit plans	\$2,150	\$1,288	\$1,910	\$1,233	

Pension plans with projected benefit obligations in excess of the fair value of assets are summarized as follows at December 31:

	Decembe	er 31, 2014	December 31, 2013		
Millions of dollars	U.S.	Non-U.S.	U.S.	Non-U.S.	
Projected benefit obligations	\$2,110	\$1,307	\$632	\$1,229	
Fair value of assets	1,829	624	591	528	

Pension plans with accumulated benefit obligations in excess of the fair value of assets are summarized as follows at December 31:

		er 31, 2014	December 31, 2013		
Millions of dollars	U.S.	Non-U.S.	U.S.	Non-U.S.	
Accumulated benefit obligations	\$1,998	\$696	\$615	\$660	
Fair value of assets	1,742	106	591	53	

The following table provides the components of net periodic pension costs:

		U.S. Plans	
	Year E	ber 31,	
Millions of dollars	2014	2013	2012
Net Periodic Pension Cost:			
Service cost	\$ 43	\$ 44	\$ 44
Interest cost	88	80	80
Actual return on plan assets	(65)	(301)	(182)
Less—return in excess of (less than) expected return	(90)	168	63
Expected return on plan assets	(155)	(133)	(119)
Settlement and curtailment loss	2	_	_
Actuarial and investment loss amortization	_	26	23
Net periodic benefit cost (credit)	\$ (22)	\$ 17	\$ 28

	N	on-U.S. Plai	ns
	Year E	nded Decen	nber 31,
Millions of dollars	2014	2013	2012
Net Periodic Pension Cost:			
Service cost	\$ 29	\$ 30	\$ 26
Interest cost	48	45	51
Actual return on plan assets	(117)	(12)	(26)
Less—return less than expected return	91	(11)	(3)
Expected return on plan assets	(26)	(23)	(29)
Settlement and curtailment (gain) loss	1	(4)	(4)
Prior service cost amortization	_	14	3
Actuarial and investment loss amortization	4	2	
Net periodic benefit cost	\$ 56	\$ 64	\$ 47

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Our goal is to manage pension investments over the longer term to achieve optimal returns with an acceptable level of risk and volatility. The assets are externally managed by professional investment firms and performance is evaluated continuously against specific benchmarks.

The actual and target asset allocation for our plans are as follows:

	20	14	20	13
Millions of dollars	Actual	Target	Actual	Target
Canada				
Equity securities	49%	50%	63%	60%
Fixed income	51%	50%	37%	40%
United Kingdom—Lyondell Chemical Plans				
Equity securities	53%	50%	54%	50%
Fixed income	47%	50%	46%	50%
United Kingdom—Basell Plans				
Equity securities	57%	60%	58%	60%
Fixed income	43%	40%	42%	40%
United States				
Equity securities	54%	51%	59%	51%
Fixed income	33%	30%	29%	30%
Alternatives	13%	19%	12%	19%
Netherlands—Lyondell Chemical Plans				
Fixed income	100%	100%	100%	100%
Netherlands—Basell Plans				
Equity securities	10%	10%	10%	18%
Fixed income	90%	90%	90%	82%

We estimate the following contributions to our pension plans in 2015:

Millions of dollars	U.S.	Non-U.S.
Defined benefit plans	\$ 43	\$67
Multi-employer plans	_	7
Total	\$ 43	\$74

As of December 31, 2014, future expected benefit payments by our pension plans which reflect expected future service, as appropriate, are as follows:

Millions of dollars	U.S.	Non-U.S.
2015	\$136	\$ 64
2016	136	64
2017	142	61
2018	144	59
2019	143	55
2020 through 2024	697	286

The following tables set forth the principal assumptions on discount rates, projected rates of compensation increase and expected rates of return on plan assets, where applicable. These assumptions vary for the different plans, as they are determined in consideration of the local conditions.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The assumptions used in determining the net benefit liabilities for our pension plans were as follows at December 31:

	2014		2	013
	U.S.	Non-U.S.	U.S.	Non-U.S.
Weighted average assumptions:				
Discount rate	4.04%	2.84%	4.73%	3.78%
Rate of compensation increase	4.00%	3.19%	4.00%	3.37%

The assumptions used in determining net benefit costs for our pension plans were as follows:

	Year Ended December 31,						
	2014		2013		2	012	
	U.S.	Non-U.S.	U.S.	Non-U.S.	U.S.	Non-U.S.	
Weighted average assumptions for the year:							
Discount rate	4.73%	6 3.78%	3.82%	3.63%	4.07%	4.83%	
Expected return on plan assets	8.00%	6 4.12%	8.00%	3.73%	8.00%	4.84%	
Rate of compensation increase	4.00%	6 3.37%	4.00%	3.12%	4.00%	3.17%	

The discount rate assumptions reflect the rates at which the benefit obligations could be effectively settled, based on the yields of high quality long-term bonds where the term closely matches the term of the benefit obligations. The weighted average expected long-term rate of return on assets in our U.S. plans of 8.00% is based on the average level of earnings that our independent pension investment advisor had advised could be expected to be earned over a fifteen to twenty year time period consistent with the plans' target asset allocation, historical capital market performance, historical plan performance (since the 1997 inception of the U.S. Master Trust) and a forecast of expected future asset returns. The weighted average expected long-term rate of return on assets in our non-U.S. plans of 4.12% is based on expectations and asset allocations that vary by region. We review these long-term assumptions on a periodic basis.

In the U.S. plans, the expected rate of return was derived based on the target asset allocation of 51% equity securities (7.9% expected return), 30% fixed income securities (5.8% expected return), and 19% alternative investments (9.5% expected return). In the non-U.S. plans, the investments consist primarily of fixed income securities whose expected rates of return range from 2.45% to 5.75%.

The following table reflects the actual annualized total returns for the periods ended December 31, 2014:

			Annual	ized		
	December 31, 2014	One Year				
U.S. plan assets	3.50%	3.50%	11.61%	9.81%	6.20%	)
Non-U.S. plan assets	28.28%	28.28%	9.87%	6.37%	4.64%	)

Actual rates of return may differ from the expected rate due to the volatility normally experienced in capital markets. The goal is to manage the investments over the long term to achieve optimal returns with an acceptable level of risk and volatility in order to meet the benefit obligations of the plans as they come due.

Our pension plans have not directly invested in securities of LyondellBasell N.V., and there have been no significant transactions between any of the pension plans and the Company or related parties thereof.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

In accordance with ASC 820, Fair Value Measurements and Disclosures, fair value measurements are classified using the following hierarchy:

Level 1—Quoted prices for identical instruments in active markets.

Level 2—Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs or significant value-drivers are observable in active markets.

Level 3—Model-derived valuations in which one or more significant inputs or significant value-drivers are unobservable.

When available, quoted market prices are used to determine fair value and such measurements are classified within Level 1. In some cases where market prices are not available, observable market-based inputs are used to calculate fair value, in which case the measurements are classified within Level 2. If quoted or observable market prices are not available, fair value is based upon internally-developed models that use, where possible, current market-based parameters such as interest rates, yield curves and currency rates. These measurements are classified within Level 3.

Fair value measurements are classified according to the lowest level input or value-driver that is significant to the valuation. A measurement may therefore be classified within Level 3 even though there may be significant inputs that are readily observable.

Changes in fair value levels—Management reviews the disclosures regarding fair value measurements annually at year end. If an instrument classified as Level 1 subsequently ceases to be actively traded, it is transferred out of Level 1. In such cases, instruments are reclassified as Level 2, unless the measurement of its fair value requires the use of significant unobservable inputs, in which case it is reclassified as Level 3.

The major classes of the pension assets are measured at fair value using the following valuation methodologies:

Common and preferred stock—Valued at the closing price reported on the market on which the individual securities are traded.

*Fixed income securities*—Certain securities that are not traded on an exchange are valued at the closing price reported by pricing services. Other securities are valued based on yields currently available on comparable securities of issuers with similar credit ratings.

Commingled funds—Valued based upon the unit values of such collective trust funds held at year end by the pension plans. Unit values are based on the fair value of the underlying assets of the fund derived from inputs principally from, or corroborated by, observable market data by correlation or other means.

*Real estate*—Valued on the basis of a discounted cash flow approach, which includes the future rental receipts, expenses, and residual values as the highest and best use of the real estate from a market participant view as rental property.

*Hedge funds*—Valued based upon the unit values of such alternative investments held at year end by the pension plans. Unit values are based on the fair value of the underlying assets of the fund.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

*Private equity*—Valued based upon the unit values of such alternative investments held at year end by the pension plans. Unit values are based on the fair value of the underlying assets of the fund. Certain securities held in the fund are valued at the closing price reported on the exchange or other established quotation service for over-the-counter securities. Other assets held in the fund are valued based on the most recent financial statements prepared by the fund manager.

Convertible securities—Valued at the quoted prices for similar assets or liabilities in active markets.

*U.S. government securities*—Certain securities are valued at the closing price reported on the active market on which the individual securities are traded. Other securities are valued based on yields currently available on comparable securities of issuers with similar credit ratings.

Cash and cash equivalents—Valued at the quoted prices for similar assets or liabilities in active markets.

John Hancock group annuity contracts ("GAC")—Valued at fair value by discounting the related cash flows based on current yields of similar instruments with comparable durations considering the credit-worthiness of the issuer.

