# LyondellBasell Industries N.V.

# Financial Report

## For the Year Ended 31 December 2016

**LyondellBasell Industries N.V.**

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## 1 About LyondellBasell

LyondellBasell Industries N.V. is a global, independent chemical company and was incorporated under Dutch law on 15 October 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 by the supply and demand for our products, 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. We purchase large quantities of natural gas, electricity and steam which we use as energy to fuel our facilities. We also purchase large quantities of natural gas and crude oil derivatives which we use as feedstocks. 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. While the North American feedstock advantage has declined more recently with lower oil prices and resulting lower olefin prices, improved product supply and demand fundamentals in several businesses, notably global polyolefins products, have partially offset the decline.

We and our subsidiaries employed approximately 13,000 full-time and part-time employees at 31 December 2016, similar to 2015 levels. In addition to our own employees, we also use the services of contractors in the routine conduct of our businesses.

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 and co-products, polyethylene and polypropylene.

- **Olefins and Polyolefins–Europe, Asia, International ("O&P–EAI").** Our O&P–EAI segment produces and markets olefins and co-products, polyethylene, and polypropylene, including polypropylene compounds.

- **Intermediates and Derivatives ("I&D").** Our I&D segment produces and markets propylene oxide and its derivatives, oxyfuels and related products and intermediate chemicals; such as, styrene monomer, acetyls, ethylene oxide and ethylene glycol.

- **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 into fuel products including gasoline and distillates.

- **Technology.** Our Technology segment develops and licenses chemical and polyolefin process technologies and manufactures and sells polyolefin catalysts.

## 2 Report of the Management Board

### 2.1 Operational and Financial Overview

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 benchmarks for refining margins are to industry prices reported by The McGraw-Hill Companies.

Highlights for the period ended 31 December 2016:

- Profit for the year of $4.2 billion ($4.2 billion in 2015);
- Repurchased approximately 36.6 million of our ordinary shares (51.8 million ordinary shares in 2015);
- Increased our interim dividends in 2016 from $0.78 to $0.85 per share (from $0.70 to $0.78 per share in 2015);
- Paid dividends totaling $1.4 billion in 2016 ($1.4 billion in 2015);
- Increased our revolving credit facility and commercial paper program from $2,000 million to $2,500 million in June 2016;
- Issued €750 million of 1.875% guaranteed notes due 2022 in March 2016;
- Sold our wholly owned Argentine subsidiary for $184 million in February 2016, realizing net proceeds of $137 million and an increase in earnings of $82 million; and
- Had liquidity of $5.1 billion ($5.3 billion in 2015), including cash of $946 million and $1,073 million of available-for-sale financial assets at year end ($995 and $1,064 million in 2015). We also held $369 million of tri-party repurchase agreements classified as other receivables and had total unused availability under our credit facilities of $2,710 million ($387 and $2,862 million in 2015).

The following selected financial data of the Company should be read in conjunction with the Consolidated Financial Statements and related notes thereto and Management’s discussion and analysis of our results of operations below. The selected financial data of the Company is derived from its audited Consolidated Financial Statements.

| Millions of U.S. Dollars (except for earnings per share amounts) | Year Ended 31 December 2016 | 2015 |
|---|---|---|
| **Results of Operations Data** | | |
| Revenue | $ 29,283 | $ 32,834 |
| Operating profit | 5,769 | 6,146 |
| Finance costs | 405 | 560 |
| Depreciation, amortization and impairments | 1,080 | 1,097 |
| Profit for the year | 4,193 | 4,209 |
| Earnings per share: | | |
| Basic | 9.99 | 9.05 |
| Diluted | 9.97 | 9.02 |
| **Balance Sheet Data** | | |
| Total equity | 5,540 | 5,701 |
| Borrowings | 9,089 | 8,136 |
| Cash and cash equivalents | (946) | (995) |
| Net debt | 8,143 | 7,141 |
| Trade and other receivables | 3,650 | 3,422 |
| Inventories | 3,534 | 3,275 |
| Trade and other payables | (3,501) | (3,520) |
| Net working capital | 3,683 | 3,177 |
| **Cash Flow Data** | | |
| Net cash provided by (used in): | | |
| Operating activities | 5,234 | 5,701 |
| Investing activities | (1,925) | (760) |
| Including purchase of property, plant and equipment | (2,243) | (1,458) |
| Financing activities | (3,349) | (4,982) |

Earnings for 2016 were good despite a heavy schedule of planned maintenance and the challenges of several operational upsets at our Houston refinery. Our continued strong earnings and cash flow enabled us to increase the amount of our interim dividends and to continue the repurchase of our ordinary shares. During 2016, the global olefins and polyolefins industry benefitted from continued favorable supply and demand balances, while low crude oil and fuel prices negatively impacted margins for refining and oxyfuels and related products. Strong results for our O&P–EAI and Technology segments demonstrate continued global industry strength.

The completion of the expansion and turnaround of our Corpus Christi ethylene facility in the fourth quarter of 2016 marked the final step in our 2 billion pound North American ethylene expansion program. Our completed ethylene expansion program, the start of site preparation for our 1.1 billion pound polyethylene facility and advancements on the design of our new PO/TBA plant, along with the completion of several major plant turnarounds this year position us favorably for the coming years.

Significant items that affected 2016 results include:

- O&P–Americas results declined on lower olefins results;
- Lower refining margins and lower crude processing rates due primarily to planned and unplanned maintenance at our Houston refinery;
- Lower I&D segment results driven mainly by lower margins for most I&D products; and
- Improved O&P–EAI segment results on higher European polyolefins margins.

**Revenues**—We had revenues of $29,283 million in 2016 and $32,834 million in 2015.

Lower average sales prices driven by decreases in the prices of crude oil and other feedstocks led to revenue declines of $3,551 million in 2016. Lower sales volumes in our Refining segment due to turnaround activities and unplanned outages, which were substantially offset by higher I&D segment sales volumes, led to a 1% volume-driven decline in revenues. The decline in revenues includes a $290 million impact from the sale of our wholly owned Argentine subsidiary.

**Cost of Sales**—Cost of sales were $22,767 million in 2016 and $26,098 million in 2015.

Fluctuations in our cost of sales are generally driven by changes in feedstock and energy costs, as all other material components remain relatively flat from year to year. The decrease in cost of sales in 2016 was primarily due to lower feedstock and energy costs. Raw material costs for crude oil, heavy liquids and natural gas liquids ("NGLs") and other feedstocks were lower in 2016 compared to 2015. The sale of our wholly owned Argentine subsidiary in 2016 also contributed approximately $230 million to the decline in 2016 cost of sales.

**Operating Profit**—Our operating profit was $5,769 million and $6,146 million in 2016 and 2015, respectively. The $377 million decrease in 2016 operating profit was driven by declines of $432 million and $117 million in the results of our O&P—Americas and Refining segments, respectively, and $277 million of losses related to financial derivative. These declines were partially offset by a $451 million improvement in results for our O&P—EAI segment.

**Finance Costs—**Finance costs were $405 million in 2016 and $560 million in 2015. The decrease in finance costs in 2016 relative to 2015 reflects lower losses related to our cross currency swaps. This decrease was offset in part by higher interest expense related to the issuance of our 1.875% guaranteed notes due 2022 in March 2016 and our 4.625% senior notes due 2055 in March 2015, and reduced benefits from our fixed-to-floating interest rate swaps. See Note 4 to the Consolidated Financial Statements for additional information on these fixed-for-floating interest rate and cross-currency swaps.

**Share of Profit of Investments Accounted for Using the Equity Method**—The Company had profit from investments accounted for using the equity method totaling $297 million in 2016 and $269 million in 2015. The $28 million increase in profit from investments accounted for using the equity method in 2016 is largely due improved results for our joint ventures in Mexico, Saudi Arabia and Thailand.

**Income Tax—**The weighted average applicable tax rates for 2016 and 2015 were 31.7% and 32.6%, respectively. The decrease was primarily attributable to the change in the geographical mix of income. Our effective income tax rate of 26.2% in 2016 and 28.5% in 2015 resulted in tax provisions of $1,485 million and $1,678 million, respectively. Compared to 2015, the 2016 effective income tax rate decreased primarily due to the change in the geographic mix of earnings partially offset by a decrease in tax exempt income and the domestic production activity deduction. The Company's exempt income primarily includes interest income and equity earnings of joint ventures. The interest income is earned by certain of our European subsidiaries through intercompany financings and is either untaxed or taxed at rates substantially lower than the U.S. statutory rate. The equity earnings are attributable to our joint ventures and these earnings when paid (dividend) to certain European subsidiaries are eligible for participation exemptions, which exempt the dividend payments from all or portions of normal statutory income tax rates. We currently anticipate the favorable treatment for the interest income and dividends to continue in the near term; however, this treatment is based on current law and tax rulings, which could change.

### 2.1.1 Segment Analysis

Our operations are managed through five operating segments: O&P–Americas; O&P–EAI; I&D; Refining; and Technology. Each of the operating segments is managed by a senior executive reporting directly to our Chief Executive Officer ("CEO"), the chief operating decision maker. Discrete financial information is available for each of the segments, and our CEO uses the operating results of each of the operating segments for performance evaluation and resource allocation.

Accounting policies for internal reporting, which are based on accounting principles generally accepted in the United States of America ("U.S. GAAP"), are materially similar to those described in Summary of Significant Accounting Policies (see Note 2 of the Consolidated Financial Statements), except for:

- *Inventories*—The Company measures its inventories in accordance with the Last In, First Out ("LIFO") method, which is permitted under U.S. GAAP. According to International Accounting Standards ("IAS") 2, *Inventories*, the LIFO method is prohibited under IFRS. Therefore, inventories are measured using the First In, First Out ("FIFO") method for the Consolidated Financial Statements. This inventory measurement difference between the reportable segments and the consolidated information results in different cost of sales and net profit for the period.

  Under U.S. GAAP we recognized pretax, lower of cost or market ("LCM") inventory valuation charges affecting all but the Technology segment in 2016 and 2015 of $29 million and $548 million, respectively ($18 million and $351 million, respectively, after tax).

- *Employee Benefits*—Under U.S. GAAP, ASC Topic 715, Compensation – Retirement Benefits ("ASC 715") requires the interest expense component of pension expense to be calculated as the product of the defined benefit liability and the discount rate. Such interest expense is netted against interest income resulting from the expected rate of return on plan assets applied to 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 discount rate, reflecting long-term market expectations, rather than current fluctuations in market conditions. Under IFRS, in accordance with IAS 19, *Employee Benefits*, the Company recognizes a net interest expense (income), which is the product of the net defined benefit liability (asset) and the discount rates, as a component of its pension expense on defined benefit plans.

  Under ASC 715, past service cost and actual return on plan assets in excess of expected return are initially recorded in other comprehensive income and subsequently recognized in earnings over the average remaining service period of the participants to the extent it exceeds the "corridor." The corridor is defined as the greater of

10 percent of the accumulated projected benefit obligation or the fair value of the plan assets as of the beginning of the year. Under IFRS, the Company immediately recognizes past service cost and net interest expense (income) as discussed above in the Consolidated Statement of Income. Actual return of plan assets in excess of recognized interest income is permanently recorded in other comprehensive income.

- *Other*—Amongst others, there are minor differences between IFRS and U.S. GAAP with respect to the adoption of IFRS 11, *Joint Arrangements* as well as discontinued operations, the subsequent measurement of asset retirement obligations, cross-currency swaps, capitalization of development costs related to research and development and amortization of debt issuance costs. If material, these differences are separately disclosed in the Consolidated Financial Statements reconciliation.

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 U.S. GAAP measure and to the IFRS Operating profit, see Note 32 of the Consolidated Financial Statements.

Our 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 31 December | |
|---|---|---|
| **Millions of U.S. Dollars** | **2016** | **2015** |
| **Sales and other operating revenues:** | | |
| O&P–Americas segment | $ 9,077 | $ 9,964 |
| O&P–EAI segment | 10,579 | 11,576 |
| I&D segment | 7,226 | 7,772 |
| Refining segment | 5,135 | 6,557 |
| Technology segment | 479 | 465 |
| Other, including intersegment eliminations | (3,313) | (3,599) |
| Total | $ 29,183 | $ 32,735 |
| | | |
| **Share of profit of associates and joint ventures:** | | |
| O&P–Americas segment | $ 59 | $ 42 |
| O&P–EAI segment | 302 | 283 |
| I&D segment | 6 | 14 |
| Total | $ 367 | $ 339 |
| | | |
| **EBITDA:** | | |
| O&P–Americas segment | $ 2,877 | $ 3,661 |
| O&P–EAI segment | 2,067 | 1,825 |
| I&D segment | 1,333 | 1,475 |
| Refining segment | 72 | 342 |
| Technology segment | 262 | 243 |
| Other, including intersegment eliminations | (9) | (13) |
| Total | $ 6,602 | $ 7,533 |

### *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.

EBITDA in 2016 reflects lower olefins and polyethylene results, partially offset by improved polypropylene results.

The benefit to 2016 EBITDA from a $57 million gain on the sale of our wholly owned Argentine subsidiary in February 2016 was offset in part by a $29 million non-cash LCM inventory valuation charge recognized in the fourth quarter due primarily to a drop in polypropylene prices. In 2015, volatility in the benchmark prices for heavy liquids and natural gas and certain correlated products, particularly ethylene and propylene, which continued during most of the year, led to net non-cash LCM inventory valuation adjustments totaling $160 million.

*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 co-products to take advantage of the relative costs of heavy liquids and NGLs.

Production economics for the industry have favored NGLs in recent years. Although the decline in oil prices significantly reduced the cost of ethylene produced from heavy liquids in 2015, NGL prices also declined and they continued to be preferred feedstocks. We produced between 87% and 90% of our U.S. ethylene production NGLs during 2016 and 2015.

The following table sets forth selected financial information for the O&P–Americas segment including Share of profit of associates and joint ventures, which is a component of EBITDA.

| | Year Ended 31 December | |
|---|---|---|
| **Millions of U.S. Dollars** | **2016** | **2015** |
| Sales and other operating revenues | $ 9,077 | $ 9,964 |
| Share of profit of associates and joint ventures | 59 | 42 |
| EBITDA | 2,877 | 3,661 |

**Revenues**—Revenues decreased by $887 million in 2016 compared to 2015.

Average sales prices for ethylene and polyethylene declined in 2016, consistent with feedstock prices that are correlated to the price of natural gas, which declined relative to 2015. These lower average sales prices led to a revenue decrease of 11% in that period. A 2% revenue increase resulted from the improvement in 2016 product sales volumes as higher olefins sales volume, supported by an increase in the level of purchases for resale during turnaround activities, were only partly offset by lower polyolefins volumes. The sale of our Argentine subsidiary reduced 2016 revenues by $230 million.

**EBITDA—**EBITDA decreased by $784 million in 2016 compared to 2015.

Lower olefin and polyethylene margins in 2016 were partially offset by higher polypropylene margins. The decline in olefins margins reflected a 2 cents per pound decrease in average ethylene sales prices and an approximate 4 cents per pound increase in the cost of ethylene production driven by lower co-product prices and an increase in the cost of NGL feedstocks. Polyethylene margins declined 4 cents per pound from very high levels in 2015 as average polyethylene sales prices caught up with the overall decline in the cost of ethylene feedstock, after lagging feedstock cost declines in 2015. A 4 cent per pound improvement in 2016 polypropylene margins reflects the benefits of lower propylene feedstock costs and tight market conditions. These olefin and polyethylene margin impacts led to a 17% decrease in EBITDA during 2016. An additional 10% decline in 2016 EBITDA is attributed to the impact of lower volumes related to lower ethylene production during the turnaround and expansion-related activities at our Corpus Christi, Texas ethylene facility and a site-wide outage related to turnaround activities at our Morris, Illinois site.

These negative impacts were partially offset by a 6% increase in 2016 EBITDA primarily due to a $131 million reduction in the unfavorable LCM adjustment recognized in 2016 versus 2015 and to the $57 million gain on the 2016 sale of our Argentine subsidiary.

***Olefins and Polyolefins—Europe, Asia, International 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 and as such management assesses the performance of the segment based on ethylene sales volumes and prices and our internal cost of ethylene production.

Higher operating results in 2016 were largely the result of higher polyolefin margins, offset in part by lower olefins results and reductions in polyolefins volumes due to turnaround activity and unplanned downtime.

EBITDA in 2016 reflects the benefit of a $21 million gain from the sale of our wholly owned Argentine subsidiary and $11 million of gains from the sales of our joint venture in Japan and idled assets in Australia. EBITDA in 2015 included a $30 million non-cash LCM inventory valuation adjustment driven by a decline in the prices of naphtha and polyolefins.

*Ethylene Raw Materials***—**In Europe, heavy liquids are the primary raw materials for our ethylene production. In recent years, we have sourced increased amounts of advantaged NGLs when the opportunity has arisen. In 2016, we continued to process advantaged feedstocks as market opportunities allowed.

The following table sets forth selected financial information for the O&P–EAI segment including Share of profit of associates and joint ventures, which is a component of EBITDA.

| | Year Ended 31 December | |
|---|---|---|
| **Millions of U.S. Dollars** | **2016** | **2015** |
| Sales and other operating revenues | $ 10,579 | $ 11,576 |
| Share of profit of associates and joint ventures | 302 | 283 |
| EBITDA | 2,067 | 1,825 |

**Revenues**—Revenues in 2016 decreased by $997 million compared to 2015.

The decline in 2016 revenues comprises a 7% decrease related to lower average sales prices, and a 2% reduction of sales volumes stemming from turnaround activities and unplanned outages.

In 2016, average sales prices for olefins and polyolefins fell following feedstock prices that declined in conjunction with the price of crude oil.

**EBITDA**—EBITDA increased by $242 million in 2016 compared to 2015.

In 2016, higher European polyolefins margins stemming from declining ethylene and propylene feedstock costs outpaced falling product prices and led to an 11% increase in EBITDA. This margin improvement in 2016 was partially offset by a 2% decrease in EBITDA due largely to lower polyolefin volumes.

A 3% increase in 2016 EBITDA is attributed to gains associated with the sales of a joint venture, idled assets and our wholly owned Argentine subsidiary, as well as the absence of the 2015 LCM inventory valuation adjustment discussed above. Income from our equity investments also led to a 1% increase in EBITDA in 2016 due to higher polyolefin margins in our European joint venture and strong operating rates in our Saudi joint ventures.

***Intermediates and Derivatives Segment***

**Overview**—Operating results for 2016 were lower than in 2015, as margin compression for most products related to declining energy prices, higher industry production rates and additional industry capacity was only partly offset by the impact of higher volumes.

EBITDA in 2015 was negatively impacted by the recognition of $181 million of LCM inventory valuation adjustments driven by the continued decline in prices for feedstocks, certain oxyfuels and related products, and intermediate chemical products to levels that were lower than the carrying value of our related inventories at reporting dates throughout the year.

The following table sets forth selected financial information for the I&D segment including Share of profit of associates and joint ventures, which is a component of EBITDA.

| | Year Ended 31 December | |
|---|---|---|
| **Millions of U.S. Dollars** | **2016** | **2015** |
| Sales and other operating revenues | $ 7,226 | $ 7,772 |
| Share of profit of associates and joint ventures | 6 | 14 |
| EBITDA | 1,333 | 1,475 |

**Revenues**—Revenues for 2016 decreased by $546 million compared to 2015.

Lower average sales prices in 2016 reflect the impacts of lower crude oil, lower gasoline prices and the decline in various feedstock prices. Additional industry supply also negatively impacted the average sales prices for certain products during 2016. These lower sales prices in 2016 were responsible for an 11% revenue decrease.

This price driven decrease was offset in part by a 4% volume-related revenue increase in 2016 resulting from fewer planned and unplanned production outages relative to 2015.

**EBITDA**—EBITDA decreased by $142 million in 2016 compared to 2015.

Lower margins in most I&D products in 2016 resulted in a 30% decrease in EBITDA. Weaker gasoline markets drove oxyfuels and related product values lower relative to butane feedstock costs, and lower product prices in propylene oxide and derivatives and intermediate chemicals were driven largely by increased industry supply. Lower income from our equity investments in 2016 also resulted in a 1% decrease in EBITDA during that period.

An EBITDA increase in 2016 of 9% related to the higher volumes discussed above, partially offset the negative margin impact. EBITDA in 2016 also reflected an increase of 12% related to the absence of the LCM inventory valuation adjustment recognized in the 2015 comparison period.

***Refining Segment***

**Overview**—Lower margins and reduced production due to planned and unplanned outages in 2016 as described below resulted in significantly lower results for our Refining segment in 2016 as compared to 2015. EBITDA in 2015 included charges totaling $177 million related to non-cash charges associated with LCM inventory valuation adjustments driven by a decline of nearly $20 per barrel in crude oil prices and corresponding reductions in refined product prices.

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 31 December | |
|---|---|---|
| **Millions of U.S. Dollars** | **2016** | **2015** |
| Sales and other operating revenues | $ 5,135 | $ 6,557 |
| EBITDA | 72 | 342 |
| Heavy crude processing rates (thousands of barrels per day) | 201 | 238 |
| **Market margins, dollars per barrel** | | |
| Light crude oil—2-1-1 | $ 10.73 | $ 14.04 |
| Light crude oil—Maya differential | 8.51 | 8.26 |
| Total Maya 2-1-1 | $ 19.24 | $ 22.30 |

**Revenues**—Revenues decreased by $1,422 million in 2016 compared to 2015.

Major refined product prices declined due to lower crude oil prices and to weakness relative to crude oil. The average per barrel price of benchmark Maya crude oil declined $7.59 in 2016 compared to 2015. A 16% price-related revenue decline in 2016 versus 2015 reflected per barrel price declines of approximately $10.51 and $10.77 for gasoline and distillates, respectively.

The remaining 6% revenue decrease in 2016 is attributed to reduced processing rates. Processing declines resulted from several unplanned outages, including a coker unit fire, downtime at crude units with reduced processing and several utility interruptions. Planned turnaround activity on a crude unit and a coker unit processing train early in 2016 also contributed to lower throughput during 2016.

**EBITDA**—EBITDA decreased by $270 million in 2016 compared to 2015.

A decline in refining margins in 2016 led to a 90% decrease in EBITDA. The Maya 2-1-1 benchmark refining spread declined in 2016 by approximately $3.10 per barrel relative to 2015. This decrease was driven by per barrel declines of approximately $3.15 and $3.40 in gasoline and diesel spreads, respectively, and an approximate $1.00 reduction in the price differential between Brent and Maya crude oils. The operating issues that drove lower crude throughput in 2016 also negatively impacted margins due to a less favorably priced crude oil mix and higher variable costs per barrel.

Lower production stemming from a reduction in average heavy crude oil processing rates relative to 2015 led to a decrease in EBITDA in 2016 of 41%. This reduction in rates was attributable to the unplanned outages, crude unit operating limitations and planned turnaround activities discussed above.

The absence of the $177 million LCM inventory valuation adjustment recognized in 2015 resulted in an EBITDA increase of 52% in 2016 as compared to 2015.

***Technology Segment***

**Overview**—The Technology segment recognizes revenues related to the sale of polyolefin catalysts and the licensing of chemical and polyolefin process technologies. These revenues are offset in part by the costs incurred in the production of catalysts, licensing and services activities and research and development (“R&D”) activities. In 2016 and 2015, our Technology segment incurred approximately 55% of all R&D costs. EBITDA in 2016 improved with higher catalyst margins. A small increase in licensing and services revenue was mostly offset by slightly lower catalyst sales volumes.

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

| | Year Ended 31 December | |
|---|---|---|
| **Millions of U.S. Dollars** | **2016** | **2015** |
| Sales and other operating revenues | $ 479 | $ 465 |
| EBITDA | 262 | 243 |

**Revenues**—Revenues increased by $14 million in 2016 compared to 2015.

Higher average catalyst sales prices and higher revenues recognized on process licenses each led to a 2% increase in 2016 revenues. These increases were partly offset by a 1% revenue decrease resulting from lower catalyst sales volumes.

**EBITDA**—EBITDA in 2016 increased by $19 million compared to 2015.

A 10% improvement in EBITDA during 2016 due to higher catalyst margins and an increase in licensing and services revenue was partly offset by a 2% decrease in EBITDA resulting from lower catalyst volumes.

### 2.1.2 Financial Condition

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

| | Year Ended 31 December | |
|---|---|---|
| **Millions of U.S. Dollars** | **2016** | **2015** |
| Sources (uses) of cash: | | |
| Operating activities | $ 5,234 | $ 5,701 |
| Investing activities | (1,925) | (760) |
| Financing activities | (3,349) | (4,982) |

**Operating Activities**—Cash of $5,234 million generated in 2016 primarily reflected profit for the year, adjusted for non-cash items, and cash generated by the main components of working capital – accounts receivable, inventories and accounts payable. The non-cash items in 2016 included an $82 million gain related to the sale of our wholly owned Argentine subsidiary with adjustments for related working capital and gains totaling $11 million related to sales of our joint venture in Japan and idled assets in Australia.

The main components of working capital used $333 million of cash in 2016. This reflects increases of $379 million in trade receivables, $338 million in inventories and $384 million in trade payables.

Higher product sales prices in the fourth quarter of 2016 across all segments combined with the impact of higher fourth quarter 2016 sales volumes in our O&P–Americas, Refining and I&D segments led to an increase in accounts receivable. Increases in accounts receivable and inventories were partially offset by higher accounts payable driven by the higher cost of crude oil and other feedstocks.

The $5,701 million of cash generated by operations in 2015 primarily reflected profit for the year, adjusted for non-cash items, and cash provided by the main components of working capital. Trade receivables decreased on lower average product sales prices, reflective of the drop in 2015 crude oil prices. The decline in raw material and feedstock prices, which was partially offset by an increase in the levels of our U.S. olefins and crude oil inventories at year end led to the decrease in 2015 inventories. U.S. olefins inventories increased in preparation for the turnaround at our Corpus Christi, Texas facility in 2016 while the unplanned maintenance outage at our Houston refinery resulted in the higher level of crude oil inventories at year end. Trade payables in 2015 declined on the lower cost of crude oil and other feedstocks.

**Investing Activities—**We invested cash of $1,925 million in 2016 and $760 million in 2015.

We invest in investment-grade and other high-quality instruments that provide adequate flexibility to redeploy funds as needed to meet our cash flow requirements while maximizing yield. In 2016 and 2015, we invested $764 million, and $2,073 million, respectively, in securities that are classified as Short-term investments. The majority of these investments are deemed available-for-sale; however beginning in the third quarter of 2016, we invested in additional securities deemed held-to-maturity. We also invested $674 million and $397 million in tri-party repurchase agreements in 2016 and 2015, respectively. These investments are classified as short-term loans receivable except for a $101 million investment which was classified as a long-term loan receivable in 2015. We received proceeds upon the sale and maturity of certain of our available-for-sale securities and repurchase agreements of $674 million and $685 million, respectively, in 2016; and $2,489 million and $350 million, respectively, in 2015. See Note 4 to the Consolidated Financial Statements for additional information regarding these investments.

We also received dividends from our investments in associates and joint ventures of $385 million in 2016 and $210 million in 2015.

The following table summarizes our capital expenditures for 2016 and 2015:

| | Year Ended 31 December | |
|---|---|---|
| **Millions of U.S. Dollars** | **2016** | **2015** |
| **Capital expenditures by segment:** | | |
| O&P–Americas | $ 1,376 | $ 668 |
| O&P–EAI | 261 | 204 |
| I&D | 333 | 441 |
| Refining | 224 | 108 |
| Technology | 36 | 24 |
| Other | 13 | 13 |
| | $ 2,243 | $ 1,458 |

In 2017, we expect to spend approximately $2 billion, which includes contributions to our PO joint venture assets. Capital spending is projected to be lower in 2017 relative to 2016, which included the ethylene expansion and related turnaround of our Corpus Christi, Texas facility and turnaround activities at other facilities.

In 2016 and 2015, capital expenditures included debottlenecks of certain assets to enhance production, turnaround activities and expansion projects at several sites, as well as other plant improvement projects and railcar purchases. The increased levels of capital expenditures in 2016 versus 2015 for our O&P–Americas, O&P–EAI and Refining segments were largely due to debottleneck and turnaround activities.

**Financing Activities**—Financing activities used cash of $3,349 million and $4,982 million during 2016 and 2015, respectively.

We made payments totaling $2,938 million and $4,656 million in 2016 and 2015, respectively, to acquire a portion of our outstanding ordinary shares. We also made dividend payments totaling $1,395 million and $1,410 million to our shareholders in 2016 and 2015, respectively. For additional information related to these share repurchases and dividend payments, see Note 23 to the Consolidated Financial Statements.

We received net proceeds of $177 million and $61 million in 2016 and 2015, respectively, through the issuance and repurchase of commercial paper instruments under our commercial program.

In March 2016, we issued €750 million of 1.875% guaranteed notes due 2022 and received a net proceeds of $812 million. In March 2015, we issued $1,000 million of 4.625% senior notes due 2055 and received net proceeds of $984 million. For additional information related to our commercial paper program and the issuance of debt, see Note 25 to the Consolidated Financial Statements.