Metropolitan Life Insurance guaranteed investment group annuity contract ("GIC")—Valued at fair value as calculated by the Company. The market value of the GIC is estimated as the present value of its future expected cash flows, discounted at an appropriate interest rate. This contract was settled in 2012.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The pension investments that are measured at fair value as of December 31, 2014 are summarized below:

	December 31, 2014			
Millions of dollars	Fair Value	Level 1	Level 2	Level 3
U.S.				
Common and preferred stock				
Domestic	\$ 404	\$402	\$ 2	\$
International	323	322	1	_
Commingled funds				
Domestic equity	76	_	76	_
International equity	258	_	258	_
Fixed income	242	_	242	
Fixed income securities				
Corporate bonds	201	_	201	
Mortgage-backed securities	13		13	
Municipal bonds	6		6	
Foreign government issued bonds	10		10	
Asset-backed securities	4		4	
Real estate	89			89
Hedge funds	129	_		129
Private equity	32		_	32
Convertible securities	1		1	_
U.S. government securities				
Agency securities	95	_	95	_
U.S. Treasury securities	41	41	_	_
Cash and cash equivalents	25	25	_	
John Hancock GACs	6	_		6
Total U.S. Pension Assets	\$1,955	\$790	\$909	\$256
	I	December 3	31, 2014	
Millions of dollars	Fair Value	Level 1	Level 2	Level 3
Non-U.S.				
Common stock	\$ 2	\$ 2	\$—	<b>\$</b> —
Commingled funds		Ψ -	'	Ψ
Domestic equity	29	_	29	
International equity	130	_	130	_
Fixed income	178	_	178	_
Fixed income securities	365	_	365	_
Cash and cash equivalents	32	32		
Total Non-U.S. Pension Assets	\$ 736	\$ 34	\$702	<u>\$—</u>

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The pension investments that are measured at fair value as of December 31, 2013 are summarized below:

	December 31, 2013			
Millions of dollars	Fair Value	Level 2	Level 3	
U.S.				
Common and preferred stock				
Domestic	\$ 454	\$454	\$ —	<b>\$</b> —
International	156	156	_	_
Commingled funds				
Domestic equity	109		109	
International equity	462	_	462	
Fixed income	189	_	189	
Fixed income securities				
Corporate bonds	177	_	177	
Mortgage-backed securities	16	_	16	
Municipal bonds	7	_	7	
Foreign government issued bonds	5	_	5	_
Asset-backed securities	2	_	2	_
Real estate	75	_	_	75
Hedge funds	124	_	_	124
Private equity	26	_	_	26
Convertible securities	1	_	1	_
U.S. government securities				
Agency securities	67	_	67	_
U.S. Treasury securities	75	75	_	_
Cash and cash equivalents	38	38	_	
John Hancock GACs	6		_	6
Total U.S. Pension Assets	\$1,989	\$723	\$1,035	\$231
		<u> </u>		<u> </u>
	]	December	31, 2013	
Millions of dollars	Fair Value	Level 1	Level 2	Level 3
Non-U.S.				
Common stock	\$ 2	\$ 2	\$ —	\$
Commingled funds	· -		T	т
Domestic equity	35	_	35	_
International equity	144	_	144	_
Fixed income	159	_	159	_
Fixed income securities	313	_	313	
Cash and cash equivalents	14	14	_	_
Total Non-U.S. Pension Assets	\$ 667	\$ 16	\$ 651	<u></u>
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# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The following table sets forth a summary of changes in the fair value of the Level 3 plan assets for the years ended December 31, 2014 and 2013:

	U.S. Pension Level 3 Assets					
Millions of dollars	Real Estate	Hedge Funds	Private Equity	Metropolitan Life GIC	John Hancock GACs	Total
Balance at January 1, 2013	\$ 59	73	10	15	6	\$163
Realized gain	3	_	_	_	_	3
Unrealized gain (loss) related to investments still						
held at the reporting date	7	7	(1)		_	13
Purchases, sales, and settlements						
Purchases	9	44	21		_	74
Sales	(3)	_	(4)		_	(7)
Settlements				(15)		(15)
Balance at December 31, 2013	75	124	26	_	6	231
Realized gain	3	1	_	_	_	4
Unrealized gain related to investments still held at						
the reporting date	8	1			_	9
Purchases and sales						
Purchases	8	25	17		_	50
Sales	(5)	(22)	(11)			(38)
Balance at December 31, 2014	\$ 89	\$129	\$ 32	<u>\$—</u>	\$ 6	\$256

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The fair value measurements of the investments in certain entities that calculate net asset value per share as of December 31, 2014 are as follows:

		nfunded nmitments	Remaining Life	<u> </u>	Redemption Frequency (if currently eligible)	Set	rade to tlement Terms	Redemption Notice Period
U.S. Commingled fund								
investing in Domestic Equity \$	76	\$—	N/A	daily, pe	ending market condition	1 to	3 days	3 to 4 days
Commingled fund investing in	. <b>.</b>		NT/A	4-11		1 4 -	2 4	2 4
International Equity 2 Commingled fund investing in Fixed	238	_	N/A	dany, pe	ending market condition	1 10	o 3 days	3 days
	242		N/A	daily ne	ending market condition	1 to	3 days	3 to 7 days
	89	13	10 years		y, pending market			5 to 90 days
Hedge Funds 1	29	_	N/A	monthly conditio		10 to	30 days 2	0 to 90 days
Private Equity	32	114	10 years	quarterly conditio	y, pending market n		N/A	N/A
Total U.S	326	<u>\$127</u>						
Millions of dollars			Infunded mmitments	Remaining Life	Redemption Frequenc (if currently eligible)	<b>y</b>	Trade to Settlement Terms	Redemption Notice Period
Non-U.S. Commingled fund investing in	1				1 to 7 days, pending ma	rket		
Domestic Equity		\$ 29	\$—	N/A	condition		1 to 3 day	s 1 to 3 days
Commingled fund investing in International Equity		130	_	N/A	1 to 7 days, pending macondition		1 to 3 day	s 1 to 3 days
Commingled fund investing in Fixed Income		178	_	N/A	daily, pending market condition		1 to 3 day	s 3 days
Total Non-U.S		\$337	<u>\$—</u>					

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The fair value measurements of the investments in certain entities that calculate net asset value per share as of December 31, 2013 are as follows:

Millions of dollars	Fair Value	Unfunded Commitment	Remaining Life		Redemption Frequency (if currently eligible)	Sett	ade to l lement erms	Redemption Notice Period
U.S. Commingled fund investing in Domestic Equity	\$109	\$—	N/A	daily, pen	ding market condition	1 to	3 days	3 to 4 days
Commingled fund investing in International Equity	462	_	N/A	daily, pen	ding market condition	1 to	3 days	3 days
Commingled fund investing in Fixed			N/A				·	J
Income		39	10 years			15 to	25 days 45	5 to 90 days
Hedge Funds	124	_	N/A	monthly, condition	pending market	10 to	30 days 20	to 90 days
Private Equity	26	91	10 years	quarterly, condition	pending market	1	N/A	N/A
Total U.S	\$985	\$130						
Millions of dollars		Fair Value (	Unfunded Commitments	Remaining Life	Redemption Frequency (if currently eligible)		Trade to Settlement Terms	Redemption Notice Period
Non-U.S. Commingled fund investing Domestic Equity		\$ 35	\$	N/A	1 to 7 days, pending m condition		1 to 3 days	1 to 3 days
Commingled fund investing International Equity		144	_	N/A	1 to 7 days, pending m condition		1 to 3 days	1 to 3 days
Commingled fund investing Income			_	N/A	daily, pending market condition		1 to 3 days	3 days
Total Non-U.S		\$338	<u>\$—</u>					

### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The preceding methods described may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, although the Company believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

Multi-employer Plan—The Company participates in a multi-employer plan, Pensionskasse der BASF WaG V.VaG, which provides for benefits to the majority of our employees in Germany. Up to a certain salary level, the benefit obligations are covered by contributions of the Company and the employees to the plan. Contributions made to the multi-employer plan are expensed as incurred.

The following table provides disclosure related to the Company's multi-employer plan:

	Company Contributions					
Millions of dollars	2014	2013	2012			
Pensionskasse der BASF WaG V.VaG (a)	\$7	\$8	\$8			

(a) The plan information for the Pensionskasse der BASF WaG V.VaG is not publicly available and the plan is not subject to a collective-bargaining agreement. The plan provides fixed, monthly retirement payments on the basis of the credits earned by the participating employees. To the extent that the plan is underfunded, the future contributions to the plan may increase and may be used to fund retirement benefits for employees related to other employers. The Pensionskasse der BASF WaG V.VaG's financial statements for the years ended December 31, 2013 and 2012 indicated total assets of \$8,004 million and \$8,163 million, respectively; total actuarial present value of accumulated plan benefits of \$7,639 million and \$7,785 million, respectively; and total contributions for all participating employers of \$254 million and \$223 million, respectively. Our plan contributions did not exceed 5 percent of the total contributions in 2014, 2013 or 2012.

Other Postretirement Benefits—We sponsor unfunded health care and life insurance plans covering certain eligible retired employees and their eligible dependents. Generally, the medical plans pay a stated percentage of medical expenses reduced by deductibles and other coverage. Life insurance benefits are generally provided by insurance contracts. We retain the right, subject to existing agreements, to modify or eliminate these benefits.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The following table provides a reconciliation of benefit obligations of our unfunded other postretirement benefit plans:

	Y	ear Ended	d December 31,		
	20	014	20	)13	
Millions of dollars	U.S.	Non-U.S.	U.S.	Non-U.S.	
Change in benefit obligation:					
Benefit obligation, beginning of period	\$ 310	\$ 41	\$ 352	\$ 39	
Service cost	4	1	5	1	
Interest cost	15	2	12	1	
Plan amendments	1	_	_	_	
Actuarial (gain) loss	32	24	(42)	1	
Benefits paid	(22)	(1)	(24)	(1)	
Participant contributions	7		7	_	
Foreign exchange effects		(7)			
Benefit obligation, end of period	347	60	310	41	
Change in plan assets:					
Fair value of plan assets, beginning of period		_		_	
Employer contributions	15	1	17	1	
Participant contributions	7	_	7	_	
Benefits paid	(22)	(1)	(24)	(1)	
Fair value of plan assets, end of period					
Funded status, end of period	<u>\$(347)</u>	<u>\$ (60)</u>	<u>\$(310)</u>	<u>\$ (41)</u>	
	Decembe	er 31, 2014	Decembe	er 31, 2013	
Millions of dollars	U.S.	Non-U.S.	U.S.	Non-U.S.	
Amounts recognized in the Consolidated Balance Sheets consist of:					
Accrued benefit liability, current	\$ (24)	\$ (1)	\$ (20)	\$ (1)	
Accrued benefit liability, long-term	(323)	(59)	(290)	(40)	
Funded status, end of period	\$(347)	<u>\$ (60)</u>	\$(310)	\$(41)	
	Decembe	er 31, 2014	Decembe	er 31, 2013	
Millions of dollars	U.S.	Non-U.S.	U.S.	Non-U.S.	
Amounts recognized in the Accumulated other comprehensive income					
(loss):					
Actuarial and investment loss	\$ 48	\$ 31	\$ 16 (1)	\$ 12	
	<u> </u>				
Balance, end of period	\$ 48	\$ 31	\$ 15	\$ 12	

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The following table provides the components of net periodic other postretirement benefit costs:

		1	U.S. Plans	
		Year En	ded Decen	iber 31,
Millions of dollars		2014	2013	2012
<b>Net Periodic Other Postretirement Cost:</b>				
Service cost		\$ 4	\$ 5	\$ 5
Interest cost		15	12	13
Actuarial loss amortization		2	1	1
Net periodic benefit cost		\$21	<u>\$18</u>	\$ 19
		No	n-U.S. Plai	ns
		Year En	ded Decem	iber 31,
Millions of dollars		2014	2013	2012
Net Periodic Other Postretirement Cost:				
Service cost		\$ 1	\$ 1	\$ 1
Interest cost		1	1	1
Actuarial loss amortization		1	1	_
Net periodic benefit cost		\$ 3	\$ 3	\$ 2
			U.S. P	
			2014	2013
Assumed heath care trend rate:				
Immediate trend rate  Ultimate trend rate (the rate to which the cost trend rate is assum			7.3%	7.6
decline)			4.5%	4.5
Year that the rate reaches the ultimate trend rate			2027	2027
		Non-U.S		
	Cana		Frai	
	At Decem		At Decen	
	2014	2013	2014	2013
Assumed heath care trend rate:				
Immediate trend rate	6.5%	7.0%	5.0%	3.5
Ultimate trend rate (the rate to which the cost trend rate is	5 OC	5.0%	5 OC	
assumed to decline)	> (10/ <sub>0</sub>	5.0%	5.0%	
Year that the rate reaches the ultimate trend rate	5.0% 2018	2018	3.070	

The health care cost trend rate assumption does not typically have a significant effect on the amounts reported due to limits on maximum contribution levels to the medical plans. However, changing the assumed health care cost trend rates by one percentage point in each year would increase or decrease the accumulated other postretirement benefit liability as of December 31, 2014 by \$17 million and \$12 million, respectively, for non-U.S. plans and by less than \$1 million for U.S. plans and would not have a material effect on the aggregate service and interest cost components of the net periodic other postretirement benefit cost for the year then ended.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The assumptions used in determining the net benefit liabilities for our other postretirement benefit plans were as follows:

	At December 31,				
	2	2014		013	
	U.S.	Non-U.S.	U.S.	Non-U.S.	
Weighted average assumptions:					
Discount rate	3.85%	2.92%	4.53%	3.99%	
Rate of compensation increase	4.00%	0.00%	4.00%	3.00%	

The assumptions used in determining the net benefit costs for our other postretirement benefit plans were as follows:

	Year Ended December 31,						
	2014		2013		2012		
	U.S.	Non-U.S.	U.S.	Non-U.S.	U.S.	Non-U.S.	
Weighted average assumptions for the year:							
Discount rate	4.53%	3.99%	3.73%	3.80%	3.98%	5.03%	
Rate of compensation increase	4.00%	3.00%	4.00%	3.00%	4.00%	3.00%	

As of December 31, 2014, future expected benefit payments by our other postretirement benefit plan, which reflect expected future service, as appropriate, were as follows:

Millions of dollars	U.S.	Non-U.S.
2015	\$ 24	\$1
2016	25	1
2017	25	1
2018	25	1
2019	26	1
2020 through 2024	122	8

Accumulated Other Comprehensive Income (Loss)—The following pretax amounts were recognized in accumulated other comprehensive income (loss) as of and for the years ended December 31, 2014 and 2013:

	Pension	n Benefits	Other	Benefits
Millions of dollars	Actuarial (Gain) Loss	Prior Service Cost (Credit)	Actuarial (Gain) Loss	Prior Service Cost (Credit)
December 31, 2012	\$ 537	\$ 10	\$ 72	\$ (1)
Arising during the period	(369)	21	(42)	_
Amortization	(28)	(14)	(2)	
Settlement gains	3			
December 31, 2013	143	17	28	(1)
Arising during the period	439	(6)	54	1
Amortization	(4)		(3)	
December 31, 2014	\$ 578	<u>\$ 11</u>	\$ 79 ====	<u>\$—</u>

In 2014, \$493 million of actuarial losses primarily reflect \$409 million of discount rate assumption changes, \$84 million of losses resulting from adoption of a new mortality table in the U.S., and other immaterial liability

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

experience gains and losses. In 2013, \$411 million of actuarial gains primarily reflect \$254 million of discount rate assumption changes and other immaterial liability experience gains and losses and \$157 million resulting from asset return in excess of expected return.

Deferred income taxes related to amounts in Accumulated other comprehensive income (loss) include provisions of \$220 million and \$48 million as of December 31, 2014 and 2013, respectively.

At December 31, 2014, AOCI included \$2 million of prior service cost and \$9 million of net actuarial and investment loss related to non-U.S. pension plans that are expected to be recognized as a component of net periodic benefit cost in 2015. There are \$13 million of net actuarial and investment losses in AOCI at December 31, 2014 for U.S. pension plans expected to be recognized in net periodic benefit cost in 2015. At December 31, 2014, AOCI included \$3 million of net actuarial loss related to non-U.S. other postretirement benefits that is expected to be recognized in net periodic benefit cost in 2015. There are \$2 million of net actuarial losses in AOCI at December 31, 2014 for U.S. other postretirement benefits expected to be recognized in net periodic benefit cost in 2015.

Defined Contribution Plans—Most employees in the U.S. and certain non-U.S. countries are eligible to participate in defined contribution plans by contributing a portion of their compensation. We also make employer contributions, such as matching contributions, to certain of these plans. The Company has a nonqualified deferred compensation plan that covers senior management in the U.S. The plan was amended on April 29, 2013 to provide for company contributions on behalf of certain eligible employees who earn base pay above the IRS annual compensation limit. We recognized less than one million of compensation expense related to the plan amendment in 2014 and 2013.

The following table provides the company contributions to the Employee Savings Plans:

	Company Contributions					
		2014		2013		2012
Millions of dollars	U.S.	Non-U.S.	U.S.	Non-U.S.	U.S.	Non-U.S.
Employee Savings Plans	\$32	\$5	\$30	\$3	\$27	\$4

### 17. Incentive and Share-Based Compensation

Under our Long-Term Incentive Plan ("LTI"), which was approved by shareholders in 2012, the Compensation Committee is authorized to grant restricted stock, restricted stock units, stock options, qualified performance awards, stock appreciation rights and other types of equity-based awards. The Compensation Committee determines the recipients of the equity awards, the type of award(s) made, the required performance measures, and the timing and duration of each grant. The maximum number of shares of LyondellBasell N.V. stock reserved for issuance under the LTI is 22,000,000. As of December 31, 2014, there were 9,055,398 shares remaining available for issuance. Upon share exercise or payment, shares are issued from our treasury shares.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Total share-based compensation expense and the associated tax benefits for the years ended December 31 are as follows:

Millions of dollars	2014	2013	2012
Compensation Expense:			
Restricted Stock Units	\$ 11	\$ 16	\$ 7
Stock Options	5	10	22
Restricted Stock	_	5	10
Qualified Performance Awards	15	11	3
Performance Share Units	6		
Total	\$ 37	\$ 42	\$ 42
Tax Benefit:			
Restricted Stock Units	\$ 4	\$ 6	\$ 2
Stock Options	2	4	8
Restricted Stock	_	2	4
Qualified Performance Awards	5	4	1
Performance Share Units	2		
Total	\$ 13	\$ 16	\$ 15

Restricted Stock Unit Awards—Restricted stock unit awards ("RSUs") generally entitle the recipient to be paid out an equal number of ordinary shares on the fifth anniversary of the grant date. In connection with the special dividend declared on November 19, 2012, the Compensation Committee authorized a grant of RSUs to each unvested stock option holder, which will vest ratably with the underlying options. RSUs, which are subject to customary accelerated vesting or forfeiture in the event of certain termination events, are accounted for as an equity award with compensation cost recognized in the income statement ratably over the vesting period.

The holders of RSUs are entitled to dividend equivalents to be settled no later than March 15, following the year in which dividends are paid, as long as the participant is in full employment at the time of the dividend payment. See the "Dividend Distribution" section of Note 20 for the per share amount of dividend equivalent payments made during 2014, 2013 and 2012 to holders of RSUs. Total dividend equivalent payments were \$4 million, \$3 million and \$7 million for 2014, 2013 and 2012, respectively.

RSUs are valued at the market price of the underlying stock on the date of grant. The weighted average grant date fair value for RSUs granted during the years ended December 31, 2014, 2013 and 2012 was \$91.66, \$63.26 and \$51.06, respectively. The total fair value of vested RSUs was \$30 million, \$11 million and \$5 million for years then ended December 31, 2014, 2013 and 2012, respectively.

The following table summarizes RSUs activity for the year ended December 31, 2014 in thousands of units:

	Number of Units	Weighted Average Grant Date Fair Value (per share)
Outstanding at January 1, 2014	1,717	\$23.00
Granted	75	91.66
Paid	(329)	33.08
Forfeited	(38)	21.72
Outstanding at December 31, 2014	1,425	\$24.30

### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

As of December 31, 2014, the unrecognized compensation cost related to RSUs was \$7 million, which is expected to be recognized over a weighted average period of one year.

Stock Options—Stock options are granted with an exercise price equal to the market price of our ordinary shares at the date of grant. The stock options are accounted for as an equity award with compensation cost recognized using the graded vesting method. We issued stock options to purchase 5,639,020 of our ordinary shares to our former Chief Executive Officer ("CEO") on April 30, 2010. These options vested in five equal, annual installments beginning on May 14, 2010 and may be exercised for a period ending April 30, 2017. The options were granted with an exercise price of \$17.61 per share, which was the fair value of the Company's ordinary shares based on its reorganized value at the date of emergence. All other stock options granted before May 4, 2011 vest in equal increments on the second, third and fourth anniversary of the grant date, and options granted on and after May 4, 2011 vest in equal increments on the first, second and third anniversary of the grant date. These other options have a contractual term of ten years and are subject to customary accelerated vesting or forfeiture in the event of certain termination events. Exercise prices for these other options range from \$11.95 to \$113.03.

The Company's Supervisory Board authorized, and the Management Board declared, a special dividend of \$2.75 per share to all shareholders of record on November 19, 2012. In connection with the special dividend, the Compensation Committee authorized a cash payment equal to the special dividend on each underlying share outstanding for vested employee stock options. The dividend equivalent payments for the vested stock options resulted in compensation expense of \$7 million in 2012.

No other terms of the Company's employee stock options, including those held by named executive officers, have been changed.

The fair value of each stock option award is estimated, based on several assumptions, on the date of grant using the Black-Scholes option valuation model. The principal assumptions utilized in valuing stock options include the expected stock price volatility (based on the historic average of the common stock of our peer companies and the Company's historic stock price volatility over the expected term); the expected dividend yield; and the risk-free interest rate (an estimate based on the yield of United States Treasury zero coupon bond with a maturity equal to the expected life of the option).

The expected term of all options granted is an estimate based on a simplified approach. In 2010, when the majority of our options were granted, we determined that the simplified method was appropriate because of the life of the Company and its relative stage of development. Similarly, we did not possess exercise patterns in similar situations as the Company's situation. The option grants that have been made since 2010 have been limited in number, and those grants have occurred during a time of substantial share price escalation.

Weighted average fair values of stock options granted in each respective year and the assumptions used in estimating those fair values are as follows:

		2014	_	2013	_	2012
Weighted average fair value:	\$	33.06	\$	22.16	\$	16.22
Fair value assumptions:						
Dividend yield		3.00%		3.00%	,	3.00%
Expected volatility	40	5.0-49.0%		51.0%	,	51.0%
Risk-free interest rate	1.	81-1.98%	0	0.95-1.27%	(	0.80-1.11%
Weighted average expected term, in years		6.0		6.0		6.0

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The following table summarizes stock option activity for the year ended December 31, 2014 in thousands of shares for the non-qualified stock options:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Term	Aggregate Intrinsic Value (millions of dollars)
Outstanding at January 1, 2014	5,215	\$15.62		
Granted	143	92.72		
Exercised	(1,169)	13.90		
Forfeited	(4)	26.85		
Outstanding at December 31, 2014	4,185	\$18.74	2.7 years	\$256
Exercisable at December 31, 2014	3,949	\$15.20	2.5 years	<u>\$253</u>

The aggregate intrinsic value of stock options exercised during the years ended December 31, 2014, 2013 and 2012 was \$98 million, \$71 million and \$39 million, respectively.

As of December 31, 2014, the unrecognized compensation cost related to non-qualified stock options was \$2 million, which is expected to be recognized over a weighted average period of one year. During 2014, cash received from option exercises was \$16 million and tax benefits realized from stock options exercised was \$33 million.

Restricted Stock—On April 30, 2010, we issued 1,771,794 restricted shares to our former CEO. The terms of the restricted stock award provided that the holder was entitled to receive dividends when and if paid on the Company's ordinary shares and that the holder had full voting rights during the restricted period. The holder could not sell or transfer the restricted shares until the restrictions lapsed on May 14, 2014 or such earlier date as provided in the award agreement. Pursuant to these vesting provisions, all of the restricted shares were vested as of December 31, 2013. An aggregate of 439,085 and 264,297 of the vested restricted shares were withheld in payment of withholding tax obligations during 2013 and 2012, respectively.

Restricted stock was valued at the market price of the underlying stock on the date of grant. No restricted stock was granted during the years ended December 31, 2014, 2013 and 2012. The total fair value of restricted stock vested during the years ended December 31, 2013 and 2012 was \$69 million and \$38 million, respectively. As of December 31, 2013, all restricted stock shares were vested and fully expensed.

Medium-Term Incentive Program ("MTI"), Qualified Performance Awards ("QPA") and Performance Share Units ("PSU")—Our MTI is designed to link the interests of senior management with the interests of shareholders by tying incentives to measurable corporate performance. The MTI awards provide payouts based on our return on assets and cost improvements over a three-calendar year performance period. Subject to customary accelerated vesting or forfeiture in the event of certain termination events, the awards will vest on the date following the end of the applicable performance period on which the Compensation Committee of the Supervisory Board certifies the performance results and will be paid by March 31 following the end of the applicable performance period. Awards granted under the MTI in 2010 and 2011 are cash-based awards. For grants made in 2012 and 2013, eligible employees other than executive officers could elect to receive share-based awards and executive officers were only eligible for the share-based awards. Beginning in 2014, all new awards under this program are share-based awards and are no longer elective. These awards are the same as the share-based QPA but are termed PSU. Shares issued in satisfaction of MTI awards are issued through QPA

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

granted under our 2012 Amended and Restated Long-Term Incentive Plan, which was approved by shareholders at our 2012 annual meeting. Awards under the MTI are accounted for as a liability and classified in Other liabilities on the Consolidated Balance Sheets. We recorded compensation expense for cash MTI awards of \$9 million, \$17 million and \$18 million for the years ended December 31, 2014, 2013 and 2012, respectively, based on the expected achievement of performance results.

The number of target QPA and PSU is established at the beginning of a three-calendar year performance period. Each unit is equivalent to one share of LyondellBasell N.V. common stock. The final number of LyondellBasell N.V. shares payable is determined at the end of the three-calendar year performance period by the Compensation Committee of the Supervisory Board. Since the service-inception date precedes the grant date, the Company estimates the number of target units each reporting period, accounts for this award as a liability award until the grant date and accrues compensation expense during the three-calendar year performance period on a straight-line basis subject to fair value adjustments. The QPA/PSU is subject to customary accelerated vesting and forfeiture in the event of certain termination events. The QPA/PSU is classified in Accrued and Other liabilities on the Consolidated Balance Sheets. For the fair value of the QPA/PSU, see Note 15.

#### Employee Stock Purchase Plan

Beginning October 1, 2012, the Company offers an Employee Stock Purchase Plan ("ESPP") which enables certain employees to make quarterly purchases of shares of LyondellBasell N.V. common stock at a 5% discount off the fair market value on the date of purchase. The ESPP is a non-compensatory plan under generally accepted accounting principles. As a result, no compensation expense is recognized in conjunction with this Plan.

#### 18. Income Taxes

LyondellBasell N.V. moved its tax residence from The Netherlands, where LyondellBasell N.V. is incorporated, to the United Kingdom effective as of July 1, 2013 pursuant to a mutual agreement procedure determination ruling between the Dutch and United Kingdom competent authorities. Pursuant to this ruling, LyondellBasell N.V. is treated solely as a tax resident in the United Kingdom and is subject to the United Kingdom corporate income tax system. As a result of the United Kingdom tax residence, dividend distributions by LyondellBasell N.V. to its shareholders are not subject to withholding tax, as the United Kingdom currently does not levy a withholding tax on dividend distributions.

We, through our subsidiaries, have substantial operations world-wide and in recent years have earned significant income in the United States. Taxes are primarily paid on the earnings generated in various jurisdictions, including the United States, The Netherlands, Germany, Italy and other countries. LyondellBasell N.V. has little or no taxable income of its own because, as a holding company, it does not conduct any operations. Instead, the subsidiaries through which we operate incur tax obligations in the jurisdictions in which they operate. Our provision for income taxes as reported in our Consolidated Statements of Income for the year ended December 31, 2014 of \$1.5 billion consists almost entirely of the income taxes owed by the subsidiaries of LyondellBasell N.V.

We monitor income tax legislative developments in countries where we are tax resident. Management does not believe that recent changes in income tax laws in our tax resident countries will have a material impact on our consolidated financial statements.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The significant components of the provision for income taxes are as follows:

	Year Ended December 31,		ber 31,
Millions of dollars	2014	2013	2012
Current:			
U.S. federal	\$ 985	\$ 969	\$ 464
Non-U.S.	277	135	78
State	101	78	70
Total current	1,363	1,182	612
Deferred:			
U.S. federal	122	218	607
Non-U.S.	50	(270)	73
State	5	6	35
Total deferred	177	(46)	715
Provision for income taxes before tax effects of other comprehensive			
income	1,540	1,136	1,327
Tax effects of elements of other comprehensive income:			
Pension and postretirement liabilities	(172)	149	(38)
Financial derivatives	4	_	_
Foreign currency translation		(4)	(1)
Total income tax expense in comprehensive income	\$1,372	\$1,281	\$1,288

We are incorporated in The Netherlands and are a tax resident of the United Kingdom. However, since the proportion of U.S. revenues, assets, operating income and associated tax provisions is significantly greater than any other single taxing jurisdiction within the worldwide group, the reconciliation of the differences between the provision for income taxes and the statutory rate is presented on the basis of the U.S. statutory federal income tax rate of 35% as opposed to the United Kingdom statutory rate of 21% to provide a more meaningful insight into those differences. Our effective tax rate for the year ended December 31, 2014 is 27.0%. This summary is shown below:

	Year E	nded Decem	ber 31,
Millions of dollars	2014	2013	2012
Income before income taxes:			
U.S	\$3,743	\$3,912	\$3,313
Non-U.S.	1,969	1,084	872
Total	\$5,712	\$4,996	\$4,185
Income tax at U.S. statutory rate	\$1,999	\$1,749	\$1,465
Increase (reduction) resulting from:			
Non-U.S. income taxed at lower statutory rates	(61)	(60)	(53)
State income taxes, net of federal benefit	64	58	67
Changes in valuation allowances	3	(353)	(72)
Exempt income	(275)	(109)	(53)
U.S. manufacturing deduction	(106)	(96)	(42)
Other, net	(84)	(53)	15
Income tax provision	\$1,540	\$1,136	\$1,327

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The deferred tax effects of tax loss and credit carryforwards ("tax attributes") and the tax effects of temporary differences between the tax basis of assets and liabilities and their reported amounts in the Consolidated Financial Statements, reduced by a valuation allowance where appropriate, are presented below:

	Decem	ber 31,
Millions of dollars	2014	2013
Deferred tax liabilities:		
Accelerated tax depreciation	\$1,464	\$1,455
Investment in joint venture partnerships	276	176
Intangible assets	264	317
Inventory	528	597
Other liabilities	58	117
Total deferred tax liabilities	2,590	2,662
Deferred tax assets:		
Tax attributes	409	514
Employee benefit plans	468	348
Other assets	93	109
Total deferred tax assets	970	971
Deferred tax asset valuation allowances	(134)	(167)
Net deferred tax assets	836	804
Net deferred tax liabilities	\$1,754	\$1,858
Balance sheet classifications:		
Deferred tax assets—current	\$ 67	\$ 24
Deferred tax assets—long-term	271	357
Deferred tax liability—current	469	580
Deferred tax liability—long-term	1,623	1,659
Net deferred tax liabilities	\$1,754	\$1,858

In the table above, we reclassified our 2013 deferred tax effects to conform to our current year presentation.

At December 31, 2014 and 2013, we had total tax attributes available in the amount of \$1,340 million and \$1,692 million, respectively, for which a deferred tax asset was recognized at December 31, 2014 and 2013 of \$409 million and \$514 million, respectively.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The expiration of the tax attributes and the related deferred tax asset, before valuation allowance, as of December 31, 2014 are as follows:

Millions of dollars	Tax Attributes	Deferred Tax on Tax Attributes
2015	\$ —	\$
2016	4	1
2017	1	_
2018	31	12
2019	50	13
Thereafter	184	41
Indefinite	1,070	342
	\$1,340	\$409

The tax attributes are primarily related to operations in France, Canada, the United Kingdom, Spain, The Netherlands and the United States. The deferred tax assets by primary jurisdictions are shown below:

	D	ecember 3	81,
Millions of dollars	2014	2013	2012
France	\$261	\$323	\$332
Canada	38	70	93
United Kingdom	25	27	33
Spain	52	56	35
The Netherlands	13	13	30
United States	15	15	2
Other	5	10	30
	\$409	\$514	\$555

In order to fully realize these net deferred tax assets, we will need to generate sufficient future taxable income in the countries where these tax attributes exist during the periods in which the attributes can be utilized. Based upon projections of future taxable income over the periods in which the attributes can be utilized and/or temporary differences can be reversed, management believes it is more likely than not that only \$249 million of these deferred tax assets at December 31, 2014 will be realized.