## Liquidity and Capital Resources

As of 31 December 2016, we had $2,093 million unrestricted cash and cash equivalents and marketable securities classified as available-for-sale and held-to-maturity financial assets. We also held $369 million of tri-party repurchase agreements classified as other receivables at December 31, 2016. For additional information related to our purchases of marketable securities, which currently include time deposits, certificates of deposit, commercial paper, bonds and limited partnership investments, and our investments in tri-party repurchase agreements, see the Investing Activities section above and Note 4 to the Consolidated Financial Statements.

At 31 December 2016, we held $556 million of cash in jurisdictions outside the U.S., principally in the United Kingdom. There are currently no material or legal or economic restrictions that would impede our transfers of cash.

We also had total unused availability under our credit facilities of $2,710 million at 31 December 2016, which included the following:

- $1,973 million under our $2,500 million revolving credit facility, which backs our $2,500 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 commercial paper program. A small portion of our availability under this facility is impacted by changes in the euro/U.S. dollar exchange rate. At 31 December 2016, we had $500 million of outstanding commercial paper, no outstanding letters of credit and no outstanding borrowings under the facility; and

- $737 million under our $900 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 31 December 2016.

We had total debt, including current maturities, of $9,089 million at 31 December 2016. We also had $451 million of outstanding letters of credit and bank guarantees issued under uncommitted credit facilities at 31 December 2016.

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.

In June 2016, the term of our existing $2,000 million revolving credit facility was extended for one year to June 2021 pursuant to a consent agreement. We also amended the revolving credit facility in June 2016 to increase its size from $2,000 million to $2,500 million. All other material terms of the agreement remained unchanged. The letters of credit sublimit of our senior revolving credit facility was reduced from $700 million to $500 million by agreement in September 2015.

In connection with the increase of our revolving credit facility, in June 2016 we increased the size of our 2014 commercial paper program to permit the issuance of privately placed, unsecured short-term promissory ("commercial paper") notes in an aggregate amount not to exceed $2,500 million. Proceeds from the issuance of commercial paper may be used for general corporate purposes, including dividend payments and share repurchases. At December 31, 2016, we had $500 million of commercial paper outstanding.

In March 2016, our direct, 100% owned subsidiary, LYB International Finance II B.V., issued €750 million of 1.875% guaranteed notes due 2022 at a discounted price of 99.607%. Proceeds from these notes were used for general corporate purposes, including repurchases of our ordinary shares. 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 II's existing and future unsecured indebtedness and to all of LyondellBasell N.V.'s existing and future unsubordinated indebtedness.

In August 2015, we amended our U.S. accounts receivable securitization facility, which, among other things, decreased the purchase limit from $1 billion to $900 million, added a $300 million uncommitted accordion feature and extended the term of the facility to August 2018.

In March 2015, we issued $1,000 million of 4.625% Notes due 2055 at a discounted price of 98.353%. Proceeds from these notes were used for general corporate purposes, including repurchases of our ordinary shares. These unsecured notes rank equally in right of payment to all of LyondellBasell N.V.'s existing and future unsubordinated indebtedness.

See Note 25 to the Consolidated Financial Statements for additional information related to our credit facilities and Notes discussed above, including redemption terms.

In May 2016, our shareholders approved a proposal to authorize us to repurchase up to an additional 10%, or approximately 42.5 million, of our shares outstanding over the following eighteen months. 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, 2016, we have purchased 21.3 million shares under this program for approximately $1,688 million. As of February 14, 2017, we had approximately 20 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 23 to the Consolidated Financial Statements.

In September 2016, we received proceeds of $72 million from the sale of our joint venture in Japan. We also purchased a net additional 7.41% interest in our joint venture in Korea for $36 million in September 2016. In February 2016, we received net proceeds of $137 million from the sale of our wholly owned Argentine subsidiary.

We engaged an investment bank in 2016 to assist in testing the value of our Houston refinery as part of our regular review of our asset portfolio and as a result of indications of interest in the refinery by third parties. Following a thorough process, we have elected to retain the refinery in our asset portfolio.

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. In connection with any repayment or redemption of our debt, we may incur cash and non-cash charges, which could be material in the period in which they are incurred. We currently intend to refinance certain outstanding debt, subject to market conditions, in the first quarter of 2017. Our current analyses indicate that the refinancing may result in charges of approximately $125 million based on current market conditions. The actual costs will depend on several factors, including interest rates and market conditions if and when the refinancing occurs.

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 31 December 2016, 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 U.S. Dollars** | **Total** | **2017** | **2018** | **2019** | **2020** | **2021** | **Thereafter** |
| Total debt, nominal value | $ 9,299 | $ 616 | $ 13 | $ 2,015 | $ 14 | $ 1,019 | $ 5,622 |
| Interest payment on total debt | 5,470 | 321 | 321 | 321 | 321 | 321 | 3,865 |
| Advances from customers | 69 | 22 | 13 | 15 | 4 | - - | 15 |
| Other | 1,541 | 960 | 294 | 29 | 30 | 30 | 198 |
| Deferred income taxes | 2,212 | 312 | 124 | 140 | 137 | 121 | 1,378 |
| Purchase obligations: | | | | | | | |
| Take-or-pay contracts | 13,806 | 2,350 | 2,348 | 2,444 | 2,559 | 2,500 | 1,605 |
| Other contracts | 8,556 | 3,343 | 2,179 | 1,002 | 467 | 204 | 1,361 |
| Operating leases | 1,650 | 341 | 286 | 211 | 173 | 146 | 493 |
| Total | $ 42,603 | $ 8,265 | $ 5,578 | $ 6,177 | $ 3,705 | $ 4,341 | $ 14,537 |

*Total Debt*—Our debt includes unsecured senior notes, guaranteed notes and various other U.S. and non-U.S. loans. See Note 25 of 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 27 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 2017 are not expected to be materially different than the expected 2017 contributions disclosed in Note 27 to the Consolidated Financial Statements. At 31 December 2016, the projected benefit obligation for our pension plans exceeded the fair value of plan assets by $950 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 $950 million, with interest, in future years. We contributed $114 million and $107 million to our pension plans in 2016 and 2015, respectively. We provide other postretirement benefits, primarily medical benefits to eligible participants, as described in Note 27 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 $47 million as of 31 December 2016.

*Other*—Other primarily consists of accruals for environmental remediation costs, obligations under deferred compensation arrangements, and anticipated asset retirement obligations.

*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 26 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 31 December 2016.

*Operating Leases*—We lease various facilities and equipment under non-cancelable lease arrangements for various periods. See Note 30 to the Consolidated Financial Statements for related lease disclosures.

### 2.1.3 Outlook

Significant financial and strategic progress in recent years has positioned us well to capture market opportunities and weather the impacts of global economic and industry cycles. Underpinning everything we do is a constant focus on operational excellence that drives our safety, environmental performance, and management of costs and reliability.

We expect to continue to deliver differential results in these areas in 2017. Our recent investments and capital structure initiatives have added to our financial strength and will help us grow and continue to capture global market opportunities in any business environment. We are well-positioned to maintain a steady and competitive dividend policy and provide additional shareholder returns. In 2016, we increased the interim quarterly dividend by 9% to 85 cents per share, and we repurchased over 37 million shares of our common stock.

Low oil prices continued to have a negative effect on margins in our U.S. olefins and global oxyfuels businesses, but continued market strength in our US and EU polyolefins helped partially offset these declines. 2016 also presented operational challenges, as a heavy turnaround schedule and a few unplanned outages limited production volumes, especially in US Olefins and Refining. Our turnaround activity will be significantly lower in 2017 than it was in 2016.

The outlook for the O&P–Americas segment has improved as we enter 2017, due to a continued healthy business environment supporting US and global demand, increasing product prices in line with the recovery in oil, and delays in the schedule for new US industry capacity to come online in 2017 and 2018.

While it will be difficult to achieve further improvement in the O&P EAI segment for 2017, the markets are starting the year with healthy demand, and with selected olefins products such as butadiene and propylene seeing significant price improvement.

2017 is starting with improved business conditions for the I&D segment, as styrene remains strong and as prices for several key products have rebounded significantly in recent months.

After a planned 1Q17 turnaround of our fluid catalytic cracker, we should have full capacity available in our Refining segment as we have addressed the 2016 problem areas, and we anticipate an improving margin environment in 2017 as the industry adapts to tighter gasoline product specifications.

Our Technology segment is expecting another solid year in 2017.

## 2.2 Risk Factors

The factors described below represent the principal risks to an investment in LyondellBasell. Any of these factors, taken alone or in combination, could adversely affect our business, operating results and financial condition, as well as the value of an investment in our securities and our ability to execute our strategy.

***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 appropriate for our business and operations as well as in line 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.

***A sustained decrease in the price of crude oil may adversely impact the results of our operations, primarily in North America.***

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 have benefitted from the favorable ratio of U.S. natural gas prices to crude oil prices in recent years. This advantage was reduced as oil prices declined beginning in 2014. If the price of crude oil remains lower relative to U.S. natural gas prices or if the demand for natural gas and NGLs increases, this may have a negative impact 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.

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

We obtain a 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.

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.

***Economic disruptions and downturns in general, and particularly continued global economic uncertainty 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.

If a sustained financial crisis in Europe leads to a further 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 South America. 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. Often, 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. Continuing 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 with different cost structures or strategic goals than we have 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;
- remediation complications;
- increased restrictions on, or the unavailability of, water for use at our manufacturing sites or for the transport of our products or raw materials;
- 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.

***Large capital projects can take many years to complete, and market conditions could deteriorate significantly between the project approval date and the project startup date, negatively impacting project returns. If we are unable to complete capital projects at their expected costs and in a timely manner, or if the market conditions assumed in our project economics deteriorate, our business, financial condition, results of operations and cash flows could be materially and adversely affected.***

Delays or cost increases related to capital spending programs involving engineering, procurement and construction of facilities could materially adversely affect our ability to achieve forecasted internal rates of return and operating results. Delays in making required changes or upgrades to our facilities could subject us to fines or penalties as well as affect our ability to supply certain products we produce. Such delays or cost increases may arise as a result of unpredictable factors, many of which are beyond our control, including:

- denial of or delay in receiving requisite regulatory approvals and/or permits;
- unplanned increases in the cost of construction materials or labor;
- disruptions in transportation of components or construction materials;
- adverse weather conditions, natural disasters or other events (such as equipment malfunctions, explosions, fires or spills) affecting our facilities, or those of vendors or suppliers;
- shortages of sufficiently skilled labor, or labor disagreements resulting in unplanned work stoppages; and
- nonperformance by, or disputes with, vendors, suppliers, contractors or subcontractors.

Any one or more of these factors could have a significant impact on our ongoing capital projects. If we were unable to make up the delays associated with such factors or to recover the related costs, or if market conditions change, it could materially and adversely affect our business, financial condition, results of operations and cash flows.

***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 security measures, 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 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. 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 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. LyondellBasell N.V. has little or no taxable income of its own because, as a holding company, it does not conduct any operations. Through our subsidiaries, we have substantial operations world-wide. Taxes are primarily paid on the earnings generated in various jurisdictions, including the United States, The Netherlands, Germany, France, and Italy.

A portion of the Company's interest income from internal financing is either untaxed or taxed at rates substantially lower than the U.S. statutory rate. In September 2016, the UK enacted provisions (the so called "anti-hybrid provisions"), effective for years beginning January 1, 2017, that will impact our internal financing structure. In addition, in October 2016 the U.S. Treasury issued final Section 385 debt-equity regulations that may also impact our internal financings.

We monitor income tax developments (including, for example, U.S. tax reform proposals and the European Union's state aid investigations) in countries where we conduct business. Recently, there has been an increase in attention, both in the U.K. and globally, to the tax practices of multinational companies, including proposals by the Organization for Economic Cooperation and Development ("OECD") with respect to base erosion and profit shifting. Such attention may result in legislative changes that could affect our tax rate. Management does not believe that recent changes in income tax laws will have a material impact on our Consolidated Financial Statements, although new or proposed changes to tax laws could affect our tax liabilities in the future.

***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 and patent applications, together with proprietary technical know-how, are significant to our competitive position, particularly with regard to PO, performance chemicals, petrochemicals, and polymers. 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 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 related 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, $2.5 billion revolving credit facility, which backs our commercial paper program, to meet our cash needs, to the extent available. As of 31 December 2016, we had no borrowings or letters of credit outstanding under the facility and $500 million outstanding under our commercial paper program, leaving an unused and available credit capacity of $1,973 million. We may also meet our cash needs by selling receivables under our $900 million U.S. 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.

***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.

***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 rates 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 changes in key actuarial assumptions, such as the discount rate or mortality 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.

Nearly all of our current pension plans have projected benefit obligations that exceed the fair value of the plan assets. As of 31 December 2016, the aggregate deficit was $950 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.

## 2.3 Our Strategy

LyondellBasell works every day to be the best operated, most respected company in our industry. We strive to consistently outperform the competition by safely and reliably delivering high quality products to customers; being the company of choice for employees and shareholders; and being a responsible, good neighbor in the communities where we operate.

To achieve this goal, we are focused on operating the Company's existing assets with excellence; managing our business to perform well in any business environment; and being positioned to take advantages of growth opportunities as they are presented. More specifically:

- **Operational excellence:** LyondellBasell's focus on operational excellence begins with achieving differential performance in industrial and process safety and environmental stewardship. Over the past several years, our production facilities have become highly reliable through the systematic application of industry best practices and performance standards. Additionally, we continue to invest in projects that further enhance the reliability of our asset portfolio. This includes key maintenance and repair activities ("turnarounds") in each segment and necessary regulatory and maintenance spending.

- **Managing for any business environment:** LyondellBasell continues to manage the business in a manner that allows the Company to perform well in any business environment. One way we do this is by exercising financial and capital discipline and maintaining a strong balance sheet. LyondellBasell also maintains a robust program for benchmarking, goal setting and measuring performance that is designed to maintain and reinforce a culture of high performance at all levels of the organization.

- **Taking advantage of unique opportunities:** The Company continues to capture opportunities created by shale gas production in the U.S., which provides low-cost feedstocks for many of our businesses. The Company actively seeks opportunities to increase sales of our differentiated products by leveraging our leading technological platform, global presence, strong customer relationships, reliability and quality. We recently announced the company's new high density polyethylene plant to be built in La Porte, Texas, the first to utilize the company's proprietary *Hyperzone* PE technology. In addition, we continue to evaluate and develop new growth projects, including a new PO/TBA plant on the Texas Gulf Coast.

### 2.4 Sustainability

LyondellBasell is committed to sustainable development. We define sustainability as the responsible and ethical use of resources to improve the everyday quality of life in the world around us. Through our stewardship of natural resources and with a focus on technological advancements, we believe we can help improve the quality of life today and for future generations.

As a significant participant in the global economy, our objectives are to:

- Create value for our investors and customers;
- Protect the well-being of our employees, contractors and the communities in which we operate;
- Manage the safe use of our products;
- Protect the environment and preserve resources for future generations; and
- Supply products that enhance the quality of life worldwide.

We strive to create better environmental and social outcomes in the way we do business. Promoting safe, efficient, and ethical business practices provides better results not only for us, but also for the customers we serve and the communities in which we operate.

Our business approach and drive for innovation are underpinned by key sustainability themes such as resource efficiency, safety, governance, and productive stakeholder dialogue. Whether addressing energy challenges or speaking with our local communities, we work continuously towards sustainable successful outcomes. We are committed to protecting the environment, human health and safety in the communities where we operate. We deliver on this commitment by:

- Producing the basic building blocks for products that enhance consumer safety, quality of life, convenience and energy conservation;

- Minimizing our impact on the environment; and

- Supporting a variety of community service activities.

We are dedicated to safety excellence. In 2016, LyondellBasell continued to operate with industry leading safety performance. The Company's safety performance in 2016, measured by total recordable incident rate[1] for employees and contractors, was 0.21.

Our Operational Excellence philosophy establishes uniform management system requirements for areas that have a direct impact on our operating performance. These management system requirements include programs for mechanical integrity and inspection, management of change, process hazard analysis, risk assessment, incident investigation and reporting, and the maintenance of process safety information. Other elements essential to a successful Operational Excellence program include effective communication and employee training.

Our process safety program is focused on the pro-active identification and management of hazards in our operations. It plays a significant role in our overall safety performance and in fulfilling our commitment to operate in a manner that protects our people, the environment and our business relationship with our customers.

Our Product Stewardship efforts promote the safe and responsible use of our products. We strive to understand the safety, health and environmental issues associated with the manufacture, distribution and use of our products and we share that understanding with our customers and other stakeholders.

We are dedicated to minimizing our emissions and improving our energy efficiency. We are making the investments necessary to accomplish this goal through cost-effective compliance, business-driven improvement and science-based risk management.

## 2.5 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 2016 and 2015, our research and development expenditures were $83 million and $85 million, respectively. A portion of these expenses are related to technical support and customer service and are allocated to the other business segments. In 2016, approximately 46% of all R&D costs were allocated to business segments, other than Technology, while in 2015, the allocations approximated 45%.

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[1] We utilize the U.S. Occupational Safety and Health Administration ("OSHA") definition for injury rate, which is the number of injuries recorded per 200,000 hours worked.

## 3 Report of the Supervisory Board

Our Supervisory Board is responsible for overseeing the Management Board and the overall course of our business and strategy. Members of the Supervisory Board are non-executives and are elected by shareholders. Our Supervisory Board and its committees oversee:

- management's identification, measurement, monitoring, and control of our company's material risks, including operational, credit, market, liquidity, compliance, strategic, and reputational risks;
- the Company's maintenance of high ethical standards and effective policies and practices to protect our reputation, assets, and business;
- management's development and implementation of an annual financial operating plan and a multi-year strategic business plan, and our progress meeting these financial and strategic plans;
- the corporate audit function, our independent registered public accounting firm, and the integrity of our consolidated financial statements; and
- the establishment, maintenance, and administration of appropriately designed compensation programs and plans.

The Supervisory board is also responsible for:

- reviewing, monitoring, and approving succession plans for the Supervisory Board, our CEO and other key executives to promote senior management continuity;
- conducting an annual self-evaluation of the Supervisory Board and its committees;
- identifying and evaluating director candidates and nominating qualified individuals for election to serve on our Supervisory Board; and
- reviewing our CEO's performance and approving the total annual compensation for our CEO and other executive officers.

Our Supervisory Board currently has eleven members. Our Articles of Association provide that the Supervisory Board will consist of at least nine members and the Rules of the Supervisory Board provide that the Supervisory Board, in its sole discretion, shall determine the size of the Supervisory Board in accordance with and in order to comply with our Articles of Association, any nomination agreements and the listing standards of the New York Stock Exchange.

Since our incorporation, our Supervisory Board has been divided into three classes, with directors in each class serving for a three-year term. The Supervisory Board has decided that all directors should be elected annually. This decision was made after a review of our governance practices and recognition that annual elections give shareholders a greater voice in expressing their views about our Supervisory Directors. Under our Articles of Association and the Rules of the Supervisory Board, the Supervisory Board nominates individuals for terms that cannot exceed three years. The Supervisory Board has determined to nominate each of our current Supervisory Directors for a term of one year for election at the 2017 annual meeting. This change will be effective without the need for shareholder approval.

Our Class II and Class III directors, whose terms would ordinarily expire at the annual meetings in 2018 and 2019, have tendered resignations effective as of the 2017 annual meeting to forego the remainders of their terms for which they were previously elected by shareholders.

The members of the Supervisory Board are elected by the general meeting of shareholders from a list of nominees that is drawn up by the Supervisory Board. Pursuant to our Articles of Association, the list is, in principle, binding.

The binding nature of the Supervisory Board's nominations may be overridden by a vote of two-thirds of the votes cast at the meeting if such two-thirds vote constitutes more than one-half of the issued share capital of the Company. In that case, shareholders would be free to cast their votes for persons other than those nominated below.

The table below shows information for each member of our Supervisory Board as of 30 March 2017.

| Jacques Aigrain, French-Swiss, 62, Supervisory Director since May 2011 |
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| Position, Principal Occupation and Business Experience: Senior Advisor at Warburg Pincus, a global private equity firm, since 2016 and partner from 2013 to 2016. Director of The London Stock Exchange Group Plc, a diversified international stock exchange, since 2013. Director of WPP plc, a multinational advertising and public relations company, since 2013. Director of Lufthansa German Airlines, from 2007 to 2015. Chairman of LCH Clearnet Group, Limited, a clearinghouse group, from 2010 to 2015. Director of Resolution Ltd., a financial services company, from 2010 to 2013. |
| Key Attributes, Experience and Skills: Mr. Aigrain has extensive experience as an executive and board member of several multinational companies. His background provides him with expertise in all areas of strategy, mergers and acquisitions, finance and capital markets. Additionally, he brings with him substantial knowledge of board related and governance matters. |
| Lincoln Benet, American-British, 53, Supervisory Director since June 2015 |
| Position, Principal Occupation and Business Experience: Chief Executive Officer of Access Industries, a privately held industrial group, since 2006. |
| Key Attributes, Experience and Skills: As CEO of an industrial group with world-wide holdings, Mr. Benet has knowledge of all aspects of executive management. Mr. Benet also currently and previously has served on the boards of several privately held companies, including investment, music and publishing, oil and gas pipes and tubing, telecommunications, management services and petrochemicals companies. He brings with him experience in global markets, mergers and acquisitions, strategic planning and corporate strategy as well as international finance matters, including corporate finance matters such as treasury, insurance and tax. |
| Jagjeet S. Bindra, American, 69, Supervisory Director since May 2011 |
| Position, Principal Occupation and Business Experience: Director of Edison International, a generator and distributor of electric power, and its subsidiary, Southern California Edison Co., an electric utility company, since 2010. Director of WorleyParsons, a global provider of project delivery and consulting services to the resources and energy sectors and complex process industries, since 2015. Director of Transocean Ltd., an offshore drilling contractor and the provider of drilling management services, from 2011 to 2014. Director of Larsen & Toubro, a technology, engineering, construction and manufacturing company, from 2009 to 2012. Director and Deputy Chairman of Transfield Services, a global provider of operations, maintenance and asset and project management services, from 2009 to 2012. |
| Key Attributes, Experience and Skills: Mr. Bindra previously led worldwide manufacturing operations as a senior executive of Chevron, a multinational energy corporation. This background provides him with extensive knowledge of global manufacturing, capital projects, health, safety and environmental and operations matters. Additionally, Mr. Bindra has knowledge of board and governance matters through his service as a board member of several publicly traded companies. |
| Robin Buchanan, British, 64, Supervisory Director since May 2011 |
| Position, Principal Occupation and Business Experience: Senior Advisor to Bain & Company, the worldwide business consulting firm, since 2007. Before that, Mr. Buchanan was the Senior Partner of Bain's UK operations for |

17 years. Director of Schroders plc, a FTSE 100 global asset management company, since 2010. Chairman of Michael Page International plc, a specialist recruitment company, from 2011 to 2015. Mr. Buchanan also previously served as Dean and President of London Business School.

Key Attributes, Experience and Skills: Mr. Buchanan has many years' experience of petrochemicals and extractive industries, as well as business and financial services. He brings with him particular expertise in competitive strategy, leadership, executive management, mergers and acquisitions and board effectiveness. Mr. Buchanan is a member of the Institute of Chartered Accountants in England and Wales (FCA).

Stephen F. Cooper, American, 70, Supervisory Director since July 2010

Position, Principal Occupation and Business Experience: Chief Executive Officer and Director of Warner Music Group Corp., a recorded music and music publishing business, since 2011. Managing Partner of Cooper Investment Partners, a private equity firm specializing in underperforming companies, since 2008.

Key Attributes, Experience and Skills: With a long career as a corporate turnaround specialist, Mr. Cooper has served as the top executive of several publicly traded companies, providing him with expansive knowledge and experience relating to all matters of executive management as well as finance and strategy. Mr. Cooper brings with him additional experience from his role as a sitting CEO and board member.

Nance K. Dicciani, American, 69, Supervisory Director since September 2013

Position, Principal Occupation and Business Experience: Director of Halliburton, an oilfield services company, since 2009. Director of Praxair, an industrial gases company, since 2008. Director of AgroFresh Solutions, Inc., a horticultural technology company, since 2015. Director of Rockwood Holdings, a specialty chemicals and advanced materials company from 2008 until 2014.

Key Attributes, Experience and Skills: Ms. Dicciani previously served as a senior executive of Honeywell Specialty Materials and Rohm and Haas, both specialty chemicals manufacturers, providing her with specific industry knowledge and understanding of manufacturing, health, safety and environmental matters, and the competitive landscape for our industry. She also has extensive experience in all areas of executive management. Through her service on other publicly traded companies, Ms. Dicciani also has experience in board and governance matters.

Claire S. Farley, American, 58, Supervisory Director since February 2014

Position, Principal Occupation and Business Experience: Director of TechnipFMC plc since the 2017 combination of FMC Technologies, Inc., a global provider of technology solutions for the energy industry, and Technip S.A., a project management, engineering and construction company. Director of Anadarko Petroleum since 2017. Previously served as a director of FMC from 2009 to 2017. Vice Chair of KKR Energy Group from 2016 to 2017 and currently an advisor to KKR Energy Group. Member of KKR Management LLC, the general partner of KKR & Co. L.P., a global investment firm, from 2013 to 2015. Managing Director of KKR Energy Group from 2011 to 2012. Director of Encana Corporation, a North American energy provider, from 2008 through 2014.

Key Attributes, Experience and Skills: As a former executive in the oil and gas exploration and production industry, Ms. Farley brings with her experience in business development, mergers, acquisitions and divestitures, as well as knowledge of the chemical industry's feedstocks and their markets. She also has experience in all matters of executive management and as a board member of several publicly traded companies, she brings with her an understanding of publicly traded company and governance matters.

Isabella D. Goren, American, 56, Supervisory Director since February 2014

Position, Principal Occupation and Business Experience: Director of MassMutual Financial Group, a mutual life insurance company, whose major affiliates include Oppenheimer Funds, Inc. and Barings LLC, since 2014. Director of Gap Inc., a global retail company with a portfolio of brands, since August 2011. Senior Vice President and Chief Financial Officer of AMR Corporation, the parent holding company of several airlines, including American Airlines, Inc., where she also served as Senior Vice President and Chief Financial Officer, from 2010 through 2013.[1]

Key Attributes, Experience and Skills: Ms. Goren has held a wide range of executive roles in capital intensive and highly competitive global businesses. Her experience and expertise cover areas that include strategic planning, management of complex international operations, business development, asset management and corporate financing functions. As a board member of major multinational companies she also brings knowledge and experience in corporate governance.

Robert G. Gwin, American, 53, Supervisory Director since May 2011

Position, Principal Occupation and Business Experience: Executive Vice President, Finance and Chief Financial Officer of Anadarko Petroleum Corporation, an oil and gas exploration and production company, since 2009. Chairman of Western Gas Holdings, LLC, the general partner of Western Gas Partners, LP, an owner, operator and developer of midstream energy assets, since 2009 and director since 2007. Chairman of Western Gas Equity Holdings, LLC, the general partner of Western Gas Equity Partners, LP since 2012.

Key Attributes, Experience and Skills: As a seasoned executive and chairman of two publicly traded master limited partnerships, Mr. Gwin brings with him extensive knowledge and experience in all areas of executive management and board service. He also has experience in finance, strategy, capital markets, governance and publicly traded company matters, as well as knowledge of the upstream and midstream oil and natural gas businesses, which are integral to the petrochemical industry's feedstock supply chain.

Bruce A. Smith, American, 73, Supervisory Director since July 2010

Position, Principal Occupation and Business Experience: Chief Executive Officer of One Cypress Energy LLC, a crude petroleum products logistics provider, since 2011. Director of GEVO, Inc., a renewable chemicals and advanced biofuels company from 2010 to 2015.

Key Attributes, Experience and Skills: As former chairman and chief executive officer of Tesoro Corporation, Mr. Smith has extensive knowledge of executive management and publicly traded company matters, including manufacturing, capital projects, health, safety and environmental and operations as well as the refining industry generally. He also has a background in all areas of finance, having served in corporate treasury and chief financial roles. Mr. Smith brings with him expertise in all areas of public company matters.

Rudy van der Meer, Dutch, 72, Supervisory Director since July 2010

Position, Principal Occupation and Business Experience: Chairman of the Supervisory Board of Coöperatie VGZ U.A., a health insurer, since 2011. Supervisory Director of James Hardie Industries S.E., an industrial fibre cement products and systems manufacturer, since 2007. Chairman of Supervisory Board of Royal Imtech N.V., a technical services provider, from 2005 to 2013.

Key Attributes, Experience and Skills: Mr. van der Meer's background includes a long career with a multinational paints, coatings and specialty chemicals producer, including as a senior executive. He has extensive industry experience, including with manufacturing, health, safety and environmental and operations matters. Mr. Van der Meer also has served on boards of several Dutch multinational companies, providing him with knowledge and understanding of public company governance matters.

[1] AMR Corporation and American Airlines, Inc. successfully completed a reorganization under Chapter 11 of the U.S. Bankruptcy Code in 2013, for which a voluntary petition was filed in 2011.

## Independence of Supervisory Board Members

Our Supervisory Board has adopted categorical standards that are used to assist in independence determinations. The categorical standards meet and in some instances exceed the requirements of the NYSE. To qualify as independent under our categorical standards, a Supervisory Director must be determined to have no material relationship with LyondellBasell other than as a Supervisory Director. The categorical standards include strict guidelines for Supervisory Directors and their immediate families regarding employment or affiliation with LyondellBasell as well as with its independent registered public accounting firm. Our categorical standards are included in our Corporate Governance Guidelines and can be found on our website at www.lyb.com.

The Supervisory Board has determined that there are no relationships or transactions that would prohibit any of the Supervisory Directors from being deemed independent. In addition to the relationships and transactions that would bar an independence finding under the categorical standards, the Supervisory Board considered all other known relationships and transactions in making its determination. Transactions and relationships considered included:

- Company subsidiaries' purchases of natural gas and natural gas liquids from a subsidiary of Anadarko Petroleum, where Mr. Gwin serves as Executive Vice President and CFO and Ms. Farley serves as a director;
- Company subsidiary's engagement of Worley Parsons, where Mr. Bindra is a director, for project management services related to capital projects;
- Company subsidiaries' engagement of the employee search and recruitment services of Michael Page International, where Mr. Buchanan served as Chairman until the end of 2015;
- Company subsidiaries' purchases of insurance coverage from a subsidiary of MassMutual Financial Group, where Ms. Goren is a director;
- Company subsidiaries' purchases of measurement products from a subsidiary of TechnipFMC, where Ms. Farley is a director;
- Company subsidiaries' purchases of industrial gases from, and sales of crude hydrogen to, Praxair, where Ms. Dicciani is a director;
- Mr. Benet's position as CEO of Access Industries, the Company's largest shareholder;
- Mr. Cooper's position as CEO of Warner Music, a subsidiary of Access Industries; and
- Mr. Buchanan's position as Non-Executive Chairman of Access Industries' Investment Committee.

In determining that none of these transactions or relationships affected the independence of any of the interested Supervisory Directors, the Supervisory Board considered the nature of the transactions and relationships. All of the transactions are ordinary course and none of the dollar amounts involved was material to the Company or the counterparty. Additionally, the Supervisory Board determined that the relationships between certain Supervisory Directors and the Company's largest shareholder do not preclude a finding of independence for purposes of NYSE listing standards. Under the Dutch Corporate Governance Code, a supervisory board member is not deemed independent if he is a representative in some way of an entity that owns 10% or more of a company's shares. Although our Supervisory Board has determined that each of Messrs. Benet, Buchanan and Cooper is independent for the purposes of the NYSE listing standards, they are not independent under the Dutch Corporate Governance Code. See Section 4.3, Dutch Corporate Governance.

## Meetings and Board Committees

The Supervisory Board held five regularly scheduled meetings in 2016. Each of the Supervisory Directors attended at least 75% of the meetings of the Supervisory Board and of each committee of which he was a member. The Company does not maintain a policy regarding Supervisory Board members' attendance at its annual general meetings. The Supervisory Board and its committees regularly hold executive sessions, at which members of management are not present. All such sessions are led by the respective Chairs of the Supervisory Board or committee, as applicable.

The table below provides membership and meeting information for each of the Supervisory Board's standing committees and changes to the committees that were made in 2016.

| Name | Audit | Compensation | Nominating & Governance | HSE&O | Finance [1] | Executive [2] |
|---|---|---|---|---|---|---|
| Robert Gwin | | | | | | Chair |
| Jacques Aigrain [3] | | Chair | | | ● | ● |
| Lincoln Benet | | | ● | | Chair | ● |
| Jagjeet Bindra [4] | ● | | | Chair | | ● |
| Robin Buchanan [5] | | ● | ● | | | |
| Steve Cooper | | | | ● | | |
| Nance Dicciani [6] | | | | ● | ● | |
| Claire Farley [7] | ● | | Chair | | | ● |
| Bella Goren | ● | ● | | | | |
| Bruce Smith | Chair | | | | ● | ● |
| Rudy van der Meer [8] | | | ● | ● | | |
| 2016 Meetings | 6 | 6 | 4 | 4 | 3 | - [9] |

(1) The Finance Committee was established in May 2016.

(2) The Executive Committee was established in May 2016.

(3) Mr. Aigrain served on the Audit Committee until May 2016 when he joined the Finance Committee.

(4) Mr. Bindra served on the Nominating & Governance Committee until May 2016 when he became Chair of the HSE&O Committee and joined the Audit Committee.

(5) Mr. Buchanan became a member of the Nominating & Governance Committee in May 2016.

(6) Ms. Dicciani served on the Audit Committee until May 2016 when she joined the Finance Committee.

(7) Ms. Farley became a member of the Audit Committee in May 2016.

(8) Mr. van der Meer served as Chair of the HSE&O Committee until May 2016.

(9) The Executive Committee had informal calls throughout the year and between meetings to discuss coordination amongst the Supervisory Board and its committees.

Each of our committees has a written charter, approved by the Supervisory Board. The charters can be found on our website at www.lyb.com. Each of the committees, other than the Executive Committee, must perform an annual self-evaluation of its effectiveness and report the results of its activities to the full Supervisory Board.

### *Audit Committee*

The Audit Committee is responsible for overseeing all matters relating to our financial statements and reporting; internal audit function and independent auditors; and our compliance function. Listed below are the general responsibilities of the Audit Committee.

- *Independent Auditor* – Engage external auditor and approve compensation; review independence and establish policies relating to hiring of auditor employees; and pre-approve audit services;

- *Internal Audit* – Review plans, staffing and activities as well as effectiveness;

- *Financial Statements* – Review financial statements and earnings releases; discuss and review accounting policies and practices and external auditor reviews; and discuss and review effectiveness of controls; and

- *Compliance* – Review plans, staffing and function of the Company's Compliance function; establish and review procedures for complaints, including anonymous complaints regarding accounting, controls and auditing; and review the Company's Code of Conduct and system for monitoring compliance therewith.

Our Board has determined that all Committee members are independent under the NYSE listing standards, our categorical standards, and the heightened independence requirements applicable to audit committee members under the rules of the SEC. Our Supervisory Board has also determined that all Committee members are financially literate in accordance with the NYSE listing standards and qualify as audit committee financial experts under SEC rules.

***Compensation Committee***

The Compensation Committee is responsible for overseeing our executive compensation programs and developing the Company's compensation philosophy generally.

In overseeing compensation matters, the Compensation Committee may delegate authority for day-to-day administration and interpretation of the Company's plans to Company employees, including selection of participants, determination of award levels within plan parameters, and approval of award documents. However, the Compensation Committee may not delegate authority under those plans for matters affecting the compensation and benefits of the executive officers. The Compensation Committee's responsibilities include the following:

- *Executive Compensation* – Approve compensation and benefits of executive officers; review objectives of executive compensation consistent with corporate objectives; review and approve goals and objectives of CEO compensation and evaluate CEO performance; and make recommendations to the Supervisory Board for all executive officers' compensation; and

- *Company Compensation Benefits* – Review compensation philosophy, programs and practices; review and approve pension and benefit arrangements as well as funding of pension and benefit plans; and make recommendations to the Supervisory Board regarding the same;

All Committee members are independent under the NYSE listing standards, our categorical standards and independence requirements applicable to compensation committee members under NYSE rules.

*Compensation Committee Interlocks and Insider Participation* - During 2016, no member of the Compensation Committee was an officer or employee of the Company or any of our subsidiaries and no executive officer served on the compensation committee or board of any entity that employed any member of our Compensation Committee or Supervisory Board.

***Nominating & Governance Committee***

One of the primary responsibilities of the Nominating & Governance Committee is to identify nominees for election to the Supervisory Board. In connection with its declassification, the Supervisory Board has nominated each current member of the Supervisory Board for election at the Annual Meeting.

It is the duty of the Nominating & Governance Committee to oversee matters regarding corporate governance. In fulfilling its duties, the Nominating & Governance Committee has the following responsibilities:

- *Administrative* – Coordinate evaluations by other committees and the full Supervisory Board;

- *Supervisory Directors and Supervisory Director Nominees* – Identify and recommend candidates for membership on the Supervisory Board; recommend committee memberships and recommend Supervisory Board compensation; and

- *Corporate Governance* – Review the Company's governance profile and make recommendations; and review and comment on shareholder proposals.

***Health, Safety, Environmental & Operations Committee***

It is the duty of the Health, Safety, Environmental & Operations ("HSE&O") Committee to assist the Supervisory Board in its oversight responsibilities by assessing the effectiveness of environmental, health and safety programs and initiatives that support Company policies. The HSE&O Committee also reviews the Company's material technologies and the risks relating to its technology portfolio as well as its performance in executing large capital projects and turnarounds. In fulfilling its duties, the HSE&O Committee has the following responsibilities:

- *Administrative* – Review the status of the Company's health, safety and environmental policies and performance, including processes to ensure compliance with applicable laws and regulations;

- *Performance* – Review and monitor the Company's health, safety and environmental performance statistics, provide oversight of the programs, initiatives and activities in the areas of technology and sustainability and review with management the existing and emerging technologies, and environment, health, safety, product stewardship and other sustainability issues that can have a material impact on the Company; and review the status of our environment, health, safety, product stewardship and other sustainability policies, programs and practices;

- *Audit* – Review and approve the scope of the health, safety and environmental audit program and regularly monitor program results; review and approve the annual budget for the health, safety and environmental audit program; and

- *Reporting* – Report periodically to the Supervisory Board on technology, health, safety and environmental matters affecting the Company.

***Finance Committee***

It is the duty of the Finance Committee to assist the Supervisory Board in its oversight responsibilities by monitoring and assessing such matters as the Company's capital structure and allocation, debt portfolio, and derivative strategies. In fulfilling its duties, the Finance Committee has the following responsibilities:

- *Strategy* – Review analyses and provide guidance and advice regarding acquisitions and divestments and discuss and review the Company's tax strategies, planning and related structures;

- *Capital* – Review the Company's capital structure; review capital allocation, including organic or inorganic investments, review and discuss the dividend policy; review and discuss stock repurchase activities and plans; and

- *Securities and Financing* – Review and discuss the Company's debt portfolio, credit facilities, compliance with financial covenants; review and discuss the commodity, interest rate or currency derivative strategies; review and discuss the securities offerings.

***Executive Committee***

The Executive Committee consists of the chairs of each of the other Supervisory Board committees. The role of the Executive Committee is to facilitate and improve communication and coordination amongst the Supervisory Board and its committees. It does so by, among other things, collaborating on agenda setting and discussing ad-hoc issues (including when a meeting of the full Supervisory Board is not possible or practical).

### 3.1 Compensation of the Management Board

The compensation paid to members of the Management Board is based on their duties as executives of the Company. Management Board members do not receive additional compensation for serving on the Management Board.

Set forth below are the main elements of the executive compensation program.

Design Principles of our Executive Compensation Program

- Take into account the realities of a cyclical, commodity industry.
- Align the interests of management with those of shareholders.
- Encourage both short and long-term results.
- Attract, retain and incentivize the highest caliber team possible.
- Provide ability to pay high achievers above market median pay based on individual performance, potential and impact to the Company's results.
- Recognize the current market leading position in HSE performance, cost discipline and business performance.

The components of our executive compensation are:

**Base Salary**: Base salaries provide executives with a regular fixed income in recognition for their job responsibilities. Executives' base salaries are determined when they are hired or promoted into their positions. The amounts of their salaries are determined on a number of factors, including market based data, the individual's work experience and time in their role, the complexity and scope of their responsibilities and internal pay equity among the Company executives.

**Annual Bonus**: Annual bonus opportunities are a percentage of base salary. The annual bonuses are meant to incentivize our executives and align their compensation with the achievement of the Company's annual priorities, which include overall business performance as well as business unit or business function performance. Based on overall Company and business unit or function performance, executives will earn from 0-200% of the target bonus amount. The bonuses also are designed to reflect individual contribution and performance. Each executive will receive an individual modifier for his performance during the year, ranging from 0-1.5. The Company and business unit/performance calculation is multiplied by this modifier, which can result in an actual payout from 0-300% of the target bonus.

**Long-Term Incentives**: Long-term incentive awards are meant to align the interests of our executives with shareholders. They are designed to motivate the achievement of increased shareholder value over the longer term. The aggregate value of long-term incentives awarded to executives is a percentage of the executives' base salary. These percentages are determined based on market data, the executive's ability to impact the Company's results and internal pay equity considerations. Long-term incentives include the following:

- **PSUs –** Vest after a three-year performance period. The PSUs are converted to shares when they vest. Awards can vest from 0-200% of target, depending on the Company's performance. Performance for the PSUs granted in 2016 is based on ROA as compared to peers[2], relative total shareholder return (TSR), cost competitiveness and capital project execution. PSUs accrue dividend equivalents in the form of additional units at the same time and in the same amount as dividends paid to shareholders.
- **RSUs** – Vest in full after three years. The ultimate value received by executives is dependent on the Company's share price when the award vests. RSUs receive cash dividend equivalents at the same time and in the same amount as dividends paid to shareholders.
- **Stock Options** – Vest ratably over a three-year period and are exercisable for 10 years. The exercise price is the fair market value on the date of grant.

**Perquisites and Other Benefits**: Our named executives receive the same benefits generally provided to all other employees, with the exception of the following:

- Annual executive physical – The Company provides annual physical exams to executives.
- Financial, tax and estate planning – The Company will reimburse up to $15,000 of expenses.
- Matching under the U.S. Deferral Plan – The Company makes matching contributions for amounts that exceed the IRS limits under our 401(k) plan and our defined benefit pension plan. The value of the matching contributions is 11% for compensation that is in excess of the IRS limitations.

From time to time, the Company provides other benefits intended for business purposes, including tax equalization payments and business club memberships or dues. The tax equalization payments are designed to make executives whole if they incur income tax in jurisdictions other than their country and/or state of residence. For example, executives may travel to other jurisdictions on Company business and may be taxed on days worked in that jurisdiction. If and only to the extent those additional taxes cannot otherwise be offset against the executive's regular income tax liability (such as in the form of credits), the Company will reimburse the executive such that his tax liability is equal to the full income tax for his jurisdiction of residence only.

Annually, the Compensation Committee reviews the total target direct compensation for each of our executive officers. This includes base salary, target bonus opportunity and target long-term incentive value (in the form of PSUs, RSUs and stock options). The Compensation Committee then sets each of the executive's compensation targets for the current year. This generally involves establishing an annual bonus target and a long-term incentive award. Regular salary adjustments, if any, normally become effective on April 1 of the year. The Compensation Committee's decisions are reviewed and ratified by the full Supervisory Board.

The Compensation Committee reviews publicly available financial and compensation information reported by our peer group and survey data reflecting a combination of general and chemical industry compensation information for executives in companies with corporate or business unit revenues matching our executives' scope of responsibilities. The Compensation Committee reviews this data to determine the median compensation for each position. The

[2] The peer group for compensation purposes consists of the following companies: 3M, Air Products and Chemicals, Alcoa Caterpillar, Dow Chemical, DuPont, Honeywell, International Paper, Johnson Controls, Monsanto, Philips 66, PPG Industries, Praxair and Valero Energy.

median is used as an appropriate reference point for pay recommendations, but actual pay and targets can vary from median, based on:

- Company, industry and job experience;
- Time in position;
- Internal pay parity amongst executives; and
- Any other relevant factors for the executive's job.

Information on the compensation paid to each member of the Management Board for 2016 performance can be found in Note 9 to the Consolidated Financial Statements.

**Financial Statements**

The Management Board has prepared the annual accounts and discussed these with the Supervisory Board. The Report of the Independent Auditor, PricewaterhouseCoopers Accountants N.V., is included in the 'Other Information' on page 162. The financial statements are being presented for adoption by shareholders at the 2017 Annual Meeting. The Supervisory Board recommends that shareholders adopt these financial statements.

**Additional Information**

For additional information, see the Corporate Governance Statement (page 42), which is deemed to be incorporated by reference herein.

London, 30 March 2017

**The Supervisory Board**

Robert G. Gwin (Chairman)

Jacques Aigrain

Lincoln Benet

Jagjeet S. Bindra

Robin Buchanan

Stephen F. Cooper

Nance K. Dicciani

Claire S. Farley

Isabella D. Goren

Bruce A. Smith

Rudy M.J. van der Meer

# 4 Corporate Governance and Risk Management

## 4.1 Corporate Governance Statement

We monitor and assess applicable Dutch, U.S., and other relevant corporate governance codes, rules, and regulations. We are subject to the Dutch Corporate Governance Code (the "Code"), as we are a listed company with its statutory seat in the Netherlands. As a NYSE listed company, we also are required to comply with the U.S. Sarbanes-Oxley Act of 2002, as well as NYSE listing rules, and the rules and regulations promulgated by the U.S. Securities and Exchange Commission ("SEC"). As an overseas company, with executive offices in the United Kingdom, we are also required to comply with applicable requirements of U.K. company law, including the Companies Act 2006.

Our corporate governance structure is based on the requirements of the Dutch Civil Code, the company's Articles of Association and the rules and regulations applicable to companies listed on the New York Stock Exchange, complemented by several internal procedures. These procedures include a risk management and control system, as well as a system of assurance of compliance with laws and regulations.

For the full text of the Code, please refer to the website http://www.commissiecorporategovernance.nl/. For the full text of the U.S. Sarbanes-Oxley Act of 2002, as well as NYSE listing rules, and the rules and regulations promulgated by the SEC, see www.sec.gov/about/laws/soa2002.pdf, http://nyse.com/, and www.sec.gov/about.shtml respectively.

The Code contains principles and best practices for Dutch companies with listed shares. We agree with both the general approach and the vast majority of its principles and best practice provisions. Any deviations from the Code are explained, in accordance with the Code's "apply or explain" principle.

Any material changes in our corporate governance structure and/or our compliance with the Code will be discussed at LyondellBasell's 2017 annual meeting of shareholders as a separate agenda item. The Management Board and the Supervisory Board are of the opinion that the company's corporate governance structure, as described here, is the most appropriate for LyondellBasell. With the exception of those aspects of our governance structure which can only be amended with the approval of shareholders, the Management Board and the Supervisory Board may make adjustments to the way the Code is applied, if this is considered to be in the interest of the Company. If adjustments are made, they will be published and reported in the annual report for the relevant year.

## 4.2 Management Board

We have a dual board structure, a common structure for Dutch companies. Under the dual board structure, there is a Supervisory Board and a Management Board. Supervisory Board members are all non-executives and Management Board members are executives of the Company. Our Articles of Association provide that our Chief Executive Officer ("CEO") shall serve as the Chairman of the Management Board. The following individuals are the current members of our Management Board:

- Bhavesh V. (Bob) Patel, CEO and Chairman of the Management Board;
- Thomas Aebischer, Executive Vice President and Chief Financial Officer ("CFO");
- Dan Coombs, Executive Vice President – Global Manufacturing, Refining, Projects and Technology;
- Jim Guilfoyle, Senior Vice President – Global Intermediates & Derivatives and Supply Chain; and

- Jeffrey A. Kaplan, Executive Vice President and Chief Legal Officer.

Timothy D. Roberts, our former Executive Vice President – Global Olefins & Polyolefins, served as a member of the Management Board in 2016, but separated from the Company on 8 February 2016. In addition, Kevin W. Brown, our former Executive Vice President – Manufacturing & Refining was also a member of the Management Board in 2016, but retired, effective 17 February 2017.

Members of the Management Board are executive officers of LyondellBasell that are nominated by the Supervisory Board and elected by shareholders. The Management Board is responsible for the management of the Company. This includes the responsibility for, among other things:

- setting and achieving the Company's objectives;
- the Company's strategy, policies, the ensuing delivery of results, and the risks inherent in its business activities and the financing of the Company;
- the structure and operation of the internal risk management and control systems;
- the financial reporting process and establishment and maintenance of the internal controls over financial reporting;
- the disclosure of information to shareholders;
- compliance with legislation and regulations;
- the relation between the Company and its stakeholders, including shareholders;
- the corporate social responsibilities of the Company; and
- the Company's corporate structure.

The term of office of each of our Management Board members expires at the 2018 annual meeting of shareholders. Information about each of our Management Board members is shown below:

**Bhavesh (Bob) V. Patel**, American, 50, Chief Executive Officer and Chairman of the Management Board since January 2015.

Mr. Patel joined the Company in 2010 as SVP – O&P Americas. Since then, he has led the Company's O&P EAI and Technology businesses with additional responsibility for all manufacturing operations outside of the Americas and the Company's PP Compounding business. Prior to joining the Company, Mr. Patel spent over 20 years with Chevron Corp. and Chevron Phillips Chemical Company.

**Thomas Aebischer**, Swiss, 55, Executive Vice President and Chief Financial Officer since January 2016.

Prior to joining the Company in 2016, Mr. Aebischer served in a variety of positions, including chief financial officer, over a nearly 20 year career with Holcim, one of the world's largest cement, concrete and aggregates companies. Earlier in his career, Mr. Aebischer worked for PricewaterhouseCoopers and the Bern cantonal tax authorities in Switzerland.

**Dan Coombs**, American, 60, Executive Vice President–Manufacturing, Projects, Refining, and Technology since January 2016.

Mr. Coombs joined the Company in 2015 as EVP – Intermediates & Derivatives. Since then, he has held various executive positions with responsibility for the Company's Technology business, global O&P businesses, as well as procurement and supply chain functions. Prior to joining the Company, Mr. Coombs spent over 15 years at Chevron Phillips Chemical Company.

**Jim Guilfoyle**, American, 46, Senior Vice President-Global Intermediates & Derivatives since June 2015.

Mr. Guilfoyle has spent 24 years at the Company and its predecessors in a variety of roles of increasing responsibility, including as director and vice president of sales and marketing and commercial operations for several products and divisions within the organization.

**Jeffrey A. Kaplan**, American, 48, Executive Vice President and Chief Legal Officer since March 2015.

Mr. Kaplan joined the Company in 2009 as Deputy General Counsel. In his time at the Company, he has overseen the legal department's disputes, operations HSE, commercial and labor and employment practice groups. Prior to joining the Company, Mr. Kaplan served in a variety of legal roles at Chevron Phillips Chemical Company and in private practice.

In fulfilling its management tasks and responsibilities, the Management Board considers the interests of the Company and the business connected with it, as well as the interests of the Company's stakeholders. The Management Board is accountable to the Supervisory Board and the annual meeting of shareholders for the performance of its management tasks.

Under a two-tier board structure, the Supervisory Board supervises and advises the Management Board in the execution of its tasks and responsibilities. The Management Board provides the Supervisory Board with all information, in writing or otherwise, necessary for the Supervisory Board to fulfill its duties. Besides the information provided in the regular meetings, the Management Board keeps the Supervisory Board frequently informed with respect to developments relating to LyondellBasell's business, financials, operations, and also with respect to industry developments in general.

Important decisions of the Management Board that require the approval of the Supervisory Board are, among others:

- The operational and financial objectives of the Company;
- The strategy to achieve the Company's objectives;
- The business and financial plans of the Company; and
- Corporate social responsibility issues relevant to the Company and the industry in which it operates.

The Rules for the Management Board contain the general responsibilities of the Management Board, the decision making process within the Management Board, and also the logistics surrounding the meetings. The Rules for the Management Board are posted in the Corporate Governance section within the Investor Relation section on our website at www.lyb.com.

The Supervisory Board may suspend one or more members of the Management Board at any time. The annual meeting of shareholders may suspend or dismiss a member at any time, but only by means of a resolution adopted by at least two-thirds (2/3) of the valid votes cast, such two-third majority representing more than half of the issued capital.

Management Board members may only accept a Supervisory Board membership of another listed company after having obtained prior approval from the Supervisory Board. Members of the Management Board are also required to notify the Supervisory Board of other important functions held or to be held by them.

No member of the Management Board is currently a Supervisory Board member of any listed company.

### 4.3 Code of Conduct

Part of LyondellBasell’s risk management and control system is the Company’s Code of Conduct. The Code of Conduct contains rules and guidelines on integrity subjects and issues.

LyondellBasell has established a complaints procedure, which provides guidance with respect to the reporting by employees, anonymously if desired, of alleged violations of the Code of Conduct or other Company policies. The complaints procedure provides that alleged violations of the Code of Conduct can be reported by both LyondellBasell employees as well as third parties by calling a hotline or submitting information via the internet.

The Code of Conduct, including complaints received based on the complaints procedure, if any, are regularly discussed in the Audit Committee.

The Code of Conduct and information on how to submit complaints are posted in the Corporate Governance section of the Investor Relations section of our website.

Mandatory training courses on our Code of Conduct are conducted regularly by all employees worldwide.

### 4.4 Conflicts of Interest

The Management Board’s Rules prohibit members of the Management Board from participating in deliberations or decisions on a subject or transaction in relation to which he has a direct or indirect personal interest, which may conflict with the interests of the Company and its associated enterprise. Additionally, any payments to a member of the Management Board, other than regular salary payments, expense reimbursements and payments arising under the Company’s benefit and compensation plans applicable to employees generally must be approved by the Supervisory Board. Finally, the Company maintains a Related Party Transaction Policy, described below, that requires Audit Committee approval of certain transactions between the Company and any officer, director or substantial shareholder. During the year 2016, no transactions occurred that could have given the appearance of conflicts of interests or that effectively involved conflicts of interests.

### 4.5 Related Party Transactions

We have adopted a written Related Party Transaction Approval Policy, which requires the disinterested members of the Audit Committee to review and approve, in advance of commitment, certain transactions that we may enter into with related parties, including Supervisory Directors, Managing Directors, officers and certain shareholders. The transactions covered by the policy are those which are:

- in the ordinary course of business but have an aggregate value of $25 million or more,
- not in the ordinary course of business, regardless of value, or
- any transaction where an officer or Supervisory Director of the Company has a direct or indirect material interest and the transaction has a value of $120,000 or more.

The disinterested members of the Audit Committee determine the fairness of the transactions to the Company by considering whether the transactions have terms no less favorable than those which could be obtained from non-related parties. Below is a description of related party transactions in existence since the beginning of the last fiscal year.

In 2010, we entered into certain agreements with affiliates of Access Industries. These agreements include a registration rights agreement that obligates us to register and bear the costs for the resale of equity securities owned by Access Industries or its affiliates, and a nomination agreement. Pursuant to the nomination agreement, Access Industries has the right to nominate individuals for appointment to the Supervisory Board if certain ownership thresholds are met. Access Industries currently owns more than 18% of our outstanding shares and nominated Messrs. Benet, Buchanan and Cooper pursuant to the agreement. The nomination rights continue for so long as Access Industries owns at least 5% of our outstanding shares. The Company entered into these agreements before it became publicly traded and the Related Party Transaction Policy was adopted.

On an ongoing basis and in the ordinary course of business, the Company makes spot purchases of natural gas and natural gas liquids ("NGLs"), which are raw materials used by the Company to manufacture its products, from Anadarko Petroleum. Robert G. Gwin, the Chairman of our Supervisory Board, serves as Executive Vice President and CFO of Anadarko Petroleum. In July 2014, the disinterested members of the Audit Committee approved the Company making spot purchases from Anadarko as it deems appropriate. The determination was based on the fact the transactions were on terms no less favorable than those which could be obtained from non-related parties. The Company purchased $46 million of natural gas and NGLs from a subsidiary of Anadarko Petroleum in 2016. The Audit Committee considered these purchases in connection with the determination that Mr. Gwin is independent. The Company does not believe that Mr. Gwin's position at Anadarko gives rise to a direct or indirect material interest in the transactions.

The Supervisory Board previously agreed to advance legal expenses to certain former and current executive officers, including: Jim Gallogly, our former CEO; Craig Glidden, our former EVP and Chief Legal Officer; Kevin Brown, our former Executive Vice President – Manufacturing and Refining; and Bob Patel, our current CEO and Chairman of the Management Board. The expenses relate to the defense of audits by the Internal Revenue Service of tax year 2012 challenging the tax treatment under Section 409A of the Internal Revenue Code of equity awards we granted to these individuals. In early 2017, the individuals agreed in principle to settlements with the IRS relating to the audits of tax year 2012. The Supervisory Board has approved the Company reimbursing the individuals for the settlement costs, on an after-tax basis. We have advanced an aggregate of $1.7 million in defense costs and in 2017 expect to reimburse an aggregate of $1.7 million in payment of the settlement costs.

*Indemnification*

We indemnify our Supervisory and Managing Directors to the fullest extent permitted by law so that they will be free from undue concern about personal liability in connection with their service to the Company. Our Articles of Association require indemnification, and we have also entered into agreements with those individuals contractually obligating us to provide this indemnification to them.

## 4.6 Dutch Corporate Governance Code

As a Dutch company, our governance practices are governed by the Dutch Corporate Governance Code (the "Code") a copy of which is available at www.commissiecorporategovernance.nl. The Code contains a number of principles and best practices. The Code, in contrast to U.S. laws, rules and regulations, contains an "apply-or-explain" principle, offering the possibility to deviate from the Corporate Governance Code and still be in compliance as long as any such deviations are explained. In certain cases, we have not applied the Code's practices and provisions and in those instances explain the non-application.

We conduct our operations in accordance with internationally accepted principles of good governance and best practice, while ensuring compliance with the corporate governance requirements applicable in the countries in which we operate. There is considerable overlap between the requirements we must meet under U.S. rules and regulations and the provisions of the Code and we apply almost all of the provisions of the Code. For clarity purposes, we have listed below deviations from the Code and our reasons for deviating.