Prior to the close of each reporting period, management considers the weight of all evidence, both positive and negative, to determine if a valuation allowance is necessary for each jurisdictions' net deferred tax assets. We place greater weight on historical evidence over future predictions of our ability to utilize net deferred tax assets. We consider future reversals of existing taxable temporary differences, future taxable income exclusive of reversing temporary differences, and taxable income in prior carryback year(s) if carryback is permitted under applicable law, as well as available prudent and feasible tax planning strategies that would, if necessary, be implemented to ensure realization of the net deferred tax asset.

#### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

A summary of the valuation allowances by primary jurisdiction is shown below, reflecting the valuation allowances for all the net deferred tax assets, including deferred tax assets for tax attributes and other temporary differences.

	D	ecember 3	1,
Millions of dollars	2014	2013	2012
France	\$ 29	\$ 34	\$378
Canada	41	78	103
United Kingdom	13	14	43
Spain	24	16	22
The Netherlands	13	13	_
United States	14	12	1
Other			4
	\$134	\$167	\$551

During 2014, the change in our valuation allowances primarily related to the expiration of \$99 million Canadian tax loss carryforwards for which a full valuation allowance had been provided on the associated deferred tax asset of \$26 million. Additionally, our valuation allowances were impacted by adjustments related to current year activity.

During 2013, we released approximately \$344 million of our valuation allowance related to our French operations. Of this amount, approximately \$52 million was related to 2013 activity. The remaining \$292 million of valuation allowance was released to earnings in the fourth quarter of 2013. In regard to this decision, management considered the following new evidence related to our French operations:

- Beginning in the second quarter of 2013, we began generating cumulative three-year pretax income;
- During 2013, we had three consecutive quarters of cumulative three-year pretax income and had
  reported two consecutive years of pretax income, a sufficient trend of sustained profitability to
  establish an expectation that the valuation allowance will more likely than not be realized;
- Existence of cumulative pretax income from core operations for the prior three years (2011-2013); exclusive of results related to discontinued operations;
- Existence of taxable income for 2013 before utilization of tax loss carryforwards;
- 2013 projections of significant pretax income for years 2014-2018; and
- 2013 projections of significant taxable income for years 2014-2018, exclusive of reversing taxable temporary differences.

French tax law provides for an indefinite carryforward of tax losses; however, losses allowed in any particular year may not exceed fifty percent of taxable income. With respect to our French operations, we have a total net deferred tax asset of \$243 million, of which we retain a valuation allowance of \$29 million relating to losses that the Company does not expect to realize a future benefit due to limitations imposed by French tax law. The remaining portion of the net deferred tax asset of \$214 million was previously covered by a valuation allowance primarily related to French tax losses. In order to fully realize the \$214 million deferred tax asset, the French tax group will be required to generate approximately \$1.4 billion of taxable income in the future.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

For 2013, in addition to the release of \$344 million of our valuation allowance related to our French operation, the Canadian valuation allowance was reduced due to the expiration of certain tax loss carryforwards as well as a true-up of the impact of provincial tax rates.

For 2012, although the French operations were profitable, these operations had a cumulative three-year loss (primarily attributable to the restructuring and the economic downturn in Europe) and were projected to generate tax losses, providing sufficient negative evidence as of December 31, 2012 to preclude a determination that it was more likely than not that all of the deferred tax asset would be realized.

We continue to provide a valuation allowance associated with non-operating losses for the United Kingdom. However, we no longer provide a valuation allowance against United Kingdom net deferred tax assets associated with operating losses as the United Kingdom operations are not in a three-year cumulative loss position and our projections indicate and management now expects the operating losses will be fully utilized within the next ten years.

For valuation allowances in Canada and Spain, we continue to maintain valuation allowances against the net deferred tax assets in these jurisdictions given their cumulative three year losses, the projection of future losses and/or limited future reversal of deferred tax liabilities. This consideration precludes a determination that it is more likely than not that the net deferred tax assets will be realized.

Deferred taxes on the unremitted earnings of certain equity joint ventures and subsidiaries of \$52 million at December 31, 2014 and 2013, have been provided to the extent that such earnings are subject to taxation on their future remittance.

Tax benefits totaling \$475 million, \$495 million and \$548 million relating to uncertain tax positions were unrecognized as of December 31, 2014, 2013 and 2012, respectively. The following table presents a reconciliation of the beginning and ending amounts of unrecognized tax benefits:

	Year En	ded Decen	nber 31,
Millions of dollars	2014	2013	2012
Balance, beginning of period	\$495	\$548	\$483
Additions for tax positions of current year	12	11	15
Additions for tax positions of prior years	12	7	50
Reductions for tax positions of prior years	(40)	(66)	_
Settlements (payments/refunds)	(4)	(5)	
Balance, end of period	\$475	\$495	\$548

The majority of the 2014, 2013 and 2012 balances, if recognized, will affect the effective tax rate. We operate in multiple jurisdictions throughout the world, and our tax returns are periodically audited or subjected to review by tax authorities. We are no longer subject to any significant income tax examinations by tax authorities for the years prior to 2012 in The Netherlands, prior to 2010 in Italy, prior to 2007 in Germany, prior to 2006 in France and prior to 2011 in the U.S., our principal tax jurisdictions. We do not expect any significant changes in the amounts of unrecognized tax benefits during the next 12 months.

We recognize interest accrued related to unrecognized tax benefits in interest expense and penalties in operating expenses. During the years ended December 31, 2014, 2013 and 2012, we recognized approximately \$15 million, \$7 million and \$4 million, respectively, for interest and penalties. We had accrued approximately \$26 million, \$11 million and \$4 million for interest and penalties as of December 31, 2014, 2013 and 2012, respectively.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

#### 19. Commitments and Contingencies

Commitments—We have various purchase commitments for materials, supplies and services incident to the ordinary conduct of business, generally for quantities required for our businesses and at prevailing market prices. These commitments are designed to assure sources of supply and are not expected to be in excess of normal requirements. Our capital expenditure commitments at December 31, 2014 were in the normal course of business.

Financial Assurance Instruments—We have obtained letters of credit, performance and surety bonds and have issued financial and performance guarantees to support trade payables, potential liabilities and other obligations. Considering the frequency of claims made against the financial instruments we use to support our obligations, and the magnitude of those financial instruments in light of our current financial position, management does not expect that any claims against or draws on these instruments would have a material adverse effect on our Consolidated Financial Statements. We have not experienced any unmanageable difficulty in obtaining the required financial assurance instruments for our current operations.

Environmental Remediation—Our accrued liability for future environmental remediation costs at current and former plant sites and other remediation sites totaled \$106 million as of December 31, 2014. The accrued liabilities for individual sites range from less than \$1 million to \$21 million. The remediation expenditures are expected to occur over a number of years, and not to be concentrated in any single year. In our opinion, it is reasonably possible that losses in excess of the liabilities recorded may have been incurred. However, we cannot estimate any amount or range of such possible additional losses. New information about sites, new technology or future developments such as involvement in investigations by regulatory agencies, could require us to reassess our potential exposure related to environmental matters.

The following table summarizes the activity in our accrued environmental liability included in "Accrued liabilities" and "Other liabilities:"

	Year Ended I	December 31,
Millions of dollars	2014	2013
Balance at beginning of period	\$120	\$126
Additional provisions	6	7
Amounts paid	(8)	(11)
Foreign exchange effects	(9)	3
Other	(3)	(5)
Balance at end of period	<u>\$106</u>	<u>\$120</u>

Access Indemnity Demand—In December 2010, one of our subsidiaries received demand letters from affiliates of Access Industries (collectively, "Access Entities"), a more than five percent shareholder of the Company, demanding indemnity for losses, including attorney's fees and expenses, arising out of a pending lawsuit styled Edward S. Weisfelner, as Litigation Trustee of the LB Litigation Trust v. Leonard Blavatnik, et al., Adversary Proceeding No. 09-1375 (REG), in the United States Bankruptcy Court, Southern District of New York. In the Weisfelner lawsuit, the plaintiffs seek to recover from Access, the return of all amounts earned by the Access Entities related to their purchase of shares of Lyondell Chemical prior to its acquisition by Basell AF S.C.A.; distributions by Basell AF S.C.A. to its shareholders before it acquired Lyondell Chemical, and management and transaction fees and expenses. The trial that was scheduled for October 2011 has been postponed.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The Access Entities have also demanded \$100 million in management fees under a 2007 management agreement between an Access affiliate and the predecessor of LyondellBasell AF, as well as other unspecified amounts relating to advice purportedly given in connection with financing and other strategic transactions. In June 2009, an Access affiliate filed a proof of claim in Bankruptcy Court against LyondellBasell AF seeking "no less than" \$723 thousand for amounts allegedly owed under the 2007 management agreement. In April 2011, Lyondell Chemical filed an objection to the claim and brought a declaratory judgment action for a determination that the demands are not valid. The declaratory judgment action is stayed pending the outcome of the *Weisfelner* lawsuit.

We do not believe that the 2007 management agreement is in effect or that the Company or any Company-affiliated entity owes any obligations under the management agreement, including for management fees or for indemnification. We intend to vigorously defend our position in any proceedings and against any claims or demands that may be asserted.

We cannot at this time estimate the reasonably possible loss or range of loss that may be incurred in the *Weisfelner* lawsuit; therefore, we cannot estimate the loss that may be sought by way of indemnity.

Indemnification—We are parties to various indemnification arrangements, including arrangements entered into in connection with acquisitions, divestitures and the formation and dissolution of joint ventures. Pursuant to these arrangements, we provide indemnification to and/or receive indemnification from other parties in connection with liabilities that may arise in connection with the transactions and in connection with activities prior to completion of the transactions. These indemnification arrangements typically include provisions pertaining to third party claims relating to environmental and tax matters and various types of litigation. As of December 31, 2014, we had not accrued any significant amounts for our indemnification obligations, and we are not aware of other circumstances that would likely lead to significant future indemnification obligations. We cannot determine with certainty the potential amount of future payments under the indemnification arrangements until events arise that would trigger a liability under the arrangements.