***II.2.4***

The stock options we grant to our executive officers, including our members of the Management Board, are exercisable before the third anniversary of the date of grant, which is contrary to best practices provision II.2.4 in the Code. The vesting terms of options to our members of the Management Board vary between three and five years, and begin vesting on the first anniversary of date of grant. We believe our vesting schedules are in line with the practices of our peer group used for executive compensation purposes and necessary to attract and retain the best people.

***II.2.4/11.2.5***

The number of options and restricted stock units that we grant to our executives are determined based on an overall target of equity based compensation, calculated as a percentage of base salary, rather than on the achievement of specified targets as is considered best practice under the Code. The targeted values of options and restricted stock units granted are determined based on peer group analyses to ensure competitive compensation for attracting and retaining our executives.

***II.2.5***

In contrast to best practices provision II.2.5 under the Code, we do not require all shares granted as compensation to be held for five years or until the end of employment. Instead, our Compensation Committee implemented share ownership requirements that restrict selling of shares unless certain levels of equity are held. We believe that the share ownership guidelines appropriately ensure executives retain enough equity to make certain their interests are aligned with shareholders while also allowing flexibility for diversification of personal wealth.

***II.2.8***

Mr. Patel, our CEO, is party to an employment agreement that provides for severance payments that are in excess of one year’s base salary. Other executives, including members of the Management Board, are participants in our Executive Severance Plan. The employment agreement and the severance plan provide for base salary plus annual bonus. We believe that these severance arrangements are consistent with market practices and our peer group severance arrangements and are necessary to attract or retain qualified leaders.

***III.2.1/III.2.3***

Our Supervisory Board currently consists of eleven members, three of whom (Messrs. Benet, Buchanan and Cooper) have been nominated by a shareholder pursuant to a nomination agreement. Under the provisions of the Code, but not under the NYSE listing standards, those three members are not considered independent as a result of their affiliation with the shareholder that nominated them, which owns more than 10% of our shares. This deviation from the Code is a result of our obligation under the nomination agreement with an affiliate of Access Industries to nominate individuals to our Supervisory Board. The Supervisory Board believes that each of its non-independent members brings with him a level of skill, experience and qualifications that benefit the workings of the Supervisory Board and therefore the Company’s stakeholders generally.

***III.3.5***

Members of the Supervisory Board are appointed for terms of up to three years; however, there is no limit on the number of terms a Supervisory Board member may serve.

Currently, the Supervisory Board does not believe there is a driving interest in limiting members to the "three four-year terms" provision of the Code. To the contrary, the Supervisory Board believes that a depth of history and knowledge of the Company, which can be developed through long-term service, continues to be key to an effective oversight of the Company. The Supervisory Board intends to revisit the provisions in its governing documents on a continuous basis and may determine that limitations of the number of terms for Supervisory Board members is appropriate. Notwithstanding any such determinations, under the nomination rights described above, as long as certain shareholders maintain their share ownership at required levels, they will be able to nominate individuals of their choosing; the result of which may be for individuals nominated by them to serve for longer than any Supervisory Board determined terms.

***III.7.1/III.7.2***

Members of the Supervisory Board have been granted restricted stock units as a portion of their annual remuneration. The restricted stock units entitle the recipient to an equal number of the Company's shares after certain time-based vesting requirements have been met. Additionally, Supervisory Board members are allowed to receive shares of our common stock in lieu of their cash retainers. This is a deviation from the Code, which states that supervisory board members shall not be granted shares and/or rights to shares by remuneration.

The Company believes that granting rights to acquire shares aligns the Supervisory Board members' interests with those of shareholders, thereby increasing the incentives to make decisions that create long-term value for the Company.

Additionally, as part of their review of director compensation, the Nominating & Governance Committee and the Supervisory Board consider, among other factors, the practices at a comparative group of public companies, based on market comparison studies prepared by an outside consultant. All of the companies in the comparative group offer some form of equity compensation. For that reason, among others, the Company believes that equity awards are reflective of the market and are necessary to attract and retain highly skilled individuals with relevant experience and to reflect the time and talent required to serve on the board of a complex, multinational corporation.

*Diversity*

The Company's Supervisory Board currently consists of eleven members, three of whom are female. The Supervisory Board believes that diversity, including with respect to gender, nationality, experience and background is important and beneficial to a well-functioning board. The Company's Management Board currently consists of five members, none of whom is female. Members of the Management Board were and will continue to be chosen from the executive officers of the Company based on their job responsibilities, regardless of gender.

### 4.7 Shareholders and General Meeting of Shareholders

*Powers*

A general meeting of shareholders will be held at least once a year in the Netherlands. In this meeting, the following items are expected to be discussed and/or approved:

- the written report of the Management Board containing the course of affairs in LyondellBasell and the conduct of the management during the past financial year as disclosed in this Annual Report;
- the adoption of the annual accounts;
- LyondellBasell's reserves and dividend policy and justification thereof by the Management Board;
- the discharge of the members of the Management Board in respect of their management during the previous financial year;
- the discharge of the members of the Supervisory Board in respect of their supervision during the previous financial year;
- each material change in the corporate governance structure of LyondellBasell (if occurred); and
- any other item the Management Board or the Supervisory Board determine to place on the agenda.

The Management Board requires the approval of the general meeting of shareholders and the Supervisory Board for resolutions regarding a significant change in the identity or character of LyondellBasell or its business, including in any event:

- a transfer of the business or virtually all of the business to a third party;
- entry into or termination of long-term cooperation by LyondellBasell or a subsidiary with another legal entity or partnership or as a general partner with full liability in a limited or general partnership if such cooperation or the termination thereof is of far-reaching significance for LyondellBasell; and
- an acquisition or disposal by LyondellBasell or a subsidiary of a participation in the capital of another company, the value of which equals at least one third of the amount of the assets according to the consolidated statement of financial position with explanatory notes attached to the Annual Accounts as most recently adopted.

Proposals placed on the agenda by the Supervisory Board, the Management Board, or at the request of shareholders, provided that they have submitted the proposals in accordance with the provisions of LyondellBasell's Articles of Association, will be discussed and resolved upon. Shareholders are entitled to request the Supervisory Board to place agenda items on the annual general meeting agenda at the latest sixty days before the meeting, and provided that they represent at least 1 percent of LyondellBasell's outstanding share capital or whose shares represent a value of at least €50,000,000.

The Management Board or Supervisory Board may convene Extraordinary General Meetings as often as they deem necessary. Such meetings must be held if one or more shareholders and others entitled to attend the meetings jointly representing at least one-tenth of the issued share capital make a written request to that effect to the Supervisory Board, specifying in detail the items to be discussed.

*Information to the Shareholders*

To ensure fair disclosure, LyondellBasell distributes Company information that may influence the share price to shareholders and other parties in the financial markets simultaneously and through means that are public to all interested parties.

When LyondellBasell's annual and quarterly results are published by means of a press release, interested parties, including shareholders, can participate through conference calls and view the presentation of the results on LyondellBasell's website. The schedule for communicating the annual financial results is in general published through a press release and is posted on LyondellBasell's website.

It is LyondellBasell's policy to post the presentations given to analysts and investors at investor conferences on its website. Information regarding presentations to investors and analysts and conference calls are announced in advance on LyondellBasell's website. Meetings and discussions with investors and analysts shall, in principle, not take place shortly before publication of regular financial information. LyondellBasell does not assess, comment upon, or correct analysts' reports and valuations in advance, other than to comment on factual errors. LyondellBasell does not pay any fees to parties carrying out research for analysts' reports, or for the production or publication of analysts' reports, and takes no responsibility for the content of such reports.

At the annual general meetings of shareholders, the shareholders will be provided with all requested information, unless this is contrary to an overriding interest of the Company. If this should be the case, the Management Board and Supervisory Board will provide their reasons for not providing the requested information.

Furthermore, the Investor Relations section on LyondellBasell's website provides links to information about LyondellBasell published or filed by LyondellBasell in accordance with applicable rules and regulations.

*Relationship with Institutional Investors*

LyondellBasell finds it important that its institutional investors participate in LyondellBasell's general meetings of shareholders. The Company believes that applying a record date and providing internet proxy voting are measures that should achieve high levels of participation at the meeting.

## 4.8 Takeover Directive; Anti-Takeover Provisions and Control

*General*

The EU Takeover Directive requires that certain listed companies must publish information providing insight into defensive structures and mechanisms which they apply. The relevant provision has been implemented into Dutch law by means of a decree of 5 April 2006. Pursuant to this decree, Dutch companies whose securities have been admitted to trading on an EU regulated market have to include information in their annual report which could be of importance for persons who are considering taking an interest in the company. The Company's shares are admitted to trading on the NYSE and not on any EU regulated markets.

According to provision IV.3.11 of the Code, we are required to provide a survey of our actual or potential anti-takeover measures, and to indicate in what circumstances it is expected that they may be used.

Accordingly, we have set out below a number of provisions in the Articles of Association that in a Dutch context technically are not necessarily considered to be anti-takeover measures, but which could restrict the ability of a controlling shareholder to effectively exercise control over the Company:

- As per article 12.4 of the Articles of Association, up to one-third (1/3) of the members of the Supervisory Board may be appointed by the Supervisory Board itself;

- As per article 12.2 of the Articles of Association, the General Meeting of Shareholders will appoint both the members of the Management Board and, subject to the above, the members of the Supervisory Board, upon the nomination of the Supervisory Board. Any such nomination with respect to the appointment of a Supervisory Board member shall, at the discretion of the Supervisory Board be binding. Such a binding nomination may be rendered non-binding by the General Meeting of Shareholders provided that a resolution to that effect shall be adopted by at least two-thirds (2/3) of the valid votes cast, such two-third (2/3) majority representing more than half of the issued share capital. In case of such a vote, the General Meeting of Shareholders will be free in its selection and appointment of a Supervisory Board member to fill the vacancy by means of a resolution adopted by at least two-thirds (2/3) of the valid votes cast, such two-third (2/3) majority representing more than half of the issued capital. If the votes cast in favor of such resolutions do not represent at least two-thirds of the issued share capital, a new meeting can be convened at which the relevant resolution can be adopted by absolute majority;

- Pursuant to a resolution passed by shareholders at the 2015 General Meeting of Shareholders the Supervisory Board has been designated for a period ending on 6 November 2016 as the body competent to issue shares in the capital of the Company whereby the Supervisory Board is in principle authorized to restrict or exclude any pre-emptive rights of existing shareholders; and

- As per article 22.1 of the Articles of Association, the Articles of Association may only be amended by the General Meeting of Shareholders on the basis of a proposal thereto of the Management Board and subject to approval of the Supervisory Board.

In the event of a hostile takeover bid, in general the Supervisory Board and the Management Board reserve the right to use all powers available to them in the interests of the Company and its affiliated enterprise, taking into consideration the relevant interests of the Company's stakeholders.

### 4.9 Compensation of the Members of the Supervisory Board

The members of our Supervisory Board receive both equity and cash compensation for their service on the Supervisory Board and its committees. The Supervisory Directors' compensation is designed to provide a competitive package that will enable the Company to attract and retain highly skilled individuals with relevant experience. The equity awards granted to Supervisory Board directors are restricted stock units ("RSUs"). The equity grants are provided as a means to align the interests of our Supervisory Directors with those of shareholders, and to put a portion of their compensation at risk to the extent the Company's market value declines. Additionally, the granting of equity compensation to directors generally is considered a best practice for U.S. companies, and all of the Company's compensation peer groups offer equity compensation to their directors. The Company believes paying directors a portion of their compensation in equity is vital in order to remain competitive and to attract and retain the best individuals.

The Supervisory Board also believes that long-term ownership of shares is a best practice for its members. Therefore, the Company maintains Director Share Ownership Guidelines. These guidelines prohibit members of the Supervisory Board from selling shares they receive upon vesting of their equity unless they hold a number of shares that are valued at five times their annual cash retainer. Restricting sales of shares in this manner ensures that our Supervisory Directors are able to diversify their holdings if necessary for their individual circumstances but also are required to hold substantial amounts of our shares during their service on our board.

The 2016 Supervisory Board compensation program is set forth below. Our Articles of Association currently provide that the Supervisory Board may set its own compensation, as long as the aggregate compensation paid to any individual member does not exceed $2 million in any single year.

**Annual Retainer**

Cash ......................................................... $115,000 ($215,000 for Chairman of the Board)

RSUs........................................................ Valued at $170,000 ($310,000 for Chairman of the Supervisory Board)

**Committee Retainer**

Members .................................................. $10,000 ($15,000 for Audit Committee)

Chairs....................................................... $20,000 ($27,500 for Audit Chair)

In addition to the retainers shown above, recognizing the time and effort international travel requires, we pay members of the Supervisory Board $5,000 for each intercontinental trip taken in performing their board service.

### 4.10 Risk Management

A certain degree of risk is inherent in our business (see Section 2.2, “Risk Factors,” generally). Additionally, pursuing business strategies and objectives inevitably leads to taking risks. Risks can jeopardize strategies and objectives in various ways. Each type of risk we encounter is addressed in a manner and with the intensity that matches the nature and size of the risk in relation to the Company’s risk appetite. The risk appetite is the total residual impact of risks that we are willing to accept in the pursuit of our objectives.

Effective risk management is a key factor for the Company realizing its business and strategic objectives. Risk areas with a low-risk appetite and thus a low acceptable residual risk require strong risk management and strong internal controls. The risk areas where we have a low-risk appetite include those relating to the safety of our employees, our assets, the environment and the communities in which we operate and those relating to legal and regulatory compliance.

The Management Board is responsible for ensuring that LyondellBasell complies with applicable legislation and regulations. It is also responsible for the financing of LyondellBasell and for managing the internal and external risks related to its business activities.

The establishment of our internal risk management and control system is based on the identification of external and internal risk factors that could influence the operational and financial objectives of the Company, and contains a system of monitoring, reporting, and operational reviews.

To help identify risks, LyondellBasell uses a formal risk management approach, consisting of a set of risks definitions which are discussed amongst senior management of LyondellBasell at least annually, as described below. Based on this risk assessment, actions are initiated to further enhance the Company's risk mitigation.

The disclosure of the risks that potentially could have a significant impact on the Company's strategy execution, operations or financial position is derived in part from LyondellBasell's internal risk assessment, comprising elements of the risk assessment model as mentioned in the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") report.

The Company publishes two annual reports in respect of the financial year ("2016 Annual Reports"): (i) a Statutory Annual Report in accordance with Dutch legal requirements in accordance with International Financial Reporting Standards ("IFRS") and International Financial Reporting Interpretation Committee ("IFRIC") interpretations as adopted by the European Union and (ii) an Annual Report on Form 10-K in accordance with U.S. securities laws, based on the United States of America Generally Accepted Accounting Principles ("U.S. GAAP"). Both 2016 Annual Reports include risk factors that are specific to the petrochemical industry, LyondellBasell and ownership of its shares. LyondellBasell also provides sensitivity analyses by providing:

- a narrative explanation of its financial statements;
- the context within which financial information should be analyzed; and
- information about the quality, and potential variability, of LyondellBasell's earnings and cash flow.

In the "Statements of the Management Board" (included on pages 58 through 59 hereof), the Management Board addresses the Company's internal risk management and control systems.

We are required to conduct an evaluation, under the supervision and with the participation of our CEO and CFO, of the effectiveness of the Company's internal control over financial reporting and, based on that evaluation, conclude whether the Company's internal control over financial reporting was effective as of 31 December 2016, providing reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. GAAP. PricewaterhouseCoopers LLP, the Company's independent registered accounting firm under U.S. securities rules and regulations also confirms the effectiveness of the Company's internal control over financial reporting in its Consent of Independent Registered Public Accounting Firm as included in our 2016 Annual Report on Form 10-K for the year ended 31 December 2016.

With respect to the process of drafting annual reports, LyondellBasell has guidelines for the lay-out and the content of its reports. These guidelines are primarily based on applicable laws. For the Statutory Annual Report, the Company follows the requirements of Dutch law and regulations, including preparation of the consolidated financial statements in accordance with IFRS and IFRIC interpretations as adopted by the European Union. For the Annual Report on Form 10-K, the Company applies the requirements of the U.S. Securities and Exchange Act of 1934, and prepares the financial statements included therein in accordance with U.S. GAAP.

LyondellBasell currently has a Disclosure Committee, consisting of various members of management from different functional areas within the Company. The Disclosure Committee reports to and assists the CEO and CFO in the maintenance, review and evaluation of disclosure controls and procedures. The Disclosure Committee's main responsibilities are to ensure compliance with applicable disclosure requirements arising under United States and applicable stock exchange rules. The Company's CEO and CFO receive reports from the Chairman of the Disclosure Committee on any material topics discussed in the meetings.

## Boards' roles in Risk Oversight

The Management Board is responsible for the Company's risk profile and managing the day-to-day of risks to the Company. The Supervisory Board has broad oversight as it relates to risk management. In this oversight role, the Supervisory Board is responsible for satisfying itself that the risk management processes designed and implemented by the Company's management are functioning and that necessary steps are taken to foster a culture of risk-adjusted decision-making throughout the organization. The Company believes that its leadership structure is conducive to sound risk management, and that the Supervisory Board's involvement is appropriate to ensure effective oversight.

The primary means by which our Supervisory Board oversees our risk management structures and policies is through its regular communications with management. At each Supervisory Board meeting, executive officers are asked to report to the Supervisory Board and, when appropriate, specific committees. Additionally, other members of management and employees periodically attend meetings and present information. One purpose of these presentations is to provide direct communication between members of the Supervisory Board and members of management. The presentations provide the Supervisory Board with the information necessary to understand the risk profile of the Company, including information regarding the specific risk environment, exposures affecting the Company's operations and the Company's plans to address such risks. In addition to information regarding general updates to the Company's operational and financial condition, members of management report to the Supervisory Board about the Company's outlook and forecasts, and any impediments to meeting those or its pre-defined strategies generally. These direct communications allow the Supervisory Board to assess management's evaluation and management of the Company's day-to-day risks.

In carrying out its oversight responsibility, the Supervisory Board has delegated to individual Supervisory Board committees certain elements of its oversight function.

- The Audit Committee provides oversight of the integrity of the Company's financial statements; independent accountants' qualifications and independence; the performance of the Company's internal audit function, independent accountants and the Company's compliance program; and its system of disclosure and internal controls.

- The Compensation Committee oversees the Company's compensation programs to evaluate whether our programs and practices create excessive risks and determines whether any changes to those programs and practices are warranted.

- The Nominating & Governance Committee reviews policies and practices in the areas of corporate governance; considers the overall relationship of the Supervisory Board to the Company's management; and develops, reviews and recommends governance guidelines applicable to the Company.

- The Health, Safety, Environmental & Operations ("HSE&O") Committee reviews and monitors compliance with health, safety and environmental matters affecting the Company and provides oversight of the Company's technology and the execution of large capital projects and turnarounds. It discusses the Company's programs related to health, safety and environmental matters, safety and environmental incidents and statistics; and plans and initiatives to continuously improve HSE results.

- The Finance Committee provides oversight in connection with strategic transactions, including those that may impact our capital position, and reviews our tax planning and strategy. The Finance Committee also reviews our capital structure and capital allocation, the dividend policy, stock repurchase programs, debt profile, and hedging strategies.

The Management Board oversees the risk management programs of the Company, including approving risk tolerances, evaluating whether they are aligned with the Company's strategic goals, and defining the overall risk profile of the Company. The Management Board has delegated to a Risk Management Committee the authorization to review and approve transactions that are in furtherance of the strategies as approved by the Management Board. The standing members of the Risk Management Committee include the Company's CEO, CFO and Chief Legal Officer. Through a variety of policies and procedures, business leaders are required to identify, monitor, mitigate and report on risks under the supervision of the Management Board, which requires risk management plans from each business segment.

The results of the risk management processes and updates on the material risks are reported to the Supervisory Board and its committees. In addition, the Audit Committee is responsible for ensuring that an effective risk assessment process is in place, and reports are made to the Audit Committee in accordance with New York Stock Exchange requirements.

### Risk Management and Control Systems

The Management Board is primarily responsible for the design, implementation and operation of the Company's internal risk management and control systems. The purpose of these systems is to adequately and effectively manage the significant risks to which the Company is exposed. Such systems can never provide absolute assurance regarding achievement of corporate objectives, nor can they provide an absolute assurance that material errors, losses, fraud and the violation of laws or regulations will not occur.

To comply with our duties in the area of internal risk management and control systems, we have designed and implemented an enterprise risk management process.

An enterprise risk assessment is conducted annually in the first quarter incorporating the five business segments, manufacturing operations and the business support functions. In addition, group-level risks are assessed with corporate functions and executive leadership. The identification and assessment of enterprise risks is conducted in accordance with the LyondellBasell Enterprise Risk Management framework which is based on the COSO Enterprise Risk Management model.

All business and corporate risks are reviewed at business and executive leadership levels and risks assessed as significant are then reported to the Management Board, which is responsible for the design of the risk management process. After review by the Management Board the significant group-level risks are reported to the Supervisory Board, which is responsible for the oversight of the process.

Enterprise risks that are not reportable to the Management Board will continue to be assessed and managed at the business/functional level. Risks considered significant are those that could impair the company's ability to achieve its strategic objectives. A half-year update of the significant business risks reported during the annual enterprise risk assessment is conducted in the fourth quarter and reported to the Management Board for review.

The Company's significant risks, as identified in accordance with the described process, are assigned to a member of the executive leadership team, who is responsible for analyses and mitigation activities related to his assigned risks. In addition, the Audit Committee of the Supervisory Board is responsible for ensuring that an effective risk assessment process is in place, and quarterly reports are made to the Audit Committee on financial and compliance risks in accordance with requirements of the New York Stock Exchange.

We use various other measures to ensure compliance with our duties in the area of internal risk management and control systems, including:

- operational review meetings of the Management Board with LyondellBasell's senior management on financial performance and realization of operational objectives and responses to emerging issues;
- monthly meetings with LyondellBasell's Chief Executive Officer, Chief Financial Officer and senior finance management focusing on monthly financial figures and internal control evaluations;
- monthly and quarterly financial reporting, mainly to LyondellBasell's senior management;
- letters of representation that are signed by LyondellBasell's key personnel on a quarterly basis in which they confirm that for their responsible area and based upon their knowledge (i) an effective system of internal controls and procedures is maintained and (ii) the financial reports fairly present the financial position, results of operations and cash flows;
- assessments by LyondellBasell's Disclosure Committees with respect to the timely review, disclosure, and evaluation of periodic (financial) reports;
- discussions on process safety, product safety, environmental and security matters within our Management Board and the Health, Safety and Environmental Committee of the Supervisory Board;
- discussions on management letters and audit reports provided by the Company's internal and external auditors within our Management Board and Audit Committee of the Supervisory Board;
- corporate policies assigning responsibility for identification and management of risks;
- LyondellBasell's Code of Conduct;
- LyondellBasell's Financial Code of Ethics applicable to the Chief Executive Officer, Chief Financial Officer and Chief Accounting Officer;
- LyondellBasell's Ethics Hotline and whistleblower procedures; and
- LyondellBasell's Compliance programs and training, which facilitate the development of controls which will aid in prevention, deterrence and detection of fraud against LyondellBasell.

## 4.11 Audit of Financial Reporting

*Financial Reporting*

LyondellBasell has comprehensive internal procedures in place for the preparation and publication of Annual Reports, annual accounts, quarterly figures, and all other financial information. These internal procedures are frequently discussed in the Audit Committee and the Supervisory Board. The Disclosure Committee assists the Management Board in overseeing LyondellBasell's disclosure activities and ensures compliance with applicable disclosure requirements arising under U.S. and Dutch law and regulatory requirements.

The Audit Committee reviews and approves the external auditor's Audit Plan for the audits planned during the financial year. The Audit Plan also includes the activities of the external auditor with respect to their reviews of the quarterly results other than the annual accounts. These reviews are based on agreed upon procedures and are approved by the Audit Committee. The external auditor regularly updates the Audit Committee on the progress of the audits and other activities.

*Appointment, Role, Assessment of the Functioning of the External Auditor, and the Auditor's Fee*

In accordance with Dutch law, LyondellBasell's external auditor is appointed by the general meeting of shareholders and is nominated for appointment by the Supervisory Board upon advice from the Audit Committee and the Management Board. LyondellBasell's current external auditor is PricewaterhouseCoopers Accountants N.V. ("PwC"), and the Supervisory Board, on the recommendation of the Audit Committee, is proposing shareholders appoint PwC as its auditor to audit the 2017 Dutch statutory accounts at the Annual Meeting.

The Audit Committee and Management Board will conduct an extensive evaluation of the external auditor's performance every four years as required by the Dutch Corporate Governance Code.

In the years that no formal evaluation is conducted, the external auditor's performance is continuously assessed by the Audit Committee in the Audit Committee meetings. So far, the external auditor has functioned to the satisfaction of both the Audit Committee and the Management Board.

Annually, the Management Board and the Audit Committee provide the Supervisory Board with a report on the relationship with the external auditor, including the required auditor independence. To determine the external auditor's independence, the relationship between the audit services and the non-audit services provided by the external auditor is important, as well as the rotation of the responsible lead audit partner every five years. Non-audit services (including tax fees and non-audit-related fees) performed by the external auditor comprised approximately two percent of the external auditor's services in 2016. Based on the proportion audit fees versus non-audit related fees, it was concluded and confirmed by the external auditor that the external auditor acts independently.

The external auditor will be present at the Annual Meeting to respond to questions, if any, from the shareholders about the auditor's report on the financial statements.

The Audit Committee, on behalf of the Supervisory Board, approves the remuneration of the external auditor as well as the non-audit services to be performed, after consultation with the Management Board and the CFO. It has been agreed among the members of the Supervisory Board and the Management Board that the Audit Committee has the most relevant insight and experience to be able to approve both items, and therefore the Supervisory Board has delegated these responsibilities to the Audit Committee.

In principle the external auditor attends all meetings of the Audit Committee, unless this is deemed not necessary by the Audit Committee. The findings of the external auditor are discussed at these meetings.

The Audit Committee reports on all issues discussed with the external auditor to the Supervisory Board, including the external auditor's report with regard to the audit of the annual accounts as well as the content of the annual accounts. In the audit report, the external auditor refers to the financial reporting risks and issues that were identified during the audit, internal control matters, and any other matters requiring communication under the auditing standards generally accepted in the Netherlands and in the United States.

*Internal Audit Function*

The internal audit function of LyondellBasell forms one of the key elements to address the topics of risk management and internal control over financial reporting as required under the Code and the Sarbanes-Oxley Act, respectively. To ensure the independence of this function, the Company's internal auditor reports to the Audit Committee. The external auditor and the Audit Committee are involved in drawing up the work schedule and audit scope of the internal auditor. The internal auditor regularly provides updates on its findings to the Audit Committee.

## 4.12 Statements of the Management Board

The Management Board is responsible for the preparation of the Annual Accounts and the Annual Report of LyondellBasell N.V. for the year ended 31 December 2016 in accordance with applicable Dutch law and International Financial Reporting Standards ("IFRS") as adopted by the European Union and with Part 9 of Book 2 of the Dutch Civil Code.

As required by provision 2:101(2) of the Dutch Corporate Governance Code and Section 5:25C(2)(c) of the Dutch Financial Markets Supervision Act ('Wet op het financieel toezicht') and on the basis of the foregoing and the explanations contained in Section 4.7 "Risk Management," the Management Board confirms that to the best of its knowledge:

- the LyondellBasell N.V. 2016 Annual Accounts give a true and fair view of the assets, liabilities, financial position and profit or loss of LyondellBasell N.V. and the entities included in the consolidation taken as a whole;

- the LyondellBasell N.V. 2016 Annual Report gives a true and fair view of LyondellBasell N.V. and the entities included in the consolidation taken as a whole as at 31 December 2016 and the state of the affairs during the financial year to which the report relates and describes the principal risks facing LyondellBasell N.V.

Based on the outcome of the measures described under Section 4.7, "Risk Management," and to the best of its knowledge and belief, the Management Board states that:

**Evaluation of Disclosure Controls and Procedures**

Employees within the Company, with the participation of our Chief Executive Officer and our Chief Financial Officer have evaluated the effectiveness of our disclosure controls and procedures in ensuring that the information required to be disclosed in reports in accordance with International Financial Reporting Standards as adopted by the European Union that we file or submit to the Chamber of Commerce in The Netherlands, as amended, is recorded, processed, summarized and reported within the time periods specified in the Dutch Law, including ensuring that such information is accumulated and communicated to management as appropriate to allow timely decisions regarding required disclosure. Based on such evaluation, our CEO and CFO have concluded that such disclosure controls and procedures were effective as of 31 December 2016, the end of the period covered by this annual report.

**Changes in Internal Control over Financial Reporting**

There have been no changes in our internal control over financial reporting in our fourth fiscal quarter of 2016 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

The establishment of LyondellBasell's internal control and risk management systems is based on the identification of external and internal risk factors that could influence the operational and financial objectives of the Company and contains a system of monitoring, reporting and operational reviews. All material risk management activities have been discussed with the Audit Committee and the Supervisory Board.

**The Management Board**,

/s/ Bhavesh (Bob) V. Patel

/s/ Thomas Aebischer

/s/ Daniel Coombs

/s/ James Guilfoyle

/s/ Jeffrey A. Kaplan

London, 30 March 2017

# CONSOLIDATED FINANCIAL STATEMENTS

**LyondellBasell Industries N.V.**

## CONSOLIDATED STATEMENT OF INCOME

| Millions of U.S. Dollars, except per share data | Note | Year Ended 31 December 2016 | 2015 |
|---|---|---|---|
| Revenue | 5 | $ 29,283 | $ 32,834 |
| Cost of sales | 6 | 22,767 | 26,098 |
| Gross profit | | 6,516 | 6,736 |
| Selling costs | 6 | 260 | 269 |
| Administrative expenses | 6 | 602 | 659 |
| Other (income) expense, net | 10 | (115) | (338) |
| Operating profit | | 5,769 | 6,146 |
| Finance income | | 17 | 32 |
| Finance costs | 11 | (405) | (560) |
| Share of profit of investments accounted for using the equity method | 16 | 297 | 269 |
| Profit before income tax | | 5,678 | 5,887 |
| Income tax expense | 12 | (1,485) | (1,678) |
| Profit for the year | | $ 4,193 | $ 4,209 |
| **Attributable to:** | | | |
| Profit/(loss) attributable to | | | |
| - Owners of the Company | | $ 4,192 | $ 4,211 |
| - Non-controlling interests | | 1 | (2) |
| Total | | $ 4,193 | $ 4,209 |
| **Earnings per share:** | | | |
| - Basic | 13 | $ 9.99 | $ 9.05 |
| - Diluted | 13 | $ 9.97 | $ 9.02 |

The notes on pages 69 to 149 are an integral part of these Consolidated Financial Statements.

**LyondellBasell Industries N.V.**

## CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

| | | Year Ended 31 December | |
|---|---|---|---|
| **Millions of U.S. Dollars** | **Note** | **2016** | **2015** |
| Profit for the year | | $ 4,193 | $ 4,209 |
| **Other comprehensive income, net of tax** | | | |
| ***Items that will not be reclassified subsequently to profit or loss:*** | | | |
| Remeasurements of post-employment benefits obligations | 27 | (122) | 34 |
| Tax on remeasurements of post-employment benefits obligations | 12 | 28 | (7) |
| | | (94) | 27 |
| ***Items that may be reclassified subsequently to profit or loss:*** | | | |
| Unrealized gains (losses) on available-for-sale securities: | | 7 | (6) |
| Tax on (benefit from) on available-for-sale securities: | 12 | (1) | 1 |
| | | 6 | (5) |
| Impact of cash flow hedges | 4 | (14) | 17 |
| Tax on (benefit from) cash flow hedges | 12 | 1 | (6) |
| | | (13) | 11 |
| Currency translation of foreign operations | | (8) | (392) |
| Tax on currency translation of foreign operations | 12 | 7 | 5 |
| | | (1) | (387) |
| Other comprehensive income (loss), net of tax | | (102) | (354) |
| Total comprehensive income | | $ 4,091 | $ 3,855 |
| Attributable to: | | | |
| - Owners of the Company | | $ 4,090 | $ 3,857 |
| - Non-controlling interests | | 1 | (2) |
| | | $ 4,091 | $ 3,855 |

The notes on pages 69 to 149 are an integral part of these Consolidated Financial Statements.

**LyondellBasell Industries N.V.**

## CONSOLIDATED STATEMENT OF FINANCIAL POSITION

**ASSETS**

| Millions of U.S. Dollars | Note | 31 December 2016 | 31 December 2015 |
|---|---|---|---|
| Non-current assets: | | | |
| Intangible assets | 14 | $ 918 | $ 1,003 |
| Property, plant and equipment | 15 | 10,839 | 9,666 |
| Investments in associates and joint ventures | 16 | 1,292 | 1,334 |
| Deferred income tax assets | 26 | 180 | 264 |
| Derivative financial instruments | 19 | 296 | 326 |
| Trade and other receivables | 21 | 113 | 216 |
| Total non-current assets | | 13,638 | 12,809 |
| Current assets: | | | |
| Inventories | 20 | 3,534 | 3,275 |
| Trade and other receivables | 21 | 3,650 | 3,422 |
| Held-to-maturity securities | 19 | 74 | - - |
| Available-for-sale financial assets | 19 | 1,073 | 1,064 |
| Derivative financial instruments | 19 | 44 | 38 |
| Income tax receivable | | 13 | 315 |
| Cash and cash equivalents | 22 | 946 | 995 |
| Total current assets | | 9,334 | 9,109 |
| Total assets | | $ 22,972 | $ 21,918 |

The notes on pages 69 to 149 are an integral part of these Consolidated Financial Statements.

**LyondellBasell Industries N.V.**

**EQUITY AND LIABILITIES**

| **Millions of U.S. Dollars** | **Note** | **31 December 2016** | **31 December 2015** |
|---|---|---|---|
| Equity attributable to the owners of the Company: | 23 | | |
| Share capital | | $ 31 | $ 31 |
| Share premium | | 10,009 | 10,007 |
| Other reserves | | (1,271) | (1,169) |
| Retained earnings | | 11,691 | 8,894 |
| Treasury shares | | (14,945) | (12,086) |
| | | 5,515 | 5,677 |
| Non-controlling interests | 24 | 25 | 24 |
| Total equity | | 5,540 | 5,701 |
| Non-current liabilities: | | | |
| Borrowings | 25 | 8,473 | 7,759 |
| Deferred income tax liability | 26 | 2,212 | 1,893 |
| Retirement benefit obligations | 27 | 1,347 | 1,263 |
| Derivative financial instruments | 19 | 20 | 6 |
| Provisions for other liabilities and charges | 29 | 220 | 262 |
| Accruals and deferred income | | 170 | 178 |
| | | 12,442 | 11,361 |
| Current liabilities: | | | |
| Trade and other payables | 28 | 3,501 | 3,520 |
| Income tax payable | | 769 | 822 |
| Borrowings | 25 | 616 | 377 |
| Derivative financial instruments | 19 | 33 | 50 |
| Provisions for other liabilities and charges | 29 | 71 | 87 |
| | | 4,990 | 4,856 |
| Total liabilities | | 17,432 | 16,217 |
| Total equity and liabilities | | $ 22,972 | $ 21,918 |

The notes on pages 69 to 149 are an integral part of these Consolidated Financial Statements.

## CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

| Millions of U.S. Dollars | Note | Share Capital | Share Premium | Treasury Shares | Other Reserves | Retained Earnings | Equity Attributable to the Owners of the Company | Non-Controlling Interests | Total Equity |
|---|---|---|---|---|---|---|---|---|---|
| Balance at 1 January 2015 | | $ 31 | $ 10,304 | $ (7,853) | $ (815) | $ 6,081 | $ 7,748 | $ 30 | $ 7,778 |
| *Transactions with owners:* | | | | | | | | | |
| Shares purchased | 23 | - - | - - | (4,615) | - - | - - | (4,615) | - - | (4,615) |
| Equity issuance costs, | | | | | | | | | |
| Dividends paid relating to 2014 | 23 | - - | - - | - - | - - | (1,410) | (1,410) | - - | (1,410) |
| Settlement from partner on exit from partnership | 24 | - - | 20 | - - | - - | - - | 20 | (4) | 16 |
| Employees share-based payments: | | | | | | | | | |
| - Issuance of shares | | - - | (317) | 382 | - - | - - | 65 | - - | 65 |
| - Tax credits related to share-based awards | 12 | - - | - - | - - | - - | 12 | 12 | - - | 12 |
| Total transactions with owners | | 31 | 10,007 | (12,086) | (815) | 4,683 | 1,820 | 26 | 1,846 |
| *Comprehensive income for the period:* | | | | | | | | | |
| Profit/(loss) for the year | | - - | - - | - - | - - | 4,211 | 4,211 | (2) | 4,209 |
| Other comprehensive income: | | | | | | | | | |
| Financial derivatives | | - - | - - | - - | 11 | - - | 11 | - - | 11 |
| Available-for-sale securities | | - - | - - | - - | (5) | - - | (5) | - - | (5) |
| Remeasurements of post employment benefit obligations | 12/27 | - - | - - | - - | 27 | - - | 27 | - - | 27 |
| Currency translation differences | | - - | - - | - - | (387) | - - | (387) | - - | (387) |
| Total Comprehensive income for the period | | - - | - - | - - | (354) | 4,211 | 3,857 | (2) | 3,855 |
| Balance at 31 December 2015 | | $ 31 | $ 10,007 | $ (12,086) | $ (1,169) | $ 8,894 | $ 5,677 | $ 24 | $ 5,701 |

The notes on pages 69 to 149 are an integral part of these Consolidated Financial Statements.

**LyondellBasell Industries N.V.**

## CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

| Millions of U.S. Dollars | Note | Share Capital | Share Premium | Treasury Shares | Other Reserves | Retained Earnings | Equity Attributable to the Owners of the Company | Non-Controlling Interests | Total Equity |
|---|---|---|---|---|---|---|---|---|---|
| Balance at 1 January 2016 | | $ 31 | $ 10,007 | $(12,086) | $ (1,169) | $ 8,894 | $ 5,677 | $ 24 | $ 5,701 |
| *Transactions with owners:* | | | | | | | | | |
| Shares purchased | 23 | - - | - - | (2,914) | - - | - - | (2,914) | - - | (2,914) |
| Equity issuance cost, | | - - | - - | - - | - - | - - | | | |
| Dividends paid relating to 2015 | 23 | - - | - - | - - | - - | (1,395) | (1,395) | - - | (1,395) |
| Settlement from partner on exit | | | | | | | | | |
| Employees share-based payments: | | | | | | | | | |
| - Issuance of shares | | - - | (12) | 55 | - - | - - | 43 | - - | 43 |
| - Tax credits related to share-based awards | 12 | - - | 14 | - - | - - | - - | 14 | - - | 14 |
| Total transactions with owners | | 31 | 10,009 | (14,945) | (1,169) | 7,499 | 1,425 | 24 | 1,449 |
| *Comprehensive income for the period:* | | | | | | | | | |
| Profit/(loss) for the year | | - - | - - | - - | - - | 4,192 | 4,192 | 1 | 4,193 |
| Other comprehensive income: | | | | | | | | | |
| Financial derivatives | | - - | - - | - - | (13) | - - | (13) | - - | (13) |
| Available-for-sale securities | | - - | - - | - - | 6 | - - | 6 | - - | 6 |
| Remeasurements of post employment benefit obligations | 12/27 | - - | - - | - - | (94) | - - | (94) | - - | (94) |
| Currency translation differences | | - - | - - | - - | (1) | - - | (1) | - - | (1) |
| Total Comprehensive income for the period | | - - | - - | - - | (102) | 4,192 | 4,090 | 1 | 4,091 |
| Balance at 31 December 2016 | | $ 31 | $ 10,009 | $ (14,945) | $ (1,271) | $ 11,691 | $ 5,515 | $ 25 | $ 5,540 |

The notes on pages 69 to 149 are an integral part of these Consolidated Financial Statements.

**LyondellBasell Industries N.V.**

## CONSOLIDATED STATEMENT OF CASH FLOWS

| | | Year Ended 31 December | |
|---|---|---|---|
| **Millions of U.S. Dollars** | **Note** | **2016** | **2015** |
| **Cash flows from operating activities:** | | | |
| Profit before income tax | | $ 5,678 | $ 5,887 |
| Adjustments for: | | | |
| Depreciation, amortization and impairments | 6 | 1,080 | 1,097 |
| Share based compensation | 8 | 38 | 53 |
| Finance cost, net | | 388 | 528 |
| Other (income) expense, net | 10 | (115) | (338) |
| Share of profit of investments accounted for using the equity method | 16 | (297) | (269) |
| Changes in working capital relating to: | | | |
| (Increase)/decrease in trade receivables | | (379) | 784 |
| (Increase)/decrease in inventories | | (338) | 742 |
| Increase/(decrease) in trade payables | | 384 | (792) |
| Other | | (110) | (158) |
| Cash generated from operations | | 6,329 | 7,534 |
| Interest paid | | (354) | (398) |
| Net income taxes paid | | (741) | (1,435) |
| Net cash from operating activities | | 5,234 | 5,701 |
| **Cash flows from investing activities:** | | | |
| Purchase of property, plant and equipment | | (2,243) | (1,458) |
| Payments for repurchase agreements | | (674) | (397) |
| Proceeds from repurchase agreements | | 685 | 350 |
| Purchases of held-to-maturity securities | | (76) | - - |
| Purchase of available-for-sale securities | | (688) | (2,073) |
| Proceeds from sale and maturities of available-for-sale securities | 4 | 674 | 2,489 |
| Payment for acquisition of business and equity method investments | | (65) | - - |
| Proceeds from sale of business, net of cash disposed of | 10 | 209 | - - |
| Proceeds from settlement of net investment hedges | | 1,295 | - - |
| Payments for settlement of net investment hedges | | (1,356) | - - |
| Interest received | | 9 | 88 |
| Dividends received from associates and joint ventures | 16 | 385 | 210 |
| Other investing costs | | (80) | 31 |
| Net cash used in investing activities | | (1,925) | (760) |
| **Cash flows from financing activities:** | | | |
| Repurchase of company ordinary shares | 23 | (2,938) | (4,656) |
| Repayments of borrowings | 25 | - - | (20) |
| Proceeds from borrowings | 25 | 807 | 968 |
| Net proceeds from commercial paper | 25 | 177 | 61 |
| Dividends paid | 23 | (1,395) | (1,410) |
| Other financing activities | | - - | 75 |
| Net cash used in financing activities | | (3,349) | (4,982) |
| **Net increase in cash and cash equivalents** | | (40) | (41) |

**LyondellBasell Industries N.V.**

| | | Year Ended 31 December | |
|---|---|---|---|
| **Millions of U.S. Dollars** | **Note** | **2016** | **2015** |
| Cash and cash equivalents at beginning of period | | 995 | 1,084 |
| Exchange rate differences | | (9) | (48) |
| Cash and cash equivalents at end of the period | 22 | $ 946 | $ 995 |

The notes on pages 69 to 149 are an integral part of these Consolidated Financial Statements.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### 1 General

LyondellBasell Industries N.V. is a limited liability company (*Naamloze Vennootschap*) incorporated under Dutch law by deed of incorporation dated 15 October 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 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. LyondellBasell Industries N.V.'s shares are listed on the New York Stock Exchange ("NYSE"). The address of our Principal executive offices is 4th Floor, One Vine Street, London, W1J0AH, The United Kingdom; our registered office address is Delftseplein 27E, 3013 AA Rotterdam, The Netherlands and is registered at the chamber of commerce under number 24473890; and our other Principal office is 1221 McKinney St., Suite 300 Houston, Texas, USA 77010.

The Consolidated Financial Statements for the year ended 31 December 2016 of LyondellBasell N.V. were approved for issue by both the Supervisory Board and the Management Board on 30 March 2017.

The Consolidated Financial Statements are subject to adoption by the Annual General Meeting of Shareholders on 24 May 2017.

### 2 Summary of Significant Accounting Policies

The significant accounting policies applied in the preparation of these Consolidated Financial Statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

**Basis of Preparation and Consolidation**

The Consolidated Financial Statements of LyondellBasell N.V. have been prepared from the books and records of LyondellBasell Industries N.V. and its subsidiaries in accordance with International Financial Reporting Standards ("IFRS") and International Financial Reporting Interpretation Committee ("IFRIC") interpretations as adopted by the European Union. Subsidiaries are all entities over which the Company has control. The Company controls an entity when the Company is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Company. They are deconsolidated from the date that control ceases. All inter-company transactions and balances have been eliminated in consolidation.

As the corporate financial information of LyondellBasell Industries N.V. is included in the Consolidated Financial Statements, the Corporate Statement of Income is presented in abbreviated format in accordance with Section 402, Book 2 of Dutch Civil Code.

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, associates and joint arrangements, has been prepared using uniform accounting policies for similar transactions and other events in similar circumstances.

## New and Amended Standards Adopted

There are no IFRS or IFRIC interpretations that are effective for the first time for the financial year beginning on or after 1 January 2016 which have a material impact on the financial statements:

**New standards, amendments and interpretations issued but not effective for the financial year 2016 and we have not elected early adoption.**

*IFRS 9, Financial Instruments*—IFRS 9, issued in July 2014, replaces the guidance in IAS 39, *Financial Instruments: Recognition and Measurement*, and includes revised guidance on classification and measurement of financial instruments, including a new expected credit loss model for calculating impairment of financial assets and new general hedge accounting requirements. It also carries forward the guidance on recognition and derecognition of financial instruments from IAS 39. This standard is effective for annual periods beginning on or after 1 January 2018 and allows for early adoption. The standard was endorsed by the EU in November 2016. We are currently assessing the impact of the adoption of this standard on our consolidated financial statements and will determine an adoption date.

*IFRS 15, Revenue from Contracts with Customers including clarifications to IFRS 15*—IFRS 15 was issued in May 2014 and establishes a new five-step model that will apply to revenue arising from contracts with customers. Under IFRS 15, revenue is recognized at an amount that reflects the consideration to which an entity expects to be entitled in exchange for transferring goods or services to a customer. In April 2016, IASB issued amendments to IFRS 15 clarifying some of the requirements and providing additional transitional relief for companies that are implementing IFRS 15.

This revenue standard, which is applicable to all entities, will supersede all current revenue recognition requirements under IFRS. Entities may apply either a full or modified retrospective approach at adoption. The standard is effective for annual periods beginning on or after 1 January 2018 with early adoption permitted. The standard has been endorsed by the EU in September 2016, however the guidance within *Clarifications to IFRS 15* is expected to be endorsed by the EU in 2017.

We are currently assessing the impact of the adoption of IFRS 15 and have preliminarily determined that there will not be a material impact on our Consolidated Financial Statements. At this moment we expect to apply IFRS 15 using the modified retrospective approach.

IFRS 16, *Leases*—IFRS 16 was issued in January 2016 and provides a single lessee accounting model, requiring lessees to recognize assets and liabilities for all leases except for short term leases or if the underlying asset has a low value. Lessors continue to classify leases as operating or finance, with IFRS 16's approach to lessor accounting substantially unchanged from its predecessor, IAS 17. IFRS 16 is effective for annual reporting periods beginning on or after 1 January 2019. Early adoption is permissible if following the adoption of IFRS 15. For transition, entities may apply either the full or modified retrospective method. The standard has not currently been endorsed by the EU. We are currently assessing the impact of this new guidance on our Consolidated Financial Statements via an extensive review of numerous existing lease contracts and other purchase obligations that contain embedded lease features, both classified as operating leases under the existing guidance.

All other standards, amendments and interpretations are not expected to materially impact our Consolidated Financial Statements.

## Goodwill

Goodwill is allocated to cash-generating units for the purpose of impairment testing. The allocation is made to those cash-generating units or groups of cash-generating units that are expected to benefit from the business combination in which the goodwill arose.

## Investments in Associates and Joint Arrangements

Investments in entities over which we have the right to exercise significant influence but not control are classified as associates. Arrangements under which we have contractually agreed to share control with another party or parties are joint arrangements. Under IFRS 11, *Joint Arrangements*, investments in joint arrangements are classified as either joint operations or joint ventures, depending on the contractual rights and obligations that each investor has, rather than the legal structure of the joint arrangement. The Company has assessed the nature of its joint arrangements and determined that it has both joint operations and joint ventures.

Interests in associates and joint ventures are accounted for using the equity method. Under the equity method of accounting, the investment is initially recognized at cost and subsequently adjusted for our share of comprehensive income, dividends received and by loans of a long-term investment nature. Interests in joint operations are recognized by including our share of assets, liabilities, income and expenses on a line-by-line basis in accordance with our accounting policies. Unrealized gains and losses on other transactions between the Group and its associates and joint arrangements are eliminated to the extent of our interest in them.

At each reporting date, we determine whether there is any objective evidence of impairment of our investments in associates or joint ventures. If an impairment is indicated, we calculate the amount of impairment as the difference between the recoverable amount of the associate or joint venture and its carrying value and recognize the amount adjacent to Share of profit/(loss) of investments accounted for using the equity method in the Consolidated Statement of Income.

## Foreign Currency Translation

*Functional and presentation 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. The consolidated financial information is presented in U.S. dollars, which is our presentation currency.

*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 Statement of Income, except when deferred in Other comprehensive income as qualifying cash flow hedges.

Foreign exchange gains and losses that relate to borrowings and cash and cash equivalents are presented in the Consolidated Statement of Income within Finance costs. All other foreign exchange gains and losses are presented in the Consolidated Statement of Income within Other expense, net.

In the Consolidated Financial Statements, the results and financial position of all the subsidiaries that have a functional currency different from the presentation currency are translated into the presentation 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 (currency translation reserve).

**Revenue Recognition**

Revenue is measured at the fair value of the consideration received or receivable, and represents amounts receivable for goods supplied and services rendered, stated net of discounts, returns and value added taxes. 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.

**Segment Reporting**

Our operations are managed through five operating segments. Each of the operating segments is separately managed under a structure that includes senior executives who report directly to our Chief Executive Officer and discrete financial information for each of the segments is available. Our Chief Executive Officer uses the operating results of each of the five operating segments for performance evaluation and resource allocation and, as such, is the chief operating decision maker.

**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. The fair value of stock options is determined using the Black-Scholes model.

Contingent share awards are recognized ratably over the vesting period as a liability and re-measured, at fair value, at the balance sheet date.

**Leases**

Finance leases, which transfer to the group substantially all the risks and benefits incidental to ownership of the leased item, are capitalized at inception of the lease at the fair value of the leased property or, if lower, at the present value of the minimum lease payments. All other leases are operating leases. Lease payments for finance leases are apportioned to finance charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are included in Finance costs. Capitalized leased assets are depreciated over the shorter of the estimated useful life of the asset or the lease term. Operating lease payments are recognized as an expense over the lease term on a straight-line basis.

### Intangible Assets

*Intangible Assets*—Intangible assets primarily consist of emission allowances, various contracts (favorable utility contracts and licensing contracts), research and development and software costs. These assets are amortized using the straight-line method over 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—*Costs incurred on development projects are recognized as intangible assets when it is probable that we will achieve economic benefits in the future, considering its commercial and technological feasibility, and costs can be measured reliably. Research expenditure and development expenditure that do not meet the aforementioned criteria are recognized as expense as incurred. Development costs that have a finite useful life and that have been capitalized are amortized on a straight-line basis over the period of expected useful life from the date that services can be offered. The expected useful life is generally 10 years.

Capitalized development projects are impaired if the recoverable amount falls below the carrying value of the related asset.

*Other intangible* assets—Costs associated with maintaining computer software programs are recognized as expense is incurred. Development costs that are directly attributable to the design and testing of identifiable and unique software products controlled by the Company are recognized as intangible assets when the recognition criteria are met. The capitalized costs are amortized over the estimated useful life, which is between 3 and 10 years.

### 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 of major projects exceeding one year, costs of major maintenance arising from turnarounds of major units when it is probable that there is an associated future economic benefit, and committed decommission costs. Routine maintenance and repair 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, generally as follows:

- 25 years for major manufacturing equipment
- 30 years for buildings
- 5 to 20 years for light equipment and instrumentation
- 15 years for office furniture
- 4 to 7 years for turnarounds of major units, and
- 3 to 5 years for information system equipment.

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

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 Statement of Income.

### Impairments of Non-Financial Assets

Assets that have an indefinite useful life, including goodwill, are not subject to amortization and are tested annually for impairment. Assets that are subject to amortization are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognized for the amount by which the asset’s carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset’s fair value less costs to sell and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash-generating units) which for the Company 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). Non-financial assets other than goodwill that have been impaired are reviewed for possible reversal of the impairment at each reporting date.

### Offsetting Financial Instruments

Financial assets and liabilities are offset and the net amount reported in the balance sheet when there is a legally enforceable right to offset the recognized amounts and there is an intention to settle on a net basis, or realize the asset and settle the liability simultaneously.

### 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. For a discussion of our policies related to financial instruments and derivatives and hedging strategy, see Note 4 Financial Risk Management.

All financial instruments are measured at amortized cost or fair value.

Derivatives are initially recognized at fair value on the inception date and are subsequently re-measured at fair value as of each reporting date. The method of recognizing the resulting gain or loss depends on whether the derivative is designated as a hedging instrument, and if so, the nature of the item being hedged. The Company designates certain derivatives as either:

a. hedges of the fair value of recognized assets or liabilities or a firm commitment (fair value hedge); or

b. hedges of a particular risk associated with a recognized asset or liability or a highly probable forecast transaction (cash flow hedge); or

c. hedges of a net investment in a foreign operation (net investment hedge).

At the inception of the transaction, the Company documents the relationship between the hedging instrument and the hedged item, its risk management objectives and strategy for undertaking various hedging transactions. The Company also documents its assessment, both at hedge inception and on an ongoing basis, of whether the derivative that is used in the hedging transaction is highly effective in offsetting changes in the fair value or cash flow of the hedged item.

The fair values of various derivative instruments used for hedging purposes are disclosed in Note 19. The full fair value of the derivatives is classified as a non-current asset or liability if the remaining maturity of the derivative is more than 12 months and as a current asset or liability if the remaining maturity is less than 12 months.

(a) Fair value hedge

Changes in the fair value of a derivative that is designated and qualifies as a fair value hedge are recorded in the Consolidated Statement of Income, together with any changes in the fair value of the hedged asset or liability that is attributable to the hedged risk. The Company applies fair value hedge accounting for hedging the changes in fair value of fixed rate borrowings. The gain or loss relating to the effective and ineffective portion of interest rate swaps hedging fixed rate borrowings is recognized in the Consolidated Statement of Income in Finance costs. Changes in the fair value of the hedge fixed rate borrowings attributable to interest rate risk are recognized in the Consolidated Statement of Income in Finance costs.

If the hedge no longer meets the criteria for hedge accounting, the adjustment to the carrying amount of a hedged item for which the effective interest method is used is amortized to profit or loss over the period to maturity.

(b) Cash flow hedge

The effective portion of changes in the fair value of a derivative that is designated and qualifies as cash flow hedge is recognized in other comprehensive income. The gain or loss relating to the ineffective portion is recognized immediately in the Consolidated Statement of Income in Other (income) expense, net.

Amounts accumulated in equity are reclassified to profit or loss in the periods when the hedged item affects profit or loss (for example, when the forecasted sale that is hedged takes place). The gain or loss relating to the ineffective portion of interest rate swaps hedging variable rate borrowings is recognized in the Consolidated Statement of Income in Finance income/costs.

When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in equity at that time remains in equity and is recognized when the forecasted transaction is ultimately recognized in the Consolidated Statement of Income. When a forecasted transaction is no longer expected to occur, the cumulative gain or loss that was reported in equity is immediately transferred to the Consolidated Statement of Income in Other (income) expense, net.

(c) Net investment hedge

Hedges of net investments in foreign operations are accounted for similarly to cash flow hedges.

Any gain or loss on the hedging instrument relating to the effective portion of the hedge is recognized in Other comprehensive income. The gain or loss relating to the ineffective portion is recognized in the income statement. Gains and losses accumulated in equity are included in the income statement when the foreign operation is partially disposed of or sold.

## Inventories

Inventories are stated at the lower of cost and net realizable value. Cost is determined using the first in, first out ("FIFO") method. The cost of finished goods and work in progress comprises directly attributable costs and related production overheads (based on normal operating capacity). Net realizable value is the estimated selling price in the ordinary course of business, less the estimated cost of completion and the estimated costs necessary to make the sale.

## Current Trade Receivables

Current trade receivables are initially recognized at fair value and subsequently measured at amortized cost, which generally corresponds to face value, less an adjustment for bad debt.

## 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. Bank overdrafts are shown within Borrowings in current liabilities on the balance sheet. 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.

## Borrowings

Borrowings are initially recognized at the fair value of the proceeds received, net of transaction costs. Subsequently, borrowings are stated at amortized cost using the effective interest method. Amortized cost is calculated by taking into account any discount or premium. Interest expense on outstanding borrowings are accrued and recorded each period in the Consolidated Statement of Income.

Fees paid on the establishment of loan facilities are recognized as transaction costs of the loan to the extent that it is probable that some or all of the facility will be drawn down. In this case, the fee is deferred until the draw-down occurs. To the extent there is no evidence that it is probable that some or all of the facility will be drawn down, the fee is capitalized as a pre-payment for liquidity services and amortized over the period of the facility to which it relates.

## Income Taxes

The income tax for the period comprises current and deferred tax. Income tax is recognized in the Consolidated Statement 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.

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date, and any adjustment to tax payable in respect to previous years. Management evaluates positions with respect to applicable tax regulation which is subject to interpretation. The Company establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

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, using the liability method. Deferred income taxes are measured at the tax rates and under the tax laws that have been enacted or substantially enacted at the balance sheet date and are expected to apply when the related deferred tax assets are realized or the deferred tax liabilities are settled.

Deferred tax assets, including assets arising from losses carried forward, are recognized to the extent that it is probable that future taxable profits will be available against which the deductible temporary differences and unused tax losses can be utilized.