As part of our technology licensing contracts, we give indemnifications to our licensees for liabilities arising from possible patent infringement claims with respect to certain proprietary licensed technologies. Such indemnifications have a stated maximum amount and generally cover a period of five to ten years.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

## 20. Stockholders' Equity

Dividend Distribution—The following table summarizes the dividends paid in the periods presented:

Millions of dollars, except per share amounts	Dividend Per Ordinary Share	Aggregate Dividends Paid	Date of Record
For the year 2014:			
March	\$0.60	\$ 327	March 3, 2014
May	0.70	370	April 28, 2014
September	0.70	358	August 25, 2014
December	0.70	348	November 24, 2014
	\$2.70	\$1,403	
For the year 2013:			
March	\$0.40	\$ 229	February 25, 2013
June	0.50	288	June 3, 2013
September	0.50	280	September 23, 2013
December	0.60	330	November 25, 2013
	\$2.00	\$1,127	

Share Repurchase Program—In May 2013, our Supervisory Board announced a share repurchase program ("May 2013 Share Repurchase Program"), under which we could repurchase up to 10% of our outstanding ordinary shares. During the second quarter of 2014, we completed the repurchase of shares authorized under this program. In April 2014, our shareholders approved a proposal to authorize us to repurchase up to an additional 10% of our outstanding ordinary shares through October 2015 ("April 2014 Share Repurchase Program"). These repurchases, which are determined at the discretion of our Management Board, may be executed from time to time through open market or privately negotiated transactions. The repurchased shares are recorded as Treasury stock and may be retired or used for general corporate purposes, including for various employee benefit and compensation plans.

The following table summarizes our share repurchase activity for the periods presented:

Millions of dollars, except shares and per share amounts	Shares Repurchased	Average Purchase Price	Total Purchase Price, Including Commissions
For the year 2014:			
May 2013 Share Repurchase Program	30,225,236	\$90.31	\$2,730
April 2014 Share Repurchase Program	33,070,101	95.08	3,143
	63,295,337	\$92.80	\$5,873
For the year 2013:			
May 2013 Share Repurchase Program	27,359,002	\$71.22	\$1,949

Due to the timing of settlements, total cash paid for share repurchases under the April 2014 Share Repurchase Program was \$3,058 million during the year ended December 31, 2014.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Ordinary Shares—The changes in the outstanding amounts of ordinary shares are as follows:

	Year Ended December 31,		
	2014	2013	
Ordinary shares outstanding:			
Beginning balance	548,824,138	575,216,709	
Share-based compensation	1,411,837	931,125	
Warrants exercised	1,116	7,666	
Employee stock purchase plan	27,648	27,640	
Purchase of ordinary shares	(63,295,337)	(27,359,002)	
Ending balance	486,969,402	548,824,138	

Treasury Shares—The changes in the amounts of treasury shares held by the Company are as follows:

	Year Ended December 31,		
	2014	2013	
Ordinary shares held as treasury shares:			
Beginning balance	29,607,877	3,206,033	
Share-based compensation	(1,411,837)	(931,126)	
Warrants exercised	_	1,608	
Employee stock purchase plan	(27,648)	(27,640)	
Purchase of ordinary shares	63,295,337	27,359,002	
Ending balance	91,463,729	29,607,877	

Treasury shares include 63,295,337 and 27,359,002 shares repurchased during 2014 and 2013, respectively, under our share repurchase programs discussed above. The repurchased shares are recorded at cost.

Accumulated Other Comprehensive Income (Loss)—The components of, and after-tax changes in, Accumulated other comprehensive income (loss) as of and for the years ended December 31, 2014 and 2013 are presented in the following table:

Millions of dollars	Financial Derivatives	and Other Postretirement Benefit Plans	Currency Translations Adjustments	Total
Balance—January 1, 2014	\$	\$(140)	\$ 236	\$ 96
Other comprehensive income (loss) before reclassifications	9	(316)	(733)	(1,040)
Amounts reclassified from accumulated other comprehensive				
loss	(89)	7		(82)
Net other comprehensive loss	(80)	(309)	(733)	(1,122)
Balance—December 31, 2014	\$ (80)	\$(449)	\$(497)	\$(1,026)
Balance—January 1, 2013	\$	\$(422)	\$ 11	\$ (411)
Other comprehensive income before reclassifications	_	251	221	472
income		31	4	35
Net other comprehensive income		282	225	507
Balance—December 31, 2013	<u>\$—</u>	<u>\$(140)</u>	\$ 236	\$ 96

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The amounts reclassified out of each component of Accumulated other comprehensive income (loss) are as follows:

	Year Ended December 31,			Affected Line Item on the Consolidated
Millions of dollars	2014	2013	2012	Statements of Income
Reclassification adjustments for: Foreign currency translations	\$—	\$ 4	\$—	Other income (expense), net
Amortization of:  Prior service cost  Actuarial loss  Settlement gain  Financial derivatives:		14 30 (3)	3 24 —	
Cross-currency swaps	(89)	_	_	Other income (expense), net
Reclassifications, before tax Income tax expense  Amounts reclassified out of Accumulated other comprehensive income (loss)	(82) \$ (82)	45 10 \$ 35	27 9 \$ 18	Provision for income taxes

Amortization of prior service cost and actuarial loss as well as settlement gain are included in the computation of net periodic pension and other postretirement benefit costs (see Note 16).

## 21. Per Share Data

Basic earnings per share are based upon the weighted average number of shares of common stock outstanding during the periods. Diluted earnings per share includes the effect of certain stock options awards and other equity-based compensation awards. We have unvested restricted stock units that are considered participating securities for earnings per share.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Earnings per share data and dividends declared per share of common stock are as follows:

			Year Ended	December 31,		
	2014		2	013	2012	
Millions of dollars	Continuing Operations	Discontinued Operations	Continuing Operations	Discontinued Operations	Continuing Operations	Discontinued Operations
Net income (loss)	\$4,172 6	\$ (4)	\$3,860 4	\$ (7) —	\$2,858 14	\$ (24)
Net income (loss) attributable to the Company shareholders Net income attributable to participating securities	4,178	(4)	3,864	(7)	2,872	(24)
Net income (loss) attributable to ordinary shareholders—basic and diluted	(12) \$4,166	\$ (4)	(11) \$3,853	\$ (7)	(3) \$2,869	\$ (24)
Millions of shares,  except per share amounts  Basic weighted average common stock outstanding	518	518	566	566	573	573
Effect of dilutive securities: Stock options	3 — 521	3 — 521	3 1 570	3 1 570	3 1 577	3 1 577
Earnings (loss) per share: Basic  Diluted  Participating securities	\$ 8.04 \$ 8.00 1.4	\$(0.01) \$(0.01) 1.4	\$ 6.81 \$ 6.76 1.7	\$(0.01) \$(0.01) 1.7	\$ 5.01 \$ 4.96 3.0	\$(0.04) \$(0.04) 3.0
Dividends declared per share of common stock	\$ 2.70	\$ —	\$ 2.00	\$ —	\$ 4.20	\$ —

## 22. Segment and Related Information

Our operations are managed through five operating segments, as shown below. We disclose the results of each of our operating segments in accordance with ASC 280, Segment Reporting. Each of the operating segments is separately managed by a senior executive reporting directly to our Chief Executive Officer, the chief operating decision maker. Discrete financial information is available for each of the segments, and our Chief Executive Officer uses the operating results of each of the operating segments for performance evaluation and resource allocation. The activities of each of our segments from which they earn revenues and incur expenses are described below:

• Olefins and Polyolefins—Americas ("O&P—Americas"). Our O&P—Americas segment produces and markets olefins, including ethylene and ethylene co-products, and polyolefins.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

- Olefins and Polyolefins—Europe, Asia, and International ("O&P—EAI"). Our O&P—EAI segment produces and markets olefins, including ethylene and ethylene co-products, polyolefins and specialty products, including polybutene-1 and polypropylene compounds.
- Intermediates and Derivatives ("I&D"). Our I&D segment produces and markets propylene oxide and its co-products and derivatives, acetyls, including methanol, ethylene oxide and its derivatives, ethanol and oxygenated fuels, or oxyfuels.
- Refining. Our Refining segment refines heavy, high-sulfur crude oils and other crude oils of varied types and sources available on the U.S. Gulf Coast.
- Technology. Our Technology segment develops and licenses chemical and polyolefin process technologies and manufactures and sells polyolefin catalysts.

In the first quarter of 2014, the chief operating decision maker began using EBITDA as the primary measure for reviewing our segments' profitability and therefore, in accordance with ASC 280, *Segment Reporting*, we have presented EBITDA for all segments. We define EBITDA as earnings before interest, taxes and depreciation and amortization. All periods have been restated to reflect this change.

Intersegment eliminations and items that are not directly related or allocated to business operations are included in "Other." Sales between segments are made primarily at prices approximating prevailing market prices.

Summarized financial information concerning reportable segments is shown in the following table for the periods presented:

**Vear Ended December 31, 2014** 

			Year End	ded Decemb	er 31, 2014		
Millions of dollars	O&P- Americas	O&P- EAI	I&D	Refining	Technology	Other	Total
Sales and other operating revenues:							
Customers	\$ 9,608	\$14,861	\$ 9,985	\$10,768	\$385	\$ 1	\$45,608
Intersegment	4,340	342	145	942	112	(5,881)	
	13,948	15,203	10,130	11,710	497	(5,880)	45,608
Depreciation and amortization							
expense	316	248	225	169	61	_	1,019
Other income, net	2	5	7	2		22	38
Income from equity investments	21	229	7	_	_	_	257
Capital expenditures	912	191	241	123	25	7	1,499
EBITDA	3,911	1,366	1,459	65	232	17	7,050
			Year End	ded Decemb	er 31, 2013		
Millions of dollars	O&P- Americas	O&P- EAI	Year End	Refining	er 31, 2013 Technology	Other	Total
					· · · · · · · · · · · · · · · · · · ·	Other	Total
Millions of dollars  Sales and other operating revenues:  Customers					· · · · · · · · · · · · · · · · · · ·	Other \$ 1	Total \$44,062
Sales and other operating revenues:	Americas	EAI	I&D	Refining	Technology		
Sales and other operating revenues:  Customers	* 9,174	*14,480	<b>I&amp;D</b> \$ 9,337	Refining \$10,656	Technology \$414	\$ 1	
Sales and other operating revenues:  Customers	* 9,174 3,915	\$14,480 205	\$ 9,337 135	Refining \$10,656 1,042	**Technology	\$ 1 (5,415)	\$44,062 —
Sales and other operating revenues:  Customers	* 9,174 3,915	\$14,480 205	\$ 9,337 135	Refining \$10,656 1,042	**Technology	\$ 1 (5,415)	\$44,062 —
Sales and other operating revenues: Customers	\$ 9,174 3,915 13,089	\$14,480 205 14,685	\$ 9,337 135 9,472	\$10,656 1,042 11,698	\$414 118 532	\$ 1 (5,415) (5,414)	\$44,062 ————————————————————————————————————
Sales and other operating revenues: Customers	\$ 9,174 3,915 13,089	\$14,480 205 14,685	\$ 9,337 135 9,472 204	\$10,656 1,042 11,698	\$414 118 532	\$ 1 (5,415) (5,414)	\$44,062 
Sales and other operating revenues:  Customers  Intersegment  Depreciation and amortization expense  Other income (expense), net	\$ 9,174 3,915 13,089 293 2	\$14,480 205 14,685 287	\$ 9,337 135 9,472 204 (16)	\$10,656 1,042 11,698	\$414 118 532	\$ 1 (5,415) (5,414)	\$44,062 

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Year Ended December 31, 2012 O&P-0&P-Millions of dollars Americas **EAI** I&D Refining **Technology** Other Total Sales and other operating revenues: \$ 8,987 \$9,280 \$12,490 \$377 \$14,203 15 \$45,352 (5,565)3,947 318 378 801 121 12,934 14,521 9,658 13,291 498 (5,550)45,352 Depreciation and amortization 281 285 194 148 73 2 983 12 2 (22)Other income (expense), net ...... 15 6 (1) Income (loss) from equity 25 121 (3) 143 468 254 159 136 43 1,060 EBITDA ..... 2,968 548 1,621 481 197 (7)5,808

In 2014, operating results for the O&P—Americas, O&P—EAI, I&D and Refining segments include non-cash charges of \$279 million, \$44 million, \$93 million and \$344 million, respectively, related to lower of cost or market inventory valuation adjustments, primarily driven by a decline in the price of crude oil and a related decline in the prices of heavy liquids and other correlated products. The O&P—EAI segment operating results for 2014 include a \$52 million benefit from a settlement under a 2005 indemnification agreement for certain existing and future environmental liabilities.