### Employee Benefits

*Pension plans*—We have both defined benefit (funded and unfunded) and defined contribution plans. For the defined benefit plans, a defined 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, the net interest expense (income) that is calculated as the product of the net defined benefit liability (asset) and the discount rate determined at the end of the year and employees past-service costs.

Remeasurement gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to equity and are reflected in 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 they are due.

*Other post-employment obligations*—Certain employees are entitled to post-retirement 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 using the same accounting methodology as used for defined benefit plans.

*Termination benefits*—Termination benefits are payable when employment is terminated before the normal retirement date, or whenever an employee accepts voluntary redundancy in exchange for these benefits. We recognize termination benefits when we are committed to either terminating the employment of current employees according to a detailed formal plan without possibility of withdrawal, or providing termination benefits as a result of an offer made to encourage voluntary redundancy. Benefits falling due more than 12 months after the balance sheet date are discounted to present value.

### Trade and Other Payables

Trade and other payables are presented as current liabilities unless payment is not due within 12 months after the reporting period. Trade and other payables are initially recognized at fair value and subsequently measured at amortized cost, which generally corresponds to face value.

### Other Provisions

Provisions are recognized when all of the following conditions are met: 1) there is a present legal or constructive obligation as a result of past events; 2) it is probable that a transfer of economic benefits will settle the obligation; and 3) a reliable estimate can be made of the amount of the obligation. The probable amount required to settle long-term obligations is discounted if the effect of discounting is material. Where discounting is used, the increase in the provision due to the passage of time is recognized as interest costs.

*Asset Retirement Obligation*—At some sites, we are contractually obligated to decommission our plants upon site exit. These obligations are recorded at their fair value at the time the obligation is incurred. Upon initial recognition of the liability, that cost is capitalized as part of the related long lived asset and depreciation is recognized 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 accretion expenses are included in Finance costs.

**Share capital**

Ordinary shares are classified as equity. Where any group company purchases the company's equity share capital (treasury shares), the consideration paid, including any directly attributable incremental costs (net of income taxes) is deducted from equity attributable to the company's equity holders until the shares are cancelled or reissued. Where such ordinary shares are subsequently reissued, any consideration received, net of any directly attributable incremental transaction cost and the related income tax effects, is included in equity attributable to the company's equity holders.

## 3 Critical Accounting Estimates and Judgments

The preparation of financial statements in conformity with IFRS requires management to make estimates and judgments that affect the reported amounts of assets and liabilities and the reported amounts of revenue and expenses during the period as well as the information disclosed.

**Critical Accounting Estimates and Assumptions**

For our critical accounting estimates and assumptions, reference is made to the notes to these Consolidated Financial Statements, including the determination of deferred tax assets for loss carry forwards and the provision for tax contingencies (see Notes 12 and 26), the determination of fair value and the value of cash-generating units for use in goodwill impairment testing (see Note 14), the depreciation rates for property, plant and equipment (see Note 15) and intangible assets (see Note 14), the discount rate used to determine the provision for retirement benefit obligations and periodic pension cost (see Note 27) and the more likely than not assessment required to determine if a provision should be recognized and measured (see Notes 29 and 30).

Also, reference is made to Note 4 Financial Risk Management, which discusses our exposure to credit risk and financial market risks.

Actual results in the future may differ from these estimates. Management estimates and judgments are continually evaluated based on historic experience and other factors, including expectations of future events believed to be reasonable under the circumstances.

**Critical Accounting Judgments in Applying LyondellBasell N.V.'s Accounting Policies**

*Property, plant and equipment and intangible assets*—With respect to 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.

*Goodwill*—Goodwill 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 acquisition of LyondellBasell Subholdings B.V. and LyondellBasell Finance Company on 30 April 2010. 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 group of cash generating units may not be fully recoverable.

*Capitalization of research and development costs*—We incur research and development costs associated with developing catalyst systems, polymers and chemicals. Research costs are expensed as incurred. Development expenditures, on an individual project, are recognized as an intangible asset when the Group can demonstrate:

- The technical feasibility of completing the intangible asset so that it will be available for use or sale
- Our intention to complete and our ability to use or sell the asset
- How the asset will generate future economic benefits
- The availability of resources to complete the asset
- The ability to reliably measure the expenditure during development

Significant judgments are required to determine the status of the projects and whether or not the relevant development should be capitalized. A determination is made as to whether or not the projects have progressed from a "research" phase into a "development" phase; and the timing of when the criteria outlined above can be clearly demonstrated.

*Joint Arrangements*—We are a party to several joint arrangements. The Company has joint control over these arrangements as unanimous consent is required from all parties to the agreements to direct the activities that significantly affect the returns of the arrangement, such as annual production budgets, capital expenditures, incurrence of indebtedness, election of key management team members, approval of pricing policies and admission of new parties.

The classification of these joint arrangements as either a joint operation or a joint venture is driven by the rights and obligations of the parties arising from the arrangement rather than the legal form of the arrangement.

The Company's joint ventures are structured as limited companies and provide the Company and the parties to the agreements with rights to the net assets of the limited companies under the arrangements. The parties are not substantially the only source of cash flows contributing to the continuity of the operations of the joint venture.

The output of the Company's joint operations is for the sole use of the parties to the joint arrangement. The parties are substantially the only source of cash flows contributing to the continuity of the operations of the joint operation.

*Employee Benefits*—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 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.

The benefit obligation and the periodic cost of other postretirement medical benefits also are measured based on assumed rates of future increase in the per capita cost of covered health care benefits.

*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.

## 4 Financial Risk Management

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 Consolidated Statement of Financial Position. 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 designated as cash flow and net investment hedges, the effective portion of the gains and losses is recorded through Other comprehensive income ("OCI"). The ineffective portion of cash flow and net investment hedges is recorded in earnings.

### 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 purchases and sales. Such contracts are generally limited to durations of one year or less. Hedge accounting has not been elected for most of our commodity contracts in 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 and swap contracts are shown in the table below:

| | 31 December 2016 | | | | |
|---|---|---|---|---|---|
| | | Notional Amounts | | | |
| Millions of U.S. Dollars | Fair Value | Value | Volumes | Volume Unit | Maturity Dates |
| Futures and swaps not designated as hedges: | | | | | |
| Heating oil | $ 1 | $ 20 | 12 | million gallons | February 2017 |
| Crude oil | (1) | 30 | 23 | million gallons | February- March 2017 |
| Naphtha | 1 | 48 | 100 | million gallons | January 2017 |
| Swaps designated as cash-flow hedges: | | | | | |
| Ethane | 3 | 58 | 184 | million gallons | January 2017-December 2019 |
| | $ 4 | $ 156 | | | |

| | 31 December 2015 | | | | |
|---|---|---|---|---|---|
| | | Notional Amounts | | | |
| | Fair Value | Value | Volumes | Volume Unit | Maturity Dates |
| Futures: | | | | | |
| Heating oil | $ - - | $ 10 | 9 | million gallons | February–April 2016 |
| Crude oil | 7 | 72 | 78 | million gallons | February–May 2016 |
| Crude/Distillates | (2) | 57 | 252 | million gallons | October 2016 |
| Butane | 1 | 1 | 8 | million gallons | February 2016 |
| | $ 6 | $ 140 | | | |

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 14% to 17%, which represents 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 OCI 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.

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

We maintain risk management control systems intended to monitor foreign currency risk attributable to 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. We enter into foreign currency forward contracts to reduce the effects of our net currency exchange exposures. At 31 December 2016, foreign currency forward contracts in the notional amount of $39 million, maturing in January 2017 to March 2017, 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 Statement of Income, are offset in part by the currency translation results recognized on the assets and liabilities.

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. This position is monitored routinely.

At 31 December 2016, a 10% fluctuation compared to the U.S. dollar in the underlying currencies that have no central bank or other currency restrictions related to non-hedged monetary net assets would result in an additional impact to earnings of less than $1 million.

*Basis Swaps*—In September 2015, we entered into €850 million of cross-currency floating-to-floating interest rate swaps (“basis swaps”) to reduce the volatility in stockholders’ equity resulting from changes in currency exchange rates of our foreign subsidiaries with respect to the U.S. dollar. Under the terms of these contracts, which have been designated as net investment hedges, we will make interest payments in euros at 3 Month EURIBOR plus basis and will receive interest in U.S. dollars at 3 Month LIBOR. Upon the maturities of these contracts, we will pay the principal amount in euros and receive U.S. dollars from our counterparties. The fair value of our basis swap contracts is calculated using the present value of future cash flows discounted using observable inputs such as known notional value amounts, yield curves, spot and forward exchange rates as well as discount rates.

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 of our basis swap contracts at least on a quarterly basis over an observation period of three years, utilizing data that is relevant to the hedge duration. We use the dollar offset approach to measure ineffectiveness.

The effective portion of the unrealized gains and losses on these basis swap contracts is reported in Equity and reclassified to earnings only when realized upon the sale or upon complete or substantially complete liquidation of the investment in the foreign entity. Cash flows from basis swaps are reported in Cash flows from investing activities in the Consolidated Statement of Cash Flows.

In September 2016, €450 million of our basis swaps expired. Upon settlement of these basis swaps contracts, which had a notional value of $500 million, we paid €450 million ($506 million at the expiry spot rate) to our counterparties and received $500 million from our counterparties. The $6 million loss is reflected in foreign currency translation adjustments in Accumulated other comprehensive loss. Cash flows from the settlement of these basis swap contracts are reported in Cash flows from investing activities in the Consolidated Statement of Cash Flows.

There was no ineffectiveness recorded during the years ended 31 December 2016 and 2015 related to these basis swaps.

At 31 December 2016, a 10% fluctuation in foreign currency rates would have a $42 million impact on other comprehensive income. A 10% fluctuation in the EURIBOR and LIBOR rates at 31 December 2016 would have an immaterial impact on other comprehensive income.

The following table summarizes our basis swaps outstanding:

| | 31 December 2016 | | 31 December 2015 | |
|---|---|---|---|---|
| **Millions of U.S. Dollars** | **Notional Value** | **Fair Value** | **Notional Value** | **Fair Value** |
| Basis Swaps expiring in 2016 | $ - | $ - | $ 500 | $ 10 |
| Basis Swaps expiring in 2017 | 305 | 15 | 305 | 6 |
| Basis Swaps expiring in 2018 | 139 | 6 | 139 | 2 |

*Forward Exchange Contracts*–In October 2016, we entered into forward exchange contracts with an aggregate notional value of €275 million ($299 million) to mitigate the risk associated with the fluctuations in the Euro to U.S. Dollar exchange rate related to our investments in foreign subsidiaries. There was no ineffectiveness recorded during the year ended December 31, 2016 related to these forward exchange contracts.

We use the critical terms match to assess both prospective and retrospective hedge effectiveness by comparing the spot rate change in the Euro notes and the spot rate change in the designated net investment. We use the hypothetical derivative method to measure hedge ineffectiveness.

In December 2015, we entered into forward exchange contracts with an aggregate notional value of €750 million ($795 million) to mitigate the risk associated with the fluctuations in the Euro to U.S. Dollar exchange rate related to our investments in foreign subsidiaries.

We elected to designate these forward exchange contracts as net investment hedges. The effective portion of the gains or losses is recorded within foreign currency translations adjustments in Other comprehensive income (loss). In periods where the hedging relationship is deemed ineffective, changes in the fair value will be recorded directly to Other income, net in the Consolidated Statements of Income. Cash flows from these forward exchange contracts are reported in Cash flows from investing activities in the Consolidated Statement of Cash Flows.

On March 31, 2016, the forward exchange contracts entered into in December 2015 expired. Upon settlement of these contracts, we paid €750 million ($850 million at the expiry spot rate) to our counterparties and received $795 million from our counterparties. The $55 million difference, which includes a $30 million loss is in the first quarter of 2016, is reflected within foreign currency translations adjustments in Other comprehensive loss. Cash flows from these forward exchange contracts are reported in Cash flows from investing activities in the Consolidated Statement of Cash Flows. There was no ineffectiveness recorded for this hedging relationship in 2016. In 2015, we recognized a $1 million loss related to ineffectiveness.

*Guaranteed Euro notes due 2022* —In 2016, we issued euro denominated notes payable due 2022 ("Euro notes") with notional amounts totaling €750 million. To mitigate the risk to our investments in foreign subsidiaries associated with fluctuations in the euro to U.S. dollar exchange rate, we designated these euro notes as a net investment hedge.

We use critical terms match to assess both prospective and retrospective hedge effectiveness by comparing the spot rate change in the Euro notes and the spot rate change in the designated net investment. We use the hypothetical derivative method to measure hedge ineffectiveness.

The effective portion of the gain or loss is recorded within foreign currency translations adjustments in Accumulated other comprehensive loss and will be reclassified to earnings only when realized upon the sale of the complete or substantially complete liquidation of the investment in the foreign entity. In period when the hedging relationship is deemed ineffective, changes in remeasurement of the Euro notes due to changes in the spot exchange rate will be recorded directly to Other income, net in the Consolidated statements of Income. Cash flows related to our Euro notes are reported in Cash Flows from financing activities and related interest payments are reported in Cash flows from operating activities in the Consolidated Statement of Cash Flows.

There was no ineffectiveness recorded for this hedging relationship for the year ended December 31, 2016.

*Cross-Currency Swaps*—We have cross-currency swap contracts that reduce our exposure to the foreign currency exchange risk associated with certain intercompany loans. Under the terms of these contracts, which have not been designated as 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. Each reporting period, the swaps are marked to market to arrive at their fair value. The resulting gains and losses are classified as Other (income) expense, net.

The following table summarized our cross-currency swaps outstanding:

| | | | **31 December 2016** | | **31 December 2015** | |
|---|---|---|---|---|---|---|
| **Millions of U.S. Dollars, except expiration date and rates** | **Expiration Date** | **Average Interest Rate** | **Notional Value** | **Fair Value** | **Notional Value** | **Fair Value** |
| Pay Euro | 2021 | 4.55% | $ 1,000 | $ 146 | $ 1,000 | $ 141 |
| Receive U.S. dollars | | 6.00% | | | | |
| Pay Euro | 2024 | 4.37% | 1,000 | 134 | 1,000 | 145 |
| Receive U.S. dollars | | 5.75% | | | | |
| Pay Euro | 2027 | 3.69% | 300 | 5 | 300 | 14 |
| Receive U.S. dollars | | 5.49% | | | | |

Finance costs in the Consolidated Statement of Income reflected losses of $71 million and $217 million for the periods ended 31 December 2016 and 2015, respectively, related to changes in currency exchange rates and cross-currency swaps.

### 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-for-Floating Interest Rate Swaps*—In 2016, 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 $1,000 million 6% senior notes due 2021 associated with the risk of variability in the 1 Month USD LIBOR rate (the benchmark interest rate).

In 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 Finance costs, net in the Cash flows from operating activities section of the Consolidated Statement of Cash Flows.

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.

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 Finance costs in our Consolidated Statement 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 years ended 31 December 2016 and 2015, we recognized net gains of $32 million and $44 million, respectively, related to the ineffectiveness of our hedging relationships.

At 31 December 2016, we had outstanding interest rate swap agreements with notional amounts of totaling $600 million, maturing on November 15, 2021, and notional amounts of $2,000 million, maturing on 15 April 2019.

We estimate that a 10% change in market interest rates as of 31 December 2016 would change the fair value of our interest rate swaps outstanding and affect our profit before income tax by approximately $12 million.

*Variable-rate debt*—Our variable rate debt consists of our $2,500 million Senior Revolving Credit Facility, our $900 million U.S. Receivables Securitization Facility and $500 million outstanding at 31 December 2016 under our commercial paper program. At 31 December 2016 and 2015, there were no outstanding borrowings our Senior Revolving Credit Facility and U.S. and European receivables facilities. We estimate that a 10% change in interest rates will not have a material impact on earnings.

*Forward-Starting Interest Rate Swaps*—In March 2015, we entered into forward-starting interest rate swaps to mitigate the risk of adverse changes in the benchmark interest rates on the anticipated refinancing of our senior notes due 2019. These interest rate swaps will be terminated upon debt issuance. The total notional amount of these forward-starting interest rate swaps was $1,000 million at 31 December, 2015. The ineffectiveness recorded for this hedging relationship was less than $1 million during the year ended 31 December 2016 and 2015 respectively.

In January 2015, we entered into forward-starting interest rate swaps with a total notional value of $750 million to mitigate the risk of adverse changes in the benchmark interest rates on the Company's planned issuance of fixed-rate debt in 2015. These forward-starting interest rate swaps were terminated upon issuance of the $1,000 million senior notes due 2055 in March 2015. The ineffectiveness recorded for this hedging relationship was less than $1 million during the year ended 31 December 2015.

In February 2014, we entered into forward-starting interest rate swaps with a total notional value of $500 million to hedge the risk of adverse changes in the benchmark interest rates 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 have elected to designate these forward-starting interest rate swaps as cash flow hedges. The effective portion of the gain or loss is recorded in other comprehensive income. In periods where the hedging relationship is deemed ineffective, the ineffective portion of the changes in the fair value will be amortized to interest expenses in the Consolidated Income Statement over the original term of the related swaps using the effective interest method.

We use a regression analysis approach under the hypothetical derivative method to assess both prospective and retrospective hedge effectiveness. We use the dollar-offset method under the hypothetical derivative method to measure hedge ineffectiveness.

In 2016, there was no settlement of our forward starting swap agreements. In 2015, we recognized a gain of $15 million in other comprehensive income related to the settlement of our forward-starting interest rate swap agreements. The related deferred gain and losses recognized in other comprehensive loss are amortized to interest expense over the original term of the related swaps using the effective interest method.

As of 31 December 2016, less than $1 million (on a pretax basis) is scheduled to be reclassified as an increase to interest expense over the next twelve months.

**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.

*Marketable Securities*—We invest cash in investment-grade securities for periods not exceeding three years. Investments in securities with original maturities of three months or less are classified as Cash and cash equivalents. At 31 December 2016 and 2015, we had marketable securities classified as Cash and cash equivalents of $351 million and $575 million, respectively.

We also have investments in marketable securities classified as available-for-sale and held-to-maturity. These securities, which are included in Short-term investments on the Consolidated Statement of Financial Position. Investments classified as available-for-sale are carried at fair value with unrealized gains and losses recorded in other comprehensive income. Investments classified as held-to-maturity are carried at amortized cost. We periodically review our available-for-sale and held-to-maturity 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.

*Repurchase Agreements*—We invest 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. Depending upon maturity, these tri-party repurchase agreements are treated as short-term loans receivable and are reflected in current Trade and other receivables or as long-term receivables reflected in noncurrent Trade and other receivables on our Consolidated Statement of Financial Position. The balance of our investment at 31 December 2016 and 2015 was $369 million and $387 million, respectively.

*Investments in marketable securities*—Our investments in marketable securities are reflected in the following table.

| | Year ended 31 December | |
|---|---|---|
| | 2016 | 2015 |
| **Millions of U.S. Dollars** | | |
| Short term investments | | |
| Available-for-sale securities, at fair value | $ 1,073 | $ 1,064 |
| Held-to-maturity securities, at cost. | 74 | - - |
| Total | $ 1,147 | $ 1,064 |

The following table summarizes the amortized cost, gross unrealized gains and losses, and fair value of our available-for-sale and held-to-maturity securities that are outstanding as of December 31,2016 and 2015.

| | 31 December 2016 | | | |
|---|---|---|---|---|
| **Millions of U.S. Dollars** | **Cost** | **Gross Unrealized Gains** | **Gross Unrealized Losses** | **Fair Value** |
| Available-for-sale securities | | | | |
| Commercial paper | $ 232 | $ - - | $ - - | $ 232 |
| Bonds | 141 | - - | - - | 141 |
| Certificates of deposit | 347 | 1 | - - | 348 |
| Limited partnership investments | 350 | 2 | - - | 352 |
| Total available-for-sale securities | $ 1,070 | $ 3 | $ - - | $ 1,073 |
| Held-to-maturity securities: | | | | |
| Time deposits | $ 74 | $ - - | $ - - | $ 74 |

| Millions of U.S. Dollars | 31 December 2015 Cost | Gross Unrealized Gains | Gross Unrealized Losses | Fair Value |
|---|---|---|---|---|
| Commercial paper | $ 329 | $ - - | $ - - | $ 329 |
| Bonds | 175 | - - | - - | 175 |
| Certificates of deposit | 215 | - - | - - | 215 |
| Limited partnership investments | 350 | - - | (5) | 345 |
| Total available-for-sale securities | $ 1,069 | $ - - | $ (5) | $ 1,064 |

Our limited partnership investments include investments in, among other things, equities and equity related securities, debt securities, credit instruments, global interest rate products, currencies, commodities, futures, options, warrants and swaps. These investments, which include both long and short positions, may be redeemed at least monthly with advance notice ranging up to ninety days. The fair value of these funds is estimated using the net asset value (NAV) per share of the respective pooled fund investment.

No losses related to other-than-temporary impairments of our available-for-sale and held-to-maturity investments have been recorded in other comprehensive loss during the year ended December 31, 2016 and the year ended December 31, 2015.

As of 31 December 2016, our available-for-sale securities had the following maturities: commercial paper securities held by the Company had maturities between one and six months; bonds had maturities between one and thirty eight months; certificates of deposit mature between one and fifteen months; and limited partnership investments mature between one and three months. Our time deposits classified as held-to-maturity securities had maturities between three and six months.

The proceeds from maturities and sales of our available-for-sale securities during the years ended and 2016 and 2015 are summarized in the following table.

| Millions of U.S. Dollars | Year Ended 31 December 2016 | 2015 |
|---|---|---|
| Proceeds from maturities of securities | $ 674 | $ 2,288 |
| Proceeds from sales of securities | - - | 201 |
| | $ 674 | $ 2,489 |

No gain or loss was realized in connection with the sale of our available-for-sale securities during the year ended 31 December 2016. We recognized realized gains of less than $1 million in connection with the sale of securities during the year ended 31 December 2015.

The specific identification method was used to identify the cost of the securities sold and the amounts reclassified out of Other comprehensive income into earnings.

During the year ended December 31, 2016, we had no sales or maturities of our held-to-maturity securities and no transfers of investments classified as held-to-maturity to available-for-sale.

The following table summarizes the fair value and unrealized losses related to available-for-sale securities that were in a continuous unrealized loss position for less than and greater than twelve months as of 31 December 2016 and 2015.

| | 31 December 2016 | | | |
|---|---|---|---|---|
| | Less than 12 months | | Greater than 12 months | |
| **Millions of U.S. Dollars** | **Fair Value** | **Unrealized Loss** | **Fair Value** | **Unrealized Loss** |
| Available for sale securities: | | | | |
| Limited partnership investments | - - | - - | 105 | (3) |
| Total | $ - - | $ - - | $ 105 | $ (3) |

| | 31 December 2015 | | | |
|---|---|---|---|---|
| | Less than 12 months | | Greater than 12 months | |
| **Millions of U.S. Dollars** | **Fair Value** | **Unrealized Loss** | **Fair Value** | **Unrealized Loss** |
| Bonds | $ 46 | $ - - | $ 35 | $ - - |
| Certificates of deposit | 150 | - - | - - | - - |
| Limited partnership investments | 345 | (5) | - - | - - |
| Total | $ 541 | $ (5) | $ 35 | $ - - |

No losses related to other-than-temporary impairments of our available-for-sale investments have been recorded in other comprehensive loss during the years ended 31 December 2016 and 2015.

## Capital Risk Management

Capital includes equity attributable to the equity holders of the parent. A discussion of credit risk can be found in Note 18.

The primary objective of the Group's capital management is to ensure that it maintains a strong credit rating and healthy capital ratios in order to support its business and maximize shareholder value.

The Group manages its capital structure and makes adjustments to it in light of changes in economic conditions. To maintain or adjust the capital structure, the Group may issue new debt, repay debt, return capital to shareholders or issue new shares.

*Liquidity and Capital Resources*—As of 31 December 2016, we had unrestricted cash and cash equivalents of $946 million ($995 million in 2015). In addition at 31 December 2016, we had total unused availability under our credit facilities of $2,710 million ($2,862 million in 2015) and $1,073 million marketable securities classified as available-for-sale financial assets ($1,064 million in 2015).

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 the 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.

The table below provides a maturity analysis of our financial liabilities based on the remaining contractual maturities as of 31 December 2016.

| Millions of U.S. Dollars | Total obligations | Less than 1 year | Between 1 to 2 years | Between 2 to 5 years | Over 5 years |
|---|---|---|---|---|---|
| **31 December 2016** | | | | | |
| Borrowings (excluding finance lease liabilities) | $ 9,293 | $ 614 | $ 11 | $ 3,047 | $ 5,621 |
| Interest payment on total debt | 5,470 | 321 | 321 | 963 | 3,865 |
| Trade and other payables | 3,501 | 3,501 | - - | - - | - - |
| Commodity derivatives | 1 | 1 | - - | - - | - - |
| | $ 18,265 | $ 4,437 | $ 332 | $ 4,010 | $ 9,486 |

| Millions of U.S. Dollars | Total obligations | Less than 1 year | Between 1 to 2 years | Between 2 to 5 years | Over 5 years |
|---|---|---|---|---|---|
| **31 December 2015** | | | | | |
| Borrowings (excluding finance lease liabilities) | $ 8,302 | $ 375 | $ 54 | $ 2,050 | $ 5,823 |
| Interest payment on total debt | 6,313 | 406 | 406 | 1,168 | 4,333 |
| Trade and other payables | 3,520 | 3,520 | - - | - - | - - |
| Commodity derivatives | 2 | 2 | - - | - - | - - |
| | $ 18,137 | $ 4,303 | $ 460 | $ 3,218 | $ 10,156 |

## Fair Value Estimates

The following table summarizes financial assets and liabilities outstanding at 31 December that are measured at fair value on a recurring basis.

| **Millions of U.S. Dollars** | **Total** | **Level 1** | **Level 2** | **Level 3** |
|---|---|---|---|---|
| **31 December 2016** | | | | |
| **Assets -** | | | | |
| Derivatives: | | | | |
| Cross-currency swaps | $ 285 | $ - - | $ 285 | $ - - |
| Commodities | 4 | 4 | - - | - - |
| Embedded derivatives | 1 | - - | 1 | - - |
| Foreign currency | - - | - - | - - | - - |
| Derivatives used for hedging: | | | | |
| Basis swaps | 21 | - - | 21 | - - |
| Forward exchange contracts | 10 | - - | 10 | - - |
| Forward-starting interest rate swaps | 1 | - - | 1 | - - |
| Fixed-for-floating interest rate swaps | 15 | - - | 15 | - - |
| Commodities | 3 | - - | 3 | - - |
| Non-derivatives: | | | | |
| Available-for-sale securities | 1,073 | 102 | 971 | - - |
| | $ 1,413 | $ 106 | $ 1,307 | $ - - |
| **Liabilities -** | | | | |
| Derivatives: | | | | |
| Commodities | $ 1 | $ 1 | $ - - | $ - - |
| Embedded derivatives | 10 | $ - - | 10 | - - |
| Warrants | - - | - - | - - | - - |
| Written put option | 21 | - - | - - | 21 |
| Foreign currency | 1 | - - | 1 | - - |
| Derivatives used for hedging: | | | | |
| Forward exchange contracts | - - | - - | - - | - - |
| Forward-starting interest rate swaps | 16 | - - | 16 | - - |
| Fixed-for-floating interest rate swaps | 4 | - - | 4 | - - |
| Non-derivatives: | | | | |
| Performance share awards | 41 | 41 | - - | - - |
| | $ 94 | $ 42 | $ 31 | $ 21 |

| Millions of U.S. Dollars | Total | Level 1 | Level 2 | Level 3 |
|---|---|---|---|---|
| **31 December 2015** | | | | |
| **Assets -** | | | | |
| Derivatives: | | | | |
| Cross-currency swaps | $ 300 | $ - - | $ 300 | $ - - |
| Commodities | 8 | 8 | - - | - - |
| Embedded derivatives | 4 | - - | 4 | - - |
| Foreign currency | 1 | - - | 1 | - - |
| Derivatives used for hedging: | | | | |
| Basis swaps | 18 | - - | 18 | - - |
| Forward-starting interest rate swaps | 8 | - - | 8 | - - |
| Fixed-for-floating interest rate swaps | 25 | - - | 25 | - - |
| Non-derivatives: | | | | |
| Available-for-sale securities | 1,064 | 104 | 960 | - - |
| | $ 1,428 | $ 112 | $ 1,316 | $ - - |
| **Liabilities -** | | | | |
| Derivatives: | | | | |
| Commodities | $ 2 | $ - - | $ 2 | $ - - |
| Written put option | 21 | - - | - - | 21 |
| Foreign currency | 3 | - - | 3 | - - |
| Derivatives used for hedging: | | | | |
| Forward exchange contracts | 24 | - - | 24 | - - |
| Forward-starting interest rate swaps | 6 | - - | 6 | - - |
| Non-derivatives: | | | | |
| Performance share awards | 40 | 40 | - - | - - |
| | $ 96 | $ 40 | $ 35 | $ 21 |

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 31 December 2016 and 2015. Short-term and long-term loans receivable, which represent our repurchase agreements, and current and non-current borrowings are recorded at amortized cost in the Consolidated Statement of Financial Position. The carrying and fair value of current and non-current borrowings exclude finance lease liabilities and commercial paper.

| | 31 December 2016 | | | | |
|---|---|---|---|---|---|
| Millions of U.S. Dollars | Carrying Value | Fair Value | Level 1 | Level 2 | Level 3 |
| Non-derivatives: | | | | | |
| Assets: | | | | | |
| Short-term loans receivables | $ 369 | $ 369 | $ - - | $ 369 | $ - - |
| Total | $ 369 | $ 369 | $ - - | $ 369 | $ - - |
| Liabilities | | | | | |
| Current borrowings | $ 90 | $ 98 | $ - - | $ 98 | $ - - |
| Non-current borrowings | 8,473 | 9,192 | - - | 9,192 | - - |
| Total | $ 8,563 | $ 9,290 | $ - - | $ 9,290 | $ - - |

| | 31 December 2015 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Millions of U.S. Dollars** | **Carrying Value** | | **Fair Value** | | **Level 1** | | **Level 2** | | **Level 3** | |
| Non-derivatives: | | | | | | | | | | |
| Assets: | | | | | | | | | | |
| Short-term loans receivables | $ | 289 | $ | 289 | $ | - - | $ | 289 | $ | - - |
| Long-term loans receivables | | 98 | | 98 | | - - | | 98 | | - - |
| Total | $ | 387 | | 387 | $ | - - | $ | 387 | $ | - - |
| Liabilities: | | | | | | | | | | |
| Current borrowings | $ | 26 | $ | 23 | $ | - - | $ | 23 | $ | - - |
| Non-current borrowings | | 7,669 | | 8,032 | | - - | | 8,032 | | - - |
| Total | $ | 7,695 | $ | 8,055 | $ | - - | $ | 8,055 | $ | - - |

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. A detailed description of the valuation techniques used for the above valued level 3 put option can be found in Note 19. There was no change in the value of the put option between 2016 and 2015.

During the years ended 31 December 2016 and 2015, there were no transfers between Level 1, Level 2 and Level 3.

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:

*Basis Swaps*—The fair value of our basis swap contracts is calculated using the present value of future cash flows discounted using observable inputs such as known notional value amounts, yield curves, spot and forward exchange rates as well as discount rates.

*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 and future exchange rates on the valuation date.

*Forward-Starting Interest Rate Swaps*—The fair value of our forward-starting interest rate swaps is calculated using the present value of future cash flows method and based on observable inputs such as benchmark interest rates.

*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 based on observable inputs such as interest rates and market yield curves.

*Commodity and Embedded Derivatives*—The fair values of our commodity derivatives classified as Level 1 and embedded derivatives are measured using closing market prices at the end of the reporting period obtained from the New York Mercantile Exchange and from third-party broker quotes and pricing providers.

The fair value of our commodity swaps classified as Level 2 is determined using a combination of observable and unobservable inputs. The observable inputs consist of future market values of various crude and heavy fuel oils, which are readily available through public data sources. The unobservable input, which is the estimated discount or premium used in the market pricing, is calculated using an internally-developed, multi-linear regression model based on the observable prices of the known components and their relationships to historical prices. A significant change in this unobservable input would not have a material impact on the fair value measurement of our level 2 commodity swaps.

*Foreign Currency Derivatives*—The fair value of our foreign currency derivatives is based on forward market rates.

*Available-for-Sale Securities*—Fair value is calculated using observable market data for similar securities and broker quotes from recognized purveyors of market data or the net asset value for limited partnerships.

Our limited partnership investments are disclosed as Level 1 and Level 2 in the fair value hierarchy. Our level 1 valued fund is actively traded based on the current day published NAV (net asset value). The published NAV represents the exit price for a unit in the fund.

The value of our other two limited partnership funds is based on their monthly published NAV. which is available to market participants. The funds have a 60 and 90 day redemption feature, respectively, whereby the exit price is the NAV 60 or 90 days after the redemption request. The historic 90 day liquidity risk (volatility of the NAV over the maximum redemption period), which is considered to be an unobservable input, has an immaterial impact on the published NAV. Therefore, the funds have been determined to be level 2 in the fair value hierarchy.

*Performance Share Awards*—Fair value is determined using the quoted market price of our stock.

*Short-Term and Long-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 values 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.

## 5 Revenue

| Millions of U.S. Dollars | 2016 | 2015 |
|---|---|---|
| Sale of goods | $ 28,853 | $ 32,531 |
| Rendering of services | 333 | 216 |
| License income | 97 | 87 |
| Total revenue | $ 29,283 | $ 32,834 |

Reference is made to Note 32 Segment Reporting for more information about revenues.

## 6 Expenses by Nature

| Millions of U.S. Dollars | Note | 2016 | 2015 |
|---|---|---|---|
| Change in inventories of finished goods and work in progress | | $ 238 | $ (675) |
| Raw materials and utilities | | 17,663 | 22,002 |
| Employee benefit expense | 7 | 2,239 | 2,205 |
| Depreciation, amortization, and impairment charges | 14/15 | 1,080 | 1,097 |
| Distribution expenses | | 1,278 | 1,244 |
| Other expenses | | 1,131 | 1,153 |
| Total cost of sales, selling costs, and administration expenses | | $ 23,629 | $ 27,026 |

## 7 Employee Benefit Expenses

| Millions of U.S. Dollars | Note | 2016 | 2015 |
|---|---|---|---|
| Wages and salaries | | $ 1,682 | $ 1,643 |
| Social security | | 278 | 267 |
| Share based compensation granted to directors and employees | 8 | 38 | 53 |
| Pension costs – defined benefit obligations | 27 | 103 | 102 |
| Pension costs – defined contribution obligations | | 49 | 43 |
| Other post-employment benefits – defined benefit obligations | 27 | 18 | 20 |
| Other employee benefits | | 71 | 77 |
| Total cost of employee benefits | | $ 2,239 | $ 2,205 |

## 8 Share-Based Compensation Granted to Directors and Employees

We are authorized to grant restricted stock units, stock options, performance share units, and other cash and stock awards under our Long-Term Incentive Plan (“LTIP”). The Compensation Committee determines the recipients of the equity awards, the type of awards, the required performance measures, and the timing and duration of each grant. The maximum number of shares of our common stock reserved for issuance under the LTIP is 22,000,000. As of 31 December 2016, there were 6,487,524 shares remaining available for issuance assuming maximum payout for performance share units (“PSUs”), which can pay out from 0% to 200% of target, as described below. Upon share exercise or payment, shares are issued from our treasury shares.

Total share-based compensation expense and the associated tax benefits are as follows for the years ended 31 December:

| Millions of U.S. Dollars | 2016 | 2015 |
|---|---|---|
| Compensation expense: | | |
| Restricted stock units | $ 10 | $ 11 |
| Stock options | 7 | 6 |
| Qualified performance awards | (3) | 25 |
| Performance share units | 24 | 11 |
| | $ 38 | $ 53 |
| Tax benefit: | | |
| Restricted stock units | $ 4 | $ 4 |
| Stock options | 2 | 2 |
| Qualified performance awards | (1) | 9 |
| Performance share units | 8 | 4 |
| | $ 13 | $ 19 |

*Restricted Stock Unit Awards* (*RSUs*)—RSUs entitle the recipient to be paid out an equal number of shares on the third anniversary of the grant date. 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 Consolidated Statement of Income ratably over the vesting period.

In 2015, 190,399 RSUs were granted to the Chief Executive Officer and three other executive officers. These RSUs vest in annual tranches with 10% vested after one year and an additional 15% vested after two years and the remaining vesting in equal tranches after each of the third, fourth, and fifth years. Compensation cost is recognized using the graded vesting method.

The holders of all RSUs are entitled to dividend equivalents to be settled no later than 15 March, 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 23 for the per share amount of dividend equivalent payments made to the holders of RSUs during 2016 and 2015. Total dividend equivalent payments were $1 million and $2 million for 2016 and 2015, 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 31 December 2016 and 2015 was $79.77 and $83.31, respectively. The total fair value of RSUs vested during 2016 and 2015 was $16 million and $120 million.

The following table summarizes RSU activity for the years ended 31 December:

| | 2016 | | | 2015 | | |
|---|---|---|---|---|---|---|
| | Number of Units (in thousands) | | Weighted Average Grant Date Fair Value (per share) | Number of Units (in thousands) | | Weighted Average Grant Date Fair Value (per share) |
| Outstanding at 1 January | 398 | $ | 65.80 | 1,425 | $ | 24.30 |
| Granted | 128 | | 79.77 | 277 | | 83.31 |
| Vested | (188) | | 51.44 | (1,217) | | 20.35 |
| Forfeited | (43) | | 79.42 | (87) | | 77.49 |
| Outstanding at 31 December | 295 | $ | 79.03 | 398 | $ | 65.80 |

As of 31 December 2016, the unrecognized compensation cost related to RSUs was $11 million, which is expected to be recognized over a weighted average period of two years.

*Stock Options*—Stock options are granted with an exercise price equal to the market price of our shares at the date of grant. The awards generally have a three year vesting period that vests in equal increments on the first, second, and third anniversary of the grant date. The awards have a contractual term of ten years, subject to customary accelerated vesting or forfeiture in the event of certain termination events. The stock options are accounted for as equity awards with compensation cost recognized using the graded vesting method. Outstanding stock options have exercise prices ranging from $12.61 to $113.03.

In 2015, 457,555 stock options were granted to the Chief Executive Officer and three other executive officers. These stock options vest in annual tranches with 10% vested after one year and an additional 15% vested after two years and the remaining vesting in equal tranches after each of the third, fourth, and fifth years.

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 our historical 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).

In 2010, when the majority of our options were granted, we did not possess exercise patterns similar to our situation. The option grants that have been made since 2010 have been limited in number and have occurred during periods of substantial share price volatility. As historical data about employees' exercise behavior is limited, the expected term of all options granted is an estimate based on a weighted average expected option life for the entire participant group. The resulting expected weighted average life of the options granted is the mid-point between the vesting date and the contractual term of the options.

Weighted average fair values of stock options granted in each respective year and the assumptions used in estimating those fair values are as follows:

| | 2016 | 2015 |
|---|---|---|
| Weighted average fair value: | $ 20.39 | $ 22.71 |
| Fair value assumptions: | | |
| Dividend yield | 3.00-4.00% | 3.00% |
| Expected volatility | 35.3-36.0% | 35.9-37.0% |
| Risk-free interest rate | 1.14-1.93% | 1.48-1.93% |
| Weighted average expected term, in years | 6.0 | 6.0-6.7 |

The following table summarizes stock option activity for the years ended 31 December 2016 and 2015 for the non-qualified stock options:

| | Number of Shares (in thousands) | Weighted Average Exercise Price | Weighted Average Remaining Term | Aggregate Intrinsic Value (Millions of Dollars) |
|---|---|---|---|---|
| Outstanding at 1 January 2015 | 4,185 | $ 18.74 | - - | $ - - |
| Granted | 680 | 82.42 | - - | - - |
| Exercised | (3,919) | 16.07 | - - | - - |
| Forfeited | (166) | 87.09 | - - | - - |
| Outstanding at 31 December 2015 | 780 | $ 73.15 | 8.1 years | $ 12 |
| Exercisable at 31 December 2015 | 167 | $ 41.12 | 4.7 years | $ 8 |
| Outstanding at 1 January 2016 | 780 | $ 73.15 | - - | $ - - |
| Granted | 328 | 78.89 | - - | - - |
| Exercised | (81) | 72.61 | - - | - - |
| Forfeited | (91) | 82.18 | - - | - - |
| Expired | (9) | 88.86 | - - | - - |
| Outstanding at 31 December 2016 | 927 | $ 74.19 | 7.6 years | $ 12 |
| Exercisable at 31 December 2016 | 253 | $ 58.29 | 5.2 years | $ 8 |

The range of exercise prices for options outstanding at the end of 31 December 2016 and 2015 was $12.61 to $113.03 and $12.61 to $113.03, respectively.

The aggregate intrinsic value of stock options exercised during the years ended 31 December 2016 and 2015 was $1 million and $280 million, respectively.

As of 31 December 2016, the unrecognized compensation cost related to non-qualified stock options was $6 million, which is expected to be recognized over a one-year period. During 2016, cash received from exercise of stock options was $6 million. There was no tax benefit associated with these exercises.

*Performance Share Units (PSUs)*—Shares issued in satisfaction of PSU awards are granted under our LTIP. The target number of units is established at the beginning of a three-calendar year performance period. Each unit is equivalent to one share of our common stock. The final number of shares payable is determined at the end of the three-calendar year performance period by the Compensation Committee. These share awards are treated as a liability award and compensation expense during the three-calendar year performance period is accrued on a straight-line basis subject to fair value adjustments. These share awards are subject to customary accelerated vesting and forfeiture in the event of certain termination events.

Beginning 1 January 2016, the holders of PSUs are entitled to accrue dividend equivalent units. These dividend equivalent units will be converted to shares upon payment at the end of the three-year performance cycle based on the overall payout percentage as determined by the Compensation Committee. PSUs and associated dividend equivalent units are classified in Accrued and Other liabilities on the Consolidated Balance Sheets. For the fair value of the share awards, see Note 4.

As of 31 December 2016, the unrecognized compensation cost related to PSUs and dividend equivalents assuming target payout was $26 million, which is expected to be recognized over a weighted average period of 2 year(s).

We also recognized compensation expense of $1 million and $10 million in 2016 and 2015, respectively, based on the final determination of payouts related to MTI grants made in 2012 and 2013.

The weighted average grant date fair for QPAs granted during the years ended 31 December 2016 and 2015 was $77.93 and $89.94, respectively. The total fair value of QPAs vested during 2016 and 2015 was $20 million and $33 million, respectively.

*Employee Stock Purchase Plan*

We have an Employee Share Purchase Plan (“ESPP”) which includes a 10% discount and look-back provision. These provisions allow participants to purchase our stock at a discount on the lower of the fair market value at the beginning or end of the purchase period. As a result of the 10% discount and the look-back provision, the ESPP is considered a compensatory plan under generally accepted accounting principles.

## 9 Remuneration of the Management Board and Supervisory Board Members

*Management Board Remuneration*

Management Board members receive base salaries, annual bonuses, and grants of share-based awards under the Company's Long Term Incentive Plan. The share-based awards include stock options, restricted stock units (RSUs) and performance share units (PSUs). The amounts in the table for share-based awards represent the grant date value of the awards that were granted in the applicable year. These amounts are recognized by the Company over the periods in which the awards are earned. Information on these awards can be found in Note 8, Share-Based Compensation Granted to Directors and Employees.

| Thousands U.S. Dollars | Base Salary | RSUs and PSUs (2) | Stock Option Awards | Annual Bonus Payments (3) | Change in Pension Value (4) | All Other Compensation (5) | Total (1) |
|---|---|---|---|---|---|---|---|
| **2016** | | | | | | | |
| Bhavesh (Bob) V. Patel | $ 1,342 | $ 6,094 | $ 2,031 | $ 2,974 | $ 9 | $ 168 | $ 12,618 |
| Thomas Aebischer | 725 | 2,531 | 1,144 | 833 | - - | 43 | 5,276 |
| Kevin W. Brown[A] | 580 | 908 | 303 | 370 | 13 | 52 | 2,226 |
| Daniel Coombs | 590 | 990 | 330 | 786 | 13 | 52 | 2,761 |
| James Guilfoyle | 343 | 342 | 114 | 298 | 21 | 28 | 1,146 |
| Jeffrey A. Kaplan | 503 | 764 | 255 | 440 | 8 | 44 | 2,014 |
| Timothy D. Roberts[B] | 81 | - - | - - | - - | 11 | 712 | 804 |
| **2015** | | | | | | | |
| Bhavesh (Bob) V. Patel | $ 1,218 | $ 12,356 | $ 6,518 | $ 3,900 | $ 13 | $ 467 | $ 24,472 |
| James L. Gallogly | 70 | - - | - - | 127 | 5 | 680 | 882 |
| Karyn F. Ovelmen | 327 | - - | - - | 371 | 7 | 834 | 1,539 |
| Craig B. Glidden | 115 | 3,000 | 2,000 | 137 | 6 | 111 | 5,369 |
| Timothy D. Roberts | 693 | 4,755 | 2,785 | 935 | 14 | 26 | 9,208 |
| Patrick D. Quarles | 216 | 788 | 263 | - - | - - | 52 | 1,319 |
| Kevin W. Brown | 547 | 2,025 | 1,075 | 801 | 15 | 47 | 4,510 |
| Jeffrey A. Kaplan | 456 | 688 | 229 | 739 | 13 | 40 | 2,165 |

[A] Announced departure on 18 January 2017 with final departure on 17 February 2017
[B] Announced departure on 14 January 2016 with final departure on 8 February 2016

(1) Information is based on full year compensation. Total expense recognized in the Consolidated Financial Statements was $24.7 million and $31.7 million in 2016 and 2015, respectively.

(2) The 2016 amounts in above table exclude dividend equivalent units that were earned on the PSUs valued at the following amounts: Mr. Patel, $163,887; Mr. Aebischer, $44,031; Mr. Brown, $24,470; Mr. Coombs, $26,730; Mr. Guilfoyle, $9,274; and Mr. Kaplan, $20,729.

(3) Amounts of Annual bonuses payments in 2016 are the bonuses earned for performance in 2016 that paid out in March 2017. The amounts of Annual bonuses for 2015 are the bonuses earned for 2015 performance but paid in 2016.

For 2016 performance, the annual bonuses payouts were based on corporate wide results (50%) and business unit/service function results (50%). The corporate wide results are based on (i) health, safety and environmental performance; (ii) business results (earnings before interest, taxes, depreciation and amortization); and (iii) cost discipline. The business unit/service function results are based on these same factors, as well as internal customer satisfaction surveys for service functions, such as Finance, Legal and IT. Finally, the annual bonuses were multiplied by a personal performance factor ranging from 0 to 1.5 to account whether the individual met his or her qualitative goals for the year. For 2016 performance, the corporate wide results paid out at 100% of target. The payout for the business unit/service functions for which members of the Management Board were responsible and the personal performance factors for each member of the Management Board were as follows:

| | Business Unit/Service Function Payout as a % of Target | Personal Performance Factor |
|---|---|---|
| Mr. Patel | 105% | 1.4 |
| Mr. Aebischer | 108% | 1.3 |
| Mr. Brown | 99% | 0.8 |
| Mr. Coombs | 109% | 1.5 |
| Mr. Guilfoyle | 106% | 1.3 |
| Mr. Kaplan | 112% | 1.1 |

(4) Amounts include increases during 2016 in the actuarial present values of benefits under the LyondellBasell Retirement Plan. The increases are calculated based on the difference between the total benefit actuarially reduced from age 65 to current age and the present value of the benefits under the plan.

(5) Amounts included in "All Other Compensation" for 2016 in the table above include Company contributions to the defined contribution plans; matching contributions under the Company's Deferral Plan; executive physicals; payment of professional fees for tax filings; payment of business club membership and dues; and financial planning allowances. Items that exceed the greater of $25K or 10% of the total amount of perquisites include matching contributions under the Deferral Plan in the following amounts: Mr. Patel, $118,451; Mr. Brown, $34,683; Mr. Coombs, $35,792; and Mr. Kaplan, $26,160 and severance payments pursuant to the Company's Executive Severance Program of $700,000 to Mr. Roberts.

The following table shows the Management Boards' equity compensation activity during 2016:

| | Stock Options [(1)] | Restricted Stock Units (RSUs) [(2)] | Performance Share Units (PSUs) [(3)] |
|---|---|---|---|
| Bhavesh V. Patel | | | |
| Outstanding at 1 January 2016 | 299,687 | 114,536 | 41,717 |
| Granted | 101,108 | 26,066 | 54,234 |
| Vested/Exercised | - - | (9,456) | (3,497) |
| Outstanding at 31 December 2016 | 400,795 | 131,146 | 92,454 |
| Thomas Aebischer | | | |
| Granted | 53,108 | 17,335 | 14,520 |
| Outstanding at 31 December 2016 | 53,108 | 17,335 | 14,520 |
| Kevin W. Brown[A] | | | |
| Outstanding at 1 January 2016 | 46,695 | 17,804 | 8,998 |
| Granted | 15,058 | 3,882 | 8,078 |
| Vested/Exercised | - - | (1,475) | (2,882) |
| Outstanding at 31 December 2016 | 61,753 | 20,211 | 14,194 |
| Daniel Coombs | | | |
| Outstanding at 1 January 2016 | 4,871 | 1,287 | 2,573 |
| Granted | 16,427 | 4,235 | 8,813 |
| Outstanding at 31 December 2016 | 21,298 | 5,522 | 11,386 |
| James Guilfoyle | | | |
| Outstanding at 1 January 2016 | 5,284 | 2,785 | 1,501 |
| Granted | 5,667 | 1,461 | 3,041 |
| Vested/Exercised | - - | (1,004) | (661) |
| Outstanding at 31 December 2016 | 10,951 | 3,242 | 3,881 |
| Jeffrey A. Kaplan | | | |
| Outstanding at 1 January 2016 | 9,875 | 2,450 | 5,731 |
| Granted | 12,675 | 3,268 | 6,801 |
| Vested/Exercised | - - | - - | (831) |
| Outstanding at 31 December 2016 | 22,550 | 5,718 | 11,701 |
| Timothy D. Roberts[B] | | | |
| Outstanding at 1 January 2016 | 133,238 | 62,644 | 14,681 |
| Forfeited | (68,740) | (31,581) | (6,931) |
| Vested/Exercised | (64,498) | (31,063) | (4,420) |
| Outstanding at 31 December 2016 | - - | - - | 3,330 |

[A] Announced departure on 18 January 2017 with final departure on 17 February 2017

[B] Announced departure on 14 January 2016 with final departure on 8 February 2016

(1) Information about stock options outstanding and activity related to stock options in 2016 is as follows:

- Mr. Patel did not exercise any options in 2016. Of the 400,795 options outstanding, 47,723 were vested as of 31 December 2016. 806 unvested options with an exercise price of $85.80 expire 20 February 2024 (806 vest 20 February 2017). 204,352 unvested options with an exercise price of $76.15 expire 12 January 2025 (34,059 vest 12 January 2017, 56,765 vest 12 January 2018, and 56,764 vest on each of 12 January 2019 and January 2020). 46,806 unvested options with an exercise price of $89.94 expire 17 February 2025 (23,403 vest on each of 17 February 2017 and 2018). 101,108 unvested options with an exercise price of $77.93 expire 16 February 2026 (33,703 vest on each of 16 February 2017 and 2018, and 33,702 vest 16 February 2019).

- Mr. Aebischer did not exercise any options in 2016. Of the 53,108 options outstanding, zero were vested as of 31 December 2016. 26,042 unvested options with an exercise price of $86.90 expire 1 January 2026 (8,682 vest 1 January 2017, 8,680 vest on each of 1 January 2018 and 2019). 27,066 unvested options with an exercise price of $77.93 expire 16 February 2026 (9,022 vest on each of 16 February 2017, 2018, and 2019).

- Mr. Brown did not exercise any options in 2016. Of the 61,753 options outstanding, 7,293 were vested as of 31 December 2016. The options outstanding at 31 December 2016 vest as follows: 5,319 vest 21 January 2017, 5,020 vest 16 February 2017, and 25,923 vest 17 February 2017. All of his vested options will expire on 18 May 2017. Mr. Brown forfeited 18,198 stock options on 17 February 2017 pursuant to the terms of the awards agreement when he left the Company.

- Mr. Coombs did not exercise any options in 2016. Of the 21,298 options outstanding, 1,625 were vested as of 31 December 2016. 3,246 unvested options with an exercise price of $101.10 expire 29 May 2025 (1,623 vest on each of 29 May 2017 and 2018). 16,427 unvested options with an exercise price of $77.93 expire 16 February 2026 (5,477 vest 16 February 2017, and 5,475 vest on each of 16 February 2018 and 2019).

- Mr. Guilfoyle did not exercise any options in 2016. Of the 10,951 options outstanding, 3,948 were vested as of 31 December 2016. 304 unvested options with an exercise price of $85.80 expire 20 February 2024 (304 vest 20 February 2017). 802 unvested options with an exercise price of $89.94 expire 17 February 2025 (401 vest on each of 17 February 2017 and 2018). 230 unvested options with an exercise price of $101.43 expire 1 June 2025 (115 vest on each of 1 June 2017 and 2018). 5,667 unvested options with an exercise price of $77.93 expire 16 February 2026 (1,889 vest on each of 16 February 2017, 2018, and 2019).

- Mr. Kaplan did not exercise any options in 2016. Of the 22,550 options outstanding, 3,835 were vested as of 31 December 2016. 4,136 unvested options with an exercise price of $89.94 expire 17 February 2025 (2,068 vest on each of 17 February 2017 and 2018). 1,904 unvested options with an exercise price of $101.79 expire 7 May 2025 (952 vest on each of 7 May 2017 and 2018). 12,675 unvested options with an exercise price of $77.93 expire 16 February 2026 (4,225 vest on each of 16 February 2017, 2018, and 2019).

- Mr. Roberts exercised 64,498 stock options during the year in four separate transactions as follows: 5,485 exercised at a fair market value of $86.20; 44,255 exercised at a fair market value of $86.20; 4,781 exercised at a fair market value of $91.00; and 9,977 exercised at a fair market value of $91.00. A total of 68,740 options were forfeited and there are no remaining outstanding options.

(2) The vesting dates of the RSUs are as follows:

- Mr. Patel - 14,183 vest 12 January 2017; 875 vest 20 February 2017; 23,638 vest 12 January 2018; 19,110 vest 17 February 2018; 23,637 vest 12 January 2019; 26,066 vest 16 February 2019; 23,637 vest 12 January 2020

- Mr. Aebischer - 3,453 vest 1 January 2017; 3,452 vest on each of 1 January 2018 and 2019; 6,978 vest 16 February 2019

- Mr. Brown - 2,212 vest 21 January 2017 and 9,785 vest 17 February 2017. Kevin W. Brown will forfeit 8,214 RSUs pursuant to the terms of the award agreement when he leaves the Company.

- Mr. Coombs - 1,287 vest 29 May 2018; 4,235 vest 16 February 2019

- Mr. Guilfoyle - 331 vest 20 February 2017; 584 vest 28 February 2017; 446 vest 12 February 2018; 328 vest 17 February 2018; 92 vest 1 June 2018; 1,461 vest 16 February 2019

- Mr. Kaplan - 1,689 vest 17 February 2018; 761 vest 7 May 2018; 3,268 vest 16 February 2019

(3) The PSUs outstanding as of January 1, 2016 include the PSUs awarded in 2014 and 2015 with performance periods ending December 31, 2016 and 2017, respectively. The PSUs granted in 2016 include the dividend equivalent units, in the form of additional PSUs. The PSUs that vested in 2016 are the number of PSUs at target. Those PSUs earned 130% of target and in the first quarter of 2017, additional shares were issued to Mr. Patel, Mr. Brown, Mr. Guilfoyle, Mr. Kaplan and Mr. Roberts in payment of the units earned in excess of target.

Additionally, in the first quarter of 2016, members of the Management Board were issued shares in payment of units earned in excess of target for the QPAs with a performance period ended December 31, 2015. The additional shares that were issued in 2016 in payment of the QPAs earned above target were as follows: Mr. Patel – 2,506; Mr. Brown – 3,734; Mr. Guilfoyle – 848; and Mr. Roberts – 2,610.

*Supervisory Board Pay*—Our Supervisory Directors receive cash compensation and equity compensation, in the form of restricted stock units, for their service on the Supervisory Board and its committees. Additionally, beginning in 2016, Supervisory Directors can elect to receive the cash component of their compensation in Company shares. The 2016 compensation of our Supervisory Directors is shown in "Supervisory Director Compensation" table below.

| | |
|---|---|
| **Annual retainer:** | |
| Cash | $115,000 ($215,000 for Chairman of the Board) |
| Restricted stock units | Valued at $170,000 ($310,000 for Chairman of the Board) |
| | |
| **Committee retainer:** | |
| Members | $10,000 ($15,000 for Audit Committee) |
| Chairs | $20,000 ($27,500 for Audit and Compensation Chair) |
| | |
| **Travel fees** | $5,000 for each intercontinental round trip |

Actual amounts earned by or paid to Supervisory Directors in 2016 and 2015 are in the following table below:

| | 2016 | | | | 2015 | | | |
|---|---|---|---|---|---|---|---|---|
| Thousands of U.S. Dollars | Fees Earned or Paid in Cash (1) | Stock Awards (2) | All Other Compen-sation (3) | Total | Fees Earned or Paid in Cash (1) | Stock Awards (2) | All Other Compen-sation (3) | Total |
| Robert G. Gwin | | | | | | | | |
| *Chairman of the Board* | $ 215 | $ 310 | $ 27 | $ 552 | $ 240 | $ 310 | $ 27 | $ 577 |
| Jacques Aigrain | 154 | 170 | 11 | 335 | 158 | 170 | 10 | 338 |
| Lincoln Benet | 138 | 170 | - - | 308 | 68 | 155 | 5 | 228 |
| Jagjeet S. Bindra | 146 | 170 | 34 | 350 | 145 | 170 | 33 | 348 |
| Robin W. T. Buchanan | - - | 301 | - - | 301 | 118 | 170 | - - | 288 |
| Stephen F. Cooper | 125 | 170 | 23 | 318 | 118 | 170 | 27 | 315 |
| Nance K. Dicciani | - - | 331 | 2 | 333 | 140 | 170 | 27 | 337 |
| Claire S. Farley | 143 | 170 | 27 | 340 | 132 | 170 | 23 | 325 |
| Bella D. Goren | 140 | 170 | 27 | 337 | 140 | 170 | 28 | 338 |
| Bruce A. Smith | - - | 333 | 2 | 335 | 149 | 170 | 18 | 337 |
| Rudy M. J. van der Meer | 139 | 170 | 2 | 311 | 145 | 170 | 7 | 322 |
| *Former Supervisory Directors* | | | | | | | | |
| Milton Carroll (4) | 69 | 170 | 4 | 243 | 135 | 170 | 12 | 317 |

(1) Includes retainers for services earned or paid through December 31, 2016. Messrs. Buchanan, Smith and Ms. Dicciani each elected to receive their cash compensation in the form of shares of our stock.