Our O&P–EAI segment operating results for 2013 included a \$25 million benefit from an insurance settlement related to the damage in 2012 to our LDPE plant in Wesseling, Germany described below. The Refining segment's operating results for 2013 also included benefits of \$14 million for recoveries and a settlement associated with a former employee who pled guilty to fraud in 2010.

In 2012, we recognized benefits of \$29 million, \$18 million and \$53 million associated with insurance settlements related to Hurricane Ike for the O&P—Americas, I&D and Refining segments, respectively. Operating results for the Refining segment also include a benefit of \$24 million for the recovery related to a former employee who pled guilty to fraud in 2010. In addition, we recognized a \$28 million benefit in our O&P—EAI segment related to the reversal of a reserve established in 2010 for an unfavorable monomer contract. These benefits were partially offset by charges of \$22 million in our O&P—EAI segment for the impairment of assets at our LDPE plant in Wesseling, Germany resulting from an explosion in a reactor bay and \$35 million and \$18 million in our O&P—EAI and Technology segments, respectively, for restructuring activities in Europe. In addition, the O&P—EAI segment operating results included \$22 million of charges associated with closure costs for facilities in Australia and Italy.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

A reconciliation of EBITDA to Income from continuing operations before income taxes is shown in the following table for each of the periods presented:

	Year Ended December 31,				
Millions of dollars	2014	2013	2012		
EBITDA:					
Total segment EBITDA	\$ 7,033	\$ 6,318	\$5,815		
Other EBITDA	17	(7)	(7)		
Less:					
Depreciation and amortization expense	(1,019)	(1,021)	(983)		
Interest expense	(352)	(309)	(655)		
Add:					
Interest income	33	15	15		
Income from continuing operations before income taxes	\$ 5,712	\$ 4,996	\$4,185		

Long-lived assets of continuing operations, including goodwill, are summarized and reconciled to consolidated totals in the following table:

Millions of dollars	O&P- Americas	O&P- EAI	I&D	Refining	Technology	Other	Total
December 31, 2014							
Property, plant and equipment, net	\$3,260	\$2,102	\$2,121	\$1,036	\$237	\$ 2	\$8,758
Investment in PO joint ventures	_	_	384	_	_	_	384
Equity investments	149	1,396	91	_	_	_	1,636
Goodwill	162	160	235	_	9	_	566
December 31, 2013							
Property, plant and equipment, net	\$2,614	\$2,412	\$2,109	\$1,045	\$275	\$ 2	\$8,457
Investment in PO joint ventures	_	_	421	_	_	_	421
Equity investments	156	1,381	92	_		_	1,629
Goodwill	162	182	251	—	10	_	605

Property, plant and equipment, net, included in the "Other" column above includes assets related to corporate and support functions.

The following geographic data for revenues are based upon the delivery location of the product and for long-lived assets, the location of the assets:

	Year 1	Ended Decemb	per 31,
Millions of dollars	2014	2013	2012
Sales and other operating revenues:			
United States	\$23,574	\$21,940	\$23,622
Germany	4,231	4,128	3,660
Italy	1,617	1,560	1,551
France	1,591	1,777	1,633
Mexico	1,361	1,478	1,519
The Netherlands	1,206	1,049	1,032
Other	12,028	12,130	12,335
Total	\$45,608	\$44,062	\$45,352

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

	Long-Liv	ed Assets
Millions of dollars	2014	2013
United States	\$ 6,657	\$ 6,046
Germany	1,513	1,791
The Netherlands	708	767
France	501	567
Italy	400	489
Mexico	161	161
Other	1,607	1,590
Total	\$11,547	\$11,411

Long-lived assets include Property, plant and equipment, net, Intangible assets, net, Equity investments, and Investments in PO joint ventures (see Notes 7, 8 and 9).

## 23. Unaudited Quarterly Results

The following table presents selected financial data for the quarterly periods in 2014 and 2013:

Millions of dollars	March 31	June 30	September 30	December 31
2014				
Sales and other operating revenues	\$11,135	\$12,117	\$12,066	\$10,290
Gross profit <sup>(a)</sup>	1,558	1,862	1,948	1,301
Operating income <sup>(b)</sup>	1,340	1,613	1,706	1,077
Income from equity investments	61	68	64	64
Income from continuing operations(b)	943	1,173	1,260	796
Income (loss) from discontinued operations, net of tax	1	3	(3)	(5)
Net income <sup>(b)</sup>	944	1,176	1,257	791
Earnings per share:				
Basic	1.73	2.25	2.46	1.59
Diluted	1.72	2.23	2.45	1.54
		For the	Quarter Ended	
Millions of dollars	March 31	June 30	September 30	December 31
2013				
Sales and other operating revenues	\$10,669	\$11,103	\$11,152	\$11,138
Gross profit <sup>(a)</sup>	1,516	1,607	1,462	1,537
Operating income	1,267	1,364	1,207	1,264
Income from equity investments	59	43	61	40
Income from continuing operations <sup>(c)</sup>	906	923	854	1,177
Income (loss) from discontinued operations, net of tax	(6)	4	(3)	(2)
Net income <sup>(c)</sup>	900	927	851	1,175
Earnings per share:				
Basic	1.56	1.62	1.51	2.13
	1.50	1.02	1.51	2.13
Diluted	1.55	1.61	1.50	2.11

<sup>(</sup>a) Represents Sales and other operating revenues less Cost of sales.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

- (b) Includes lower of cost or market inventory valuation pretax adjustments of \$45 million (\$28 million after tax) and \$715 million (\$455 million after tax) in the three months ended September 30, 2014 and December 31, 2014, respectively. For additional information related to these adjustments, see Note 22.
- (c) Includes a \$353 million benefit for the three months ended December 31, 2013 related to the release of valuation allowances primarily associated with tax losses in our French tax group.

## Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure.

None.

#### Item 9A. Controls and Procedures.

#### **Effectiveness of Controls and Procedures**

Our management, with the participation of our Chief Executive Officer (principal executive officer) and our Chief Financial Officer (principal financial officer) has evaluated the effectiveness of our disclosure controls and procedures in ensuring that the information required to be disclosed in reports that we file or submit under the Securities Exchange Act of 1934, as amended, is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, including ensuring that such information is accumulated and communicated to management (including the principal executive and financial officers) as appropriate to allow timely decisions regarding required disclosure. Based on such evaluation, our principal executive and financial officers have concluded that such disclosure controls and procedures were effective as of December 31, 2014, the end of the period covered by this Annual Report on Form 10-K.

## Management's Report on Internal Control Over Financial Reporting

Management's report on our internal control over financial reporting can be found in Item 8, *Financial Statements and Supplementary Data*, of this report.

### **Changes in Internal Control over Financial Reporting**

There have been no changes in our internal control over financial reporting, as defined in Rule 13a-15(f) of the Act, in our fourth fiscal quarter of 2014 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

#### Item 9B. Other Information.

None.

#### PART III

#### Item 10. Directors, Executive Officers and Corporate Governance.

We have a Code of Conduct for all employees and directors, including our principal executive officer, principal financial officer, principal accounting officer and persons performing similar functions. We also have a Financial Code of Ethics specifically for our principal executive officer, principal financial officer, principal accounting officer and persons performing similar functions. We have posted copies of these codes on the "Corporate Governance" section of our website at www.lyb.com (within the Investor Relations section). Any waivers of the codes must be approved, in advance, by our Supervisory Board. Any amendments to, or waivers from, the codes that apply to our executive officers and directors will be posted on the "Corporate Governance" section of our website.

Information regarding our executive officers is reported under the caption "Executive Officers of the Registrant" in Part I of this report, which is incorporated herein by reference.

All other information required by this Item will be included in our Proxy Statement relating to our 2015 Annual General Meeting of Shareholders to be held on May 6, 2015, and is incorporated herein by reference.\*

#### Item 11. Executive Compensation.

All information required by this Item will be included in our Proxy Statement relating to our 2015 Annual General Meeting of Shareholders to be held on May 6, 2015, and is incorporated herein by reference.\*

# Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

All information required by this Item will be included in our Proxy Statement relating to our 2015 Annual General Meeting of Shareholders to be held on May 6, 2015, and is incorporated herein by reference.\*

## Item 13. Certain Relationships and Related Transactions, and Director Independence.

All information required by this Item will be included in our Proxy Statement relating to our 2015 Annual General Meeting of Shareholders to be held on May 6, 2015, and is incorporated herein by reference.\*

#### Item 14. Principal Accounting Fees and Services.

All information required by this Item will be included in our Proxy Statement relating to our 2015 Annual General Meeting of Shareholders to be held on May 6, 2015, and is incorporated herein by reference.\*

\* Except for information or data specifically incorporated herein by reference under Items 10 through 14, other information and data appearing in our 2015 Proxy Statement are not deemed to be a part of this Annual Report on Form 10-K or deemed to be filed with the Commission as a part of this report.

## **PART IV**

## Item 15. Exhibits, Financial Statement Schedules.

## (a) (1) Consolidated Financial Statements:

The financial statements and supplementary information listed in the Index to Financial Statements, which appears on page 70, are filed as part of this annual report.

## (a) (2) Consolidated Financial Statement Schedules:

Schedules are omitted because they either are not required or are not applicable or because equivalent information has been included in the financial statements, the notes thereto or elsewhere herein.

## (b) Exhibits:

The exhibit list required by this Item is incorporated by reference to the Exhibit Index filed as part of this report.

## **SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

# LYONDELLBASELL INDUSTRIES N.V.

Date: February 17, 2015	15 /s/ Bhavesh V. Patel				
• ,	Name: Bhavesh V. Patel Title: Chairman of the Management Boa				
<u>Signature</u>	<u>Title</u>	Date			
/S/ BHAVESH V. PATEL Bhavesh V. Patel	Chief Executive Officer and Chairman of the Management Board (Principal Executive Officer)	February 17, 2015			
/s/ KARYN F. OVELMEN Karyn F. Ovelmen	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 17, 2015			
/s/ WILLIAM B. ALLEN, JR. William B. Allen, Jr.	Vice President, Finance (Principal Accounting Officer)	February 17, 2015			
/s/ JACQUES AIGRAIN  Jacques Aigrain	Director	February 17, 2015			
/s/ JAGJEET S. BINDRA  Jagjeet S. Bindra	Director	February 17, 2015			
/s/ ROBIN BUCHANAN  Robin Buchanan	Director	February 17, 2015			
/s/ MILTON CARROLL  Milton Carroll	Director	February 17, 2015			
/s/ STEPHEN F. COOPER Stephen F. Cooper	Director	February 17, 2015			
/s/ NANCE K. DICCIANI  Nance K. Dicciani	Director	February 17, 2015			
/s/ CLAIRE F. FARLEY  Claire F. Farley	Director	February 17, 2015			
/s/ Bella D. Goren  Bella D. Goren	Director	February 17, 2015			
/s/ ROBERT G. GWIN  Robert G. Gwin	Chairman of the Supervisory Board and Director	February 17, 2015			

Signature	Title	<u>Date</u>
/s/ Bruce A. Smith	Director	February 17, 2015
Bruce A. Smith  /S/ RUDY M.J. VAN DER MEER	Director	February 17, 2015
Rudy M.J. van der Meer	Director	1 columny 17, 2013

# **Exhibit Index**

Exhibit Number	<b>Description</b>
2	Third Amended and Restated Joint Chapter 11 Plan of Reorganization for the LyondellBasell Debtors, dated as of March 12, 2010 (incorporated by reference to Exhibit 2.1 to Form 10 dated April 28, 2010)
3	Amended and Restated Articles of Association of LyondellBasell Industries N.V., dated as of May 22, 2013 (incorporated by reference to Exhibit 3 to Form 8-K dated May 29, 2013)
4.1	Specimen certificate for Class A ordinary shares, par value €0.04 per share, of LyondellBasell Industries N.V. (incorporated by reference to Exhibit 4.1 to Amendment No. 2 to Form 10 dated July 26, 2010)
4.2	Nomination Agreement between AI International Chemicals S.à.r.l. and LyondellBasell Industries N.V., dated as of April 30, 2010 (incorporated by reference to Exhibit 4.5 to Amendment No. 2 to Form 10 dated July 26, 2010)
4.3	Registration Rights Agreement by and among LyondellBasell Industries N.V. and the Holders (as defined therein), dated as of April 30, 2010 (incorporated by reference to Exhibit 4.7 to Amendment No. 2 to Form 10 dated July 26, 2010)
4.4	Indenture relating to 6.0% Senior Notes due 2021, among the Company, as issuer, each of the Guarantors named therein, as guarantors, Wells Fargo National Association, as trustee, registrar and paying agent, dated as of November 14, 2011 (including form of 6.0% Senior Note due 2021 (incorporated by reference to Exhibit 4.1 to Form 8-K dated November 17, 2011)
4.5	Indenture relating to 5% Senior Notes due 2019 and 5.75% Senior Notes due 2024, among LyondellBasell Industries N.V., as issuer, each of the Guarantors named therein, as guarantors, Wells Fargo Bank, National Association, as trustee, registrar and paying agent, dated as of April 9, 2012 (including form of 5.000% Senior Note due 2019 and form of 5.750% Senior Note due 2024) (incorporated by reference to Exhibit 4.3 to Form 8-K dated April 10, 2012)
4.6	Indenture, among LYB International Finance B.V., as issuer, LyondellBasell Industries N.V., as guarantor, and Wells Fargo Bank, National Association, as trustee, dated as of July 16, 2013 (incorporated by reference to Exhibit 4.1 to Form 8-K dated July 16, 2013)
4.7	Warrant Agreement by and among LyondellBasell Industries N.V. and Computershare Inc. and Computershare Trust Company, N.A., dated as of April 30, 2010 (incorporated by reference to Exhibit 4.12 to Amendment No. 2 to Form 10 dated July 26, 2010)
10.1+	Employment agreement by and among James L. Gallogly, Lyondell Chemical Company and LyondellBasell AFGP, dated as of May 14, 2009 (incorporated by reference to Exhibit 10.1 to Form 10 dated April 28, 2010)
10.2+	Employment agreement by and among James L. Gallogly, Lyondell Chemical Company and LyondellBasell Industries N.V., dated as of September 12, 2013 (incorporated by reference to Exhibit 10.1 to Form 10-Q dated October 29, 2013)
10.3+	Employment Agreement by and among Bhavesh V. Patel, Lyondell Chemical Company and LyondellBasell AFGP, dated as of March 19, 2010 (incorporated by reference to Exhibit 10.5 to Form 10 dated April 28, 2010)
10.4+	Employment Agreement by and amount Bhavesh V. Patel, Lyondell Chemical Company and LyondellBasell Industries, N.V., dated as of December 18, 2014 (incorporated by reference to Exhibit 10.1 to Form 8-K dated December 22, 2014)

Exhibit Number	<b>Description</b>
10.5+	Letter Agreement dated October 7, 2011 between Karyn F. Ovelmen and Lyondell Chemical Company (incorporated by reference to Exhibit 10.2 to Form 8-K dated October 11, 2011)
10.6+	Employment Agreement by and among Craig B. Glidden, Lyondell Chemical Company and LyondellBasell AFGP, dated as of August 5, 2009 (incorporated by reference to Exhibit 10.3 to Form 10 dated April 28, 2010)
10.7+	Employment Agreement by and among Kevin Brown, Lyondell Chemical Company and LyondellBasell AFGP, dated as of March 19, 2010 (incorporated by reference to Exhibit 10.4 to Form 10 dated April 28, 2010)
10.8+*	First Amendment to Employment Agreement by and among Kevin Brown, Lyondell Chemical Company and LyondellBasell Industries N.V., dated as of January 22, 2015
10.9+	Employment Agreement, dated as of June 2, 2011 by and among Lyondell Chemical Company and Tim Roberts (incorporated by reference to Exhibit 10.8 to Form 10-K dated February 29, 2012)
10.10+	First Amendment to Employment Agreement by and between Lyondell Chemical Company and Tim Roberts dated as of January 22, 2015 (incorporated by reference to Exhibit 10.1 to Form 8-K dated January 28, 2015)
10.11+	LyondellBasell Industries N.V. Short-Term Incentive Plan (incorporated by reference to Exhibit 10.11 to Amendment No. 2 to Form 10 dated July 26, 2010)
10.12+	LyondellBasell Industries N.V. Medium Term Incentive Plan (incorporated by reference to Exhibit 10.12 to Form 10 dated April 28, 2010)
10.13+	LyondellBasell Industries Amended and Restated 2010 Long-Term Incentive Plan (incorporated by reference to Appendix A to the Registrant's definitive proxy statement filed on March 29, 2012)
10.14+	LyondellBasell U.S. Senior Management Deferral Plan dated March 1, 2012 (incorporated by reference to Exhibit 10.1 to Form 8-K filed on March 1, 2012)
10.15+	First Amendment to the LyondellBasell U.S. Senior Management Deferral Plan dated April 29, 2013 (incorporated by reference to Exhibit 10.1 to Form 8-K filed on April 30, 2013)
10.16+	Form of Officer and Director Indemnification Agreement (incorporated by reference to Exhibit 10.14 to Amendment No. 2 to Form 10 dated July 26, 2010)
10.17+	Form of Non-Qualified Stock Option Award Agreement (incorporated by reference to Exhibit 10.12 to Form 10-K dated February 12, 2013)
10.18+	Form of Restricted Stock Unit Award Agreement (incorporated by reference to Exhibit 10.13 to Form 10-K dated February 12, 2013)
10.19+	Form of Stock Appreciation Right Award Agreement (incorporated by reference to Exhibit 10.18 to Amendment No. 2 to Form 10 dated July 26, 2010)
10.20+	Form of Qualified Performance Award Agreement (incorporated by reference to Form 10-K dated February 29, 2012)
10.21	Amended and Restated Credit Agreement, dated June 5, 2014, among LyondellBasell Industries N.V. and LYB Americas Finance Company, as Borrowers, the Lenders, Bank of America, N.A., as Administrative Agent, Swing Line Lender and L/C Issuer, Deutsche Bank Securities Inc., as Syndication Agent and the other parties thereto (incorporated by reference to Exhibit 10.1 to Form 8-K filed on June 5, 2014)

Exhibit Number	<b>Description</b>
10.22	Receivables Purchase Agreement, dated September 11, 2012, by and among Lyondell Chemical Company, as initial servicer, and LYB Receivables LLC, a bankruptcy-remote special purpose entity that is a wholly owned subsidiary of the Company, PNC National Association, as Administrator and LC Bank, certain conduit purchasers, committed purchasers, LC participants and purchaser agents that are parties thereto from time to time (incorporated by reference to Exhibit 10.1 to Form 8-K filed on September 14, 2012)
10.23	Purchase and Sale Agreement, dated September 11, 2012, by and among Lyondell Chemical Company, Equistar Chemicals, LP and LyondellBasell Acetyls, LLC, the other originators from time to time parties thereto, Lyondell Chemical Company, as initial servicer and LYB Receivables LLC, a bankruptcy-remote special purpose entity that is a wholly owned subsidiary of the Company (incorporated by reference to Exhibit 10.2 to Form 8-K filed on September 14, 2012)
10.24	Master Receivables Purchase Agreement (as amended and restated on April 23,2013) among Basell Sales and Marketing Company B.V., Lyondell Chemie Nederland B.V., Basell Polyolefins Collections Limited, Citicorp Trustee Company Limited and Citibank, N.A., London Branch (incorporated by reference to Exhibit 10.1 to Form 8-K filed on April 29, 2013)
12.1*	Computation of Ratio of Earnings to Fixed Charges
21*	List of subsidiaries of the registrant
23*	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm
31.1*	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934
31.2*	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934
32*	Certifications pursuant to 18 U.S.C. Section 1350
101.INS*	XBRL Instance Document
101.SCH*	XBRL Schema Document
101.CAL*	XBRL Calculation Linkbase Document
101.DEF*	XBRL Definition Linkbase Document
101.LAB*	XBRL Labels Linkbase Document
101.PRE*	XBRL Presentation Linkbase Document

- Management contract or compensatory plan, contract or arrangement Filed herewith.