(2) Represents restricted stock units, or RSUs, for all Supervisory Directors and shares of stock issued in lieu of cash compensation for Messrs. Buchanan, Smith and Ms. Dicciani. The annual grants of RSUs are made in conjunction with the regularly scheduled May Supervisory Board meeting. The terms of the RSUs provide for dividend equivalent payments when dividends are paid on the Company's shares. In 2016, the annual grant for each director was 2,093 units, other than Mr. Gwin, who received 3,816 units. These awards are the only stock awards outstanding at 2016 fiscal year-end for the Supervisory Directors. The shares received in lieu of cash compensation are issued at the same time quarterly cash payments are otherwise made to Supervisory Directors. The number of shares issued is based on the average of the closing prices of the Company's shares over the quarter in which the compensation was earned. The shares issued in lieu of cash compensation were as follows: Mr. Buchanan – 1,627 shares; Mr. Smith – 2,028 shares; and Ms. Dicciani – 2,003 shares.

(3) Includes $5,000 for each intercontinental trip taken for work performed for the Company. Also includes benefits in kind related to tax preparation and advice related to the Supervisory Directors' UK and Dutch tax returns and payments. The Company provides these services, through a third party, to the Supervisory Directors because of our unique incorporation and tax domicile situation.

(4) Mr. Carroll retired in July 2016. Pursuant to the terms of his RSU award, he vested pro-rata based on his days of service during the year.

## 10 Other (Income) Expense, Net

| Millions of U.S. Dollars | 2016 | 2015 |
|---|---|---|
| (Gains)/losses on financial derivatives | $ 15 | $ (262) |
| (Gains)/losses on foreign exchange | (12) | (34) |
| (Gains)/losses on sale of investment | (88) | - |
| Other | (30) | (42) |
| Other (income) expense, net | $ (115) | $ (338) |

*(Gains)/losses on financial derivatives*—The amounts reported as losses on financial derivatives in 2016 and gain in 2015 are related to our cross-currency swaps.

*(Gains)/losses on sale of investments*—Upon the sale of our wholly owned subsidiary, Petroken Petroquimica Ensenada S.A. in February 2016, we received net proceeds of $137 million, which is reflected in Cash flows from investing activities in the Consolidated Statement of Cash Flows. In connection with the sale, we recognized a pretax and after tax gain of $82 million, which is reflected in Other Income.

Upon the sale of our ownership interest in SunAllomer Ltd., our joint venture in Japan in September 2016, we received proceeds of $72 million, which is reflected in Cash flows from investing activities in the Consolidated Statement of Cash Flows. In connection with the sale, we recognized a pretax and after tax gain of $6 million, which is reflected in Other Income.

## 11 Finance Costs

| Millions of U.S. Dollars | 2016 | 2015 |
|---|---|---|
| Interest expense on borrowings | $ 317 | $ 303 |
| Provisions for unwinding of discount | 2 | 2 |
| Foreign exchange (gain) loss from borrowings and cash | 83 | 251 |
| Other | 3 | 4 |
| Total finance costs | $ 405 | $ 560 |

## 12 Income Tax Expense

LyondellBasell N.V. is a tax resident in the United Kingdom pursuant to a mutual agreement procedure determination ruling between the Dutch and United Kingdom competent authorities and therefore subject solely to the United Kingdom corporate income tax system.

Through our subsidiaries, we 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, France, 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.

We monitor income tax developments (including, for example, the European Union's state aid investigations) in countries where we conduct business. In September 2016, the UK enacted provisions (the so called "anti-hybrid provisions"), effective for years beginning January 1, 2017, that will impact our internal financing structure. In addition, in October 2016 the U.S. Treasury issued final Section 385 debt-equity regulations that may also impact our internal financings. Recently, there has been an increase in attention, both in the U.K. and globally, to the tax practices of multinational companies, including proposals by the Organization for Economic Cooperation and Development ("OECD") with respect to base erosion and profit shifting. Such attention may result in legislative changes that could affect our tax rate. Management does not believe that recent changes in income tax laws will have a material impact on our Consolidated Financial Statements, although new or proposed changes to tax laws could affect our tax liabilities in the future.

| **Millions of U.S. Dollars** | **Note** | **2016** | **2015** |
|---|---|---|---|
| Current tax on profits for the year | | $ 1,042 | $ 1,552 |
| Deferred tax - origination and reversal of temporary difference | 26 | 430 | 126 |
| Deferred tax - prior year adjustment | | 13 | -- |
| Income tax expense | | $ 1,485 | $ 1,678 |

The tax on LyondellBasell N.V.'s profit before tax differs from the theoretical amount that would arise using the weighted average tax rate applicable to profits of the consolidated entities as follows:

| **Millions of U.S. Dollars** | **2016** | **2015** |
|---|---|---|
| Profit before tax | $ 5,678 | $ 5,887 |
| | | |
| Tax calculated at domestic tax rates applicable to profits in the respective countries | 1,802 | 1,919 |
| Tax effects of: | | |
| Exempt income | (292) | (270) |
| Notional royalties | | |
| U.S. manufacturing deduction | (41) | (88) |
| Uncertain tax positions | | |
| Warrants and stock compensation | | |
| Other | 16 | 117 |
| Tax charge | $ 1,485 | $ 1,678 |

The weighted average applicable tax rates for 2016 and 2015 were 31.7% and 32.6%, respectively. The decrease was primarily attributable to a change in the geographic mix of income. Our effective income tax rate of 26.2% in 2016 and 28.5% in 2015 resulted in tax provisions of $1,485 million and $1,678 million, respectively. Compared to 2015, the 2016 effective income tax rate decreased primarily due to a change in the geographic mix of earnings, increased foreign exchange losses, and tax exempt income partially offset by a reduction in the U.S. domestic production activity deduction.

Current and deferred taxes related to items charged or (credited) directly to other comprehensive income during the period are as follows:

| Millions of U.S. Dollars | 2016 | 2015 |
|---|---|---|
| Current tax: | | |
| Currency translation differences | $ (7) | $ (5) |
| Deferred tax: | | |
| Retirement benefit obligation | (28) | 7 |
| Derivatives | (1) | 6 |
| Other | 1 | (1) |
| | $ (35) | $ 7 |

Current and deferred taxes credited directly to equity are as follows:

| Millions of U.S. Dollars | Note | 2016 | 2015 |
|---|---|---|---|
| Current tax | | | |
| Share base payments | | $ (2) | $ (111) |
| Settlement from partner on exit from partnership | | - - | 10 |
| Deferred tax: | | | |
| Share base payments | 26 | 1 | 99 |
| Share base payments - prior year adjustment | | (13) | - - |
| Settlement from partner on exit from partnership | | - - | 2 |
| | | $ (14) | $ - - |

## 13 Earnings Per Share

*Basic earnings per share*—Basic earnings per share is calculated by dividing the profit attributable to equity holders of the Company by the weighted average number of ordinary shares in issue during the period excluding ordinary shares purchased by the Company and held as treasury shares. The Company has unvested restricted stock units that are considered participating securities for earnings per share.

| Millions, except per share data | 2016 | 2015 |
|---|---|---|
| Profit attributable to LyondellBasell N.V. | $ 4,192 | $ 4,211 |
| Profit attributable to participating securities | (4) | (8) |
| Profit attributable to equity holders of the Company | 4,188 | 4,203 |
| Basic weighted average common stock outstanding | 419 | 465 |
| Basic earnings per share | $ 9.99 | $ 9.05 |

*Diluted earnings per share*—Diluted earnings per share is calculated by adjusting the weighted average number of ordinary shares outstanding to assume conversion of all dilutive potential ordinary shares.

| Millions, except per share data | 2016 | 2015 |
|---|---|---|
| Profit attributable to LyondellBasell N.V. | $ 4,192 | $ 4,211 |
| Profit attributable to participating securities | (4) | (8) |
| Profit attributable to equity holders of the Company | 4,188 | 4,203 |
| Basic weighted average common stock outstanding | 419 | 465 |
| Effect of dilutive securities: | | |
| MTI QPA and PSU awards | 1 | 1 |
| Dilutive potential shares | 420 | 466 |
| Diluted earnings per share | $ 9.97 | $ 9.02 |
| Participating securities | 0.4 | 0.4 |
| Interim dividend per share of common stock | $ 3.33 | $ 3.04 |

## 14 Intangible Assets

| Millions of U.S. Dollars | Capitalized Development Projects | Goodwill | Emission Allowances | Favorable Contracts and Other Intangibles | Total |
|---|---|---|---|---|---|
| **Balance at 1 January 2015** | $ 106 | $ 343 | $ 400 | $ 296 | $ 1,145 |
| Additions | 4 | - - | 26 | - - | 30 |
| Amortization | (9) | - - | (97) | (39) | (145) |
| Exchange differences | (11) | (8) | (1) | (7) | (27) |
| **At 31 December 2015** | $ 90 | $ 335 | $ 328 | $ 250 | $ 1,003 |
| | | | | | |
| **At 31 December 2015** | | | | | |
| Cost | $ 141 | $ 335 | $ 687 | $ 608 | $ 1,771 |
| Accumulated amortization and impairment | (51) | - - | (359) | (358) | (768) |
| **Closing balance** | $ 90 | $ 335 | $ 328 | $ 250 | $ 1,003 |
| | | | | | |
| **Balance at 1 January 2016** | $ 90 | $ 335 | $ 328 | $ 250 | $ 1,003 |
| Additions | 8 | - - | 17 | 4 | 29 |
| Retirements | - - | - - | (6) | - - | (6) |
| Transfers | - - | - - | (1) | 1 | - - |
| Amortization | (9) | - - | (62) | (34) | (105) |
| Exchange differences | (2) | (2) | - - | 1 | (3) |
| **At 31 December 2016** | $ 87 | $ 333 | $ 276 | $ 222 | $ 918 |
| | | | | | |
| **At 31 December 2016** | | | | | |
| Cost | $ 145 | $ 333 | $ 697 | $ 592 | $ 1,767 |
| Accumulated amortization and impairment | (58) | - - | (421) | (370) | (849) |
| **Closing balance** | $ 87 | $ 333 | $ 276 | $ 222 | $ 918 |

*Research and development*—Amortization expense is generally recorded as part of Cost of sales. Research and development expenditures recognized as expense for 2016 and 2015 were $83 million and $85 million, respectively.

*Goodwill*—Goodwill is allocated and monitored by management into the following groups of cash generating units ("CGU"):

| Millions of U.S. Dollars | 2016 | 2015 |
|---|---|---|
| Intermediates and Derivatives | $ 178 | $ 180 |
| Olefins and Polyolefins - Americas | 131 | 131 |
| Olefins and Polyolefins - Europe, Asia, International | 16 | 16 |
| Technology | 8 | 8 |
| Total | $ 333 | $ 335 |

The recoverable amount of a CGU is determined based on value-in-use calculations. These calculations use pre-tax cash flow projections based on management approved financial budgets covering a five-year period. Cash flows beyond the five-year period are extrapolated using the estimated growth rates described in the "Growth rate estimates" section below. Based on this analysis, the recoverable amounts of each of our cash generating units or groups of cash generating units were substantially in excess of their carrying value. Accordingly, no goodwill impairment was recognized in 2016 or 2015.

The calculation of value is most sensitive to the following assumptions:

- Gross margin
- Pre-tax discount rates
- Market share assumptions; and
- Growth rate used to extrapolate cash flows beyond the budget period

*Gross margins*—Gross margins are predicted in the planning period by using key hydrocarbon pricing estimates and product variable margins based on macroeconomic predictions and individual supply and demand balances.

*Pre-tax discount rates*—Pre-tax discount rates ("discount rates") represent the current market assessment of the risks specific to each cash generating unit, regarding the time value of money and individual risks of the underlying assets which have not been incorporated in the cash flow estimates. The discount rate calculation is based on the nature of the assets and activities of the Company's business and its operating segments and derived from its weighted average cost of capital ("WACC"). The WACC takes into account both debt and equity. The cost of equity is derived from the expected return on investment by the nature of the Company's assets and activities.

*Market share assumptions*—These assumptions are based on forecasts of demand for our products taking into consideration changes in global capacity.

*Growth rate estimates*—Rates are based upon managements' best estimates which are determined using published third party sources, internal knowledge and market insights based on macroeconomic predictions

With regard to the assessment of value in use, management believes that no reasonably possible change in any of the above key assumptions would cause the carrying value to materially exceed its recoverable amount.

The key assumptions used for value-in-use calculations are as follows:

| | 2016 | | 2015 | |
|---|---|---|---|---|
| | **Pre-tax Discount Rate** | **Growth Rate** | **Pre-tax Discount Rate** | **Growth Rate** |
| Intermediates and Derivatives | 12% | 2% | 11% | 2% |
| Olefins and Polyolefins - Americas | 13% | 2% | 15% | 2% |
| Olefins and Polyolefins - EAI | 17% | 2% | 19% | 2% |
| Technology | 18% | 3% | 20% | 3% |

## 15 Property, Plant and Equipment

| Millions of U.S. Dollars | Land | Building and Equipment | Assets Under Construction | Joint Operations | Other | Total |
|---|---|---|---|---|---|---|
| **Balance at 1 January 2015** | $ 297 | $ 7,601 | $ 1,143 | $ 429 | $ - - | $ 9,470 |
| Additions | 4 | 17 | 1,439 | 16 | - - | 1,476 |
| Transfers | - - | 1,243 | (1,275) | - - | - - | (32) |
| Disposals | - - | (18) | - - | (6) | - - | (24) |
| Depreciation | - - | (896) | - - | (56) | - - | (952) |
| Exchange differences | (18) | (249) | (35) | (27) | - - | (329) |
| Other changes | - - | 57 | - - | - - | - - | 57 |
| **At 31 December 2015** | $ 283 | $ 7,755 | $ 1,272 | $ 356 | $ - - | $ 9,666 |
| | | | | | | |
| **At 31 December 2015** | | | | | | |
| Cost | $ 283 | $ 11,686 | $ 1,335 | $ 631 | $ - - | $ 13,935 |
| Accumulated amortization and impairment | - - | (3,931) | (63) | (275) | - - | (4,269) |
| **Closing balance** | $ 283 | $ 7,755 | $ 1,272 | $ 356 | $ - - | $ 9,666 |
| | | | | | | |
| **Balance at 1 January 2016** | $ 283 | $ 7,755 | $ 1,272 | $ 356 | $ - - | $ 9,666 |
| Additions | - - | 77 | 2,283 | - - | - - | 2,360 |
| Transfers | - - | 2,450 | (2,459) | 9 | - - | - - |
| Disposals | - - | (120) | (1) | - - | - - | (121) |
| Depreciation | - - | (964) | - - | (8) | - - | (972) |
| Impairment | - - | (3) | - - | - - | - - | (3) |
| Exchange differences | (5) | (71) | (12) | (3) | - - | (91) |
| **At 31 December 2016** | $ 278 | $ 9,124 | $ 1,083 | $ 354 | $ - - | $ 10,839 |
| | | | | | | |
| **At 31 December 2016** | | | | | | |
| Cost | $ 278 | $ 14,022 | $ 1,146 | $ 637 | $ - - | $ 16,083 |
| Accumulated amortization and impairment | - - | (4,898) | (63) | (283) | - - | (5,244) |
| **Closing balance** | $ 278 | $ 9,124 | $ 1,083 | $ 354 | $ - - | $ 10,839 |

Depreciation, amortization and impairment charges are recognized in Cost of sales, Selling costs and Administrative expenses as indicated in the following table:

| Millions of U.S. Dollars | 2016 | 2015 |
|---|---|---|
| Cost of sales | $ 1,064 | $ 1,083 |
| Selling costs | 1 | 1 |
| Administrative expenses | 15 | 13 |
| Total | $ 1,080 | $ 1,097 |

## 16 Investments in Associates and Joint Ventures

The Company does not have any joint ventures or associates that are considered individually material. None of the associates and joint ventures is listed on a stock exchange.

Summarized aggregate financial information of the joint ventures and associates are shown below.

The amounts recognized on our Consolidated Statement of Financial Position are as follows:

| | 31 December | |
|---|---|---|
| **Millions of U.S. Dollars** | **2016** | **2015** |
| Associates | $ 353 | $ 502 |
| Joint ventures | 939 | 832 |
| | $ 1,292 | $ 1,334 |

The amounts recognized on our Consolidated Statement of Income are as follows:

| | 31 December | |
|---|---|---|
| **Millions of U.S. Dollars** | **2016** | **2015** |
| Associates | $ 54 | $ 124 |
| Joint ventures | 243 | 145 |
| | $ 297 | $ 269 |

### Associates

The changes in our Associates investments are as follows:

| | 31 December | |
|---|---|---|
| **Millions of U.S. Dollars** | **2016** | **2015** |
| Opening balance | $ 502 | $ 535 |
| Transfers | (142) | - - |
| Share in profit of associates, net of tax | 54 | 124 |
| Dividends received | (66) | (91) |
| Divestitures | - - | (16) |
| Currency exchange differences | 7 | (48) |
| Other | (2) | (2) |
| Closing balance | $ 353 | $ 502 |

Currency exchange differences are reported in the Consolidated Statement of Other Comprehensive Income within Currency translation of foreign operations.

### Joint Ventures

The changes in our Joint Venture investments are as follows:

| Millions of U.S. Dollars | 31 December 2016 | 31 December 2015 |
|---|---|---|
| Opening balance | $ 832 | $ 817 |
| Transfers | 142 | - - |
| Share in profit of joint ventures, net of tax | 243 | 145 |
| Dividends received | (319) | (119) |
| Sale of ownership interest in SunAllomer Ltd. | (58) | - - |
| Purchase of additional ownership interest in Polymirae Co. Ltd. | 38 | - - |
| Capital repayment | (9) | - - |
| Currency exchange differences | 2 | 2 |
| Other | 68 | (13) |
| Closing balance | $ 939 | $ 832 |

In September 2016, we received proceeds of $72 million from the sale of our ownership interest in SunAllomer Ltd., our joint venture in Japan. Also in September 2016, we purchased a net additional 7.41% interest in Polymirae Co. Ltd., our joint venture in Korea, for $36 million.

Currency exchange differences are reported in the Consolidated Statement of Other Comprehensive Income within Currency translation of foreign operations.

### Principal Subsidiaries

Information about principal subsidiaries at 31 December 2016 is set out in Appendix A.

## 17 Financial Assets and Liabilities by Category

| | 2016 | | | | 2015 | | | |
|---|---|---|---|---|---|---|---|---|
| Millions of U.S. Dollars | Financial assets at amortized cost | Assets Held at Fair Value | Derivatives Used for Hedging | Total | Financial assets at amortized cost | Assets Held at Fair Value | Derivatives Used for Hedging | Total |
| **Financial assets at 31 December** | | | | | | | | |
| Trade and other receivables, excluding prepayments | $ 3,569 | $ - - | $ - - | $ 3,569 | $ 3,246 | $ - - | $ - - | $ 3,246 |
| Derivative financial instruments | - - | 303 | 37 | 340 | - - | 313 | 51 | 364 |
| Held to maturity investments | 74 | - - | - - | 74 | - - | - - | - - | - - |
| Available for sale investments | - - | 1,073 | - - | 1,073 | - - | 1,064 | - - | 1,064 |
| Cash and cash equivalents | 946 | - - | - - | 946 | 995 | - - | - - | 995 |
| Total | $ 4,589 | $ 1,376 | $ 37 | $ 6,002 | $ 4,241 | $ 1,377 | $ 51 | $ 5,669 |

| | 2016 | | | 2015 | | |
|---|---|---|---|---|---|---|
| | Other Financial Liabilities at Amortized Cost | Liabilities at Fair Value through Profit and Loss | Total | Other Financial Liabilities at Amortized Cost | Liabilities at Fair Value through Profit and Loss | Total |
| **Financial liabilities at 31 December** | | | | | | |
| Borrowings | $ 9,089 | $ - - | $ 9,089 | $ 8,136 | $ - - | $ 8,136 |
| Derivative financial instruments | - - | 53 | 53 | - - | 56 | 56 |
| Trade and other payables | 3,460 | 41 | 3,501 | 3,480 | 40 | 3,520 |
| Total | $ 12,549 | $ 94 | $ 12,643 | $ 11,616 | $ 96 | $ 11,712 |

## 18 Credit Quality of Financial Assets

Investments in cash and cash equivalents and transactions involving derivative financial instruments are entered into with counterparties that have sound credit ratings and a good reputation. Available-for-sale investments consist of commercial paper, bonds and certificates of deposits, time deposits and limited partnership investments with counterparties whose credit rating is investment grade or higher.

We have a global credit risk management policy to minimize credit losses due to non-performance of our customer base. We monitor our exposure to credit risk on an on-going basis through a team of credit professionals stationed in our key global markets. We have continued to manage our customer credit risk very closely by monitoring our aging analysis along with payment and financial performance. Where appropriate, additional security instruments, letters of credit or corporate guarantees, are secured. Due to our global breadth and scale, we do not have a significant concentration of customer risk. Our largest counterparty risk amounted to $59 million and $63 million at 31 December 2016 and 2015, respectively.

## 19 Derivative and Other Financial Instruments

| Millions of U.S. Dollars | 31 December 2016 | 31 December 2015 |
|---|---|---|
| **Assets** | | |
| **Derivatives -** | | |
| **Designated as hedges:** | | |
| Basis swaps | $ 21 | $ 18 |
| Forward-starting interest rate swaps | 1 | 8 |
| Fixed-for-floating interest rate swaps | 15 | 25 |
| Forward exchange contract | 10 | - - |
| Commodities | 3 | - - |
| **Not designated as hedges:** | | |
| Cross-currency swaps | 285 | 300 |
| Commodities | 4 | 8 |
| Embedded derivatives | 1 | 4 |
| Foreign currency | - - | 1 |
| **Non-derivatives:** | | |
| Held-to-maturity securities | 74 | - |
| Available-for-sale securities | 1,073 | 1,064 |
| Total | $ 1,487 | $ 1,428 |
| **Liabilities** | | |
| **Derivatives -** | | |
| **Designated as hedges:** | | |
| Forward exchange contacts | $ - - | $ 24 |
| Forward-starting interest rate swaps | 16 | 6 |
| Fixed-for-floating interest rate swaps | 4 | - - |
| **Not designated as hedges:** | | |
| Commodities | 1 | 2 |
| Embedded derivatives | 10 | - |
| Foreign currency | 1 | 3 |
| Written put option | 21 | 21 |
| **Non-derivatives:** | | |
| Performance share awards | 41 | 40 |
| Total | $ 94 | $ 96 |

*Written put option*—The subsidiary that holds the Company's equity interest in a certain associate 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 the London Interbank Offered Rate ("LIBOR") plus 40 basis points, less paid dividends. On November 9, 2016, Basell International Holdings, B.V. notified the minority shareholder of its intention to exercise the option to purchase all of the minority shareholders shares. The effective date of transfer is scheduled for April 2017 at an Option price of $21 million, which is based on the option valuation as of June 30, 2016.

For further details on derivatives, reference is made to Note 4 Financial Risk Management.

## 20 Inventories

| | 31 December | |
|---|---|---|
| **Millions of U.S. Dollars** | **2016** | **2015** |
| Finished goods | $ 2,058 | $ 1,866 |
| Parts and materials | 498 | 504 |
| Raw materials and supplies | 978 | 905 |
| Total inventories | $ 3,534 | $ 3,275 |

Cost of inventories of $22,767 million and $26,098 million in 2016 and 2015, respectively, has been recognized as expense and included in Cost of sales.

## 21 Trade and Other Receivables

| | 31 December | |
|---|---|---|
| **Millions of U.S. Dollars** | **2016** | **2015** |
| Trade receivables | $ 2,731 | $ 2,527 |
| Trade receivables on related parties | 126 | 13 |
| Less: provision for impairment of trade receivables | (16) | (24) |
| Trade receivables, net | 2,841 | 2,516 |
| | | |
| Social security and other taxes | 104 | 125 |
| Prepaid expenses | 194 | 392 |
| Repurchase agreements | 369 | 387 |
| Other | 255 | 218 |
| Total | 3,763 | 3,638 |
| | | |
| Less: non-current portion | (113) | (216) |
| Current portion | $ 3,650 | $ 3,422 |

The carrying value of the trade and other receivables approximates their fair value. The maximum exposure to credit risk at the reporting date is the carrying value of each class of receivable mentioned above. We do not hold any collateral as security.

The provision for doubtful trade receivables is determined based on ageing and reviewed periodically. The creation and release of provisions for impaired receivables have been included in Selling costs in the Consolidated Statement of Income.

The ageing of the gross trade receivables not impaired at 31 December were as follows:

| **Millions of U.S. Dollars** | **2016** | **2015** |
|---|---|---|
| Amounts undue | $ 2,736 | $ 2,401 |
| Past due 0-90 days | 103 | 98 |
| Past due 91-180 days | 2 | 17 |
| | $ 2,841 | $ 2,516 |

The ageing of the gross trade receivables partly impaired at 31 December were as follows:

| | **2016** | | **2015** | |
|---|---|---|---|---|
| **Millions of U.S. Dollars** | **Gross** | **Provision** | **Gross** | **Provision** |
| Amounts undue | $ - - | $ - - | $ - - | $ - - |
| Past due 0-90 days | - - | - - | - - | - - |
| Past due 91-180 days | 16 | 16 | 24 | 24 |
| | $ 16 | $ 16 | $ 24 | $ 24 |

At 31 December 2016 and 2015, trade receivables of an initial value of $16 million and $24 million, respectively, were impaired and fully provided for. The movement in the provision for doubtful accounts is as follows:

| **Millions of U.S. Dollars** | **2016** | **2015** |
|---|---|---|
| Balance, 1 January | $ 24 | $ 28 |
| (Write off) additions, net | (8) | (4) |
| Balance, 31 December | $ 16 | $ 24 |

Trade receivables secured by letters of credit were $125 million and $99 million at 31 December 2016 and 2015, respectively. The carrying amounts of trade and other receivables are denominated in the following currencies at 31 December:

| **Millions of U.S. Dollars** | **2016** | **2015** |
|---|---|---|
| USD | $ 1,848 | $ 1,719 |
| EUR | 1,494 | 1,506 |
| Other | 421 | 413 |
| | $ 3,763 | $ 3,638 |

For further details on trade receivables, reference is made to Note 4 Financial Risk Management.

## 22 Cash and Cash Equivalents

For the purpose of the Consolidated Statement of Cash Flows, Cash and cash equivalents comprise the following at 31 December:

| Millions of U.S. Dollars | 2016 | 2015 |
|---|---|---|
| Cash at bank and on hand | $ 646 | $ 515 |
| Short-term deposits | 300 | 480 |
| | $ 946 | $ 995 |

Cash at banks earns interest at floating rates based on daily bank deposit rates. Short-term deposits are made for varying periods of between one day and three months, depending on the immediate cash requirements, and earn interest at the respective short-term deposit rates.

## 23 Equity Attributable to the Owners of the Company

The Company’s authorized share capital totals €51 million divided into 1,275 million ordinary shares of €0.04 each.

For a breakdown of Equity attributable to equity holders, reference is made to the Consolidated Statement of Changes in Equity. For a detail of the non-distributable reserves, reference is made to the Corporate Financial Statements.

*Dividend distribution*—We declared and paid the following dividends for the following periods:

| Millions of U.S. Dollars, except per share amounts | Dividend Per Ordinary Share | Aggregate Dividends Paid | Date of Record |
|---|---|---|---|
| **For the year 2016:** | | | |
| March | $ 0.78 | $ 336 | February 29, 2016 |
| June | 0.85 | 362 | May 24, 2016 |
| September | 0.85 | 351 | August 16, 2016 |
| December | 0.85 | 346 | November 29, 2016 |
| | $ 3.33 | $ 1,395 | |
| **For the year 2015:** | | | |
| March | $ 0.70 | $ 334 | 2 March 2015 |
| May | 0.78 | 368 | 1 June 2015 |
| September | 0.78 | 361 | 25 August 2015 |
| December | 0.78 | 347 | 23 November 2015 |
| | $ 3.04 | $ 1,410 | |

*Shares Repurchase Programs*—We completed the repurchase of shares under share repurchase programs authorized by our shareholders in May 2015 ("May 2015 Share Repurchase Program), April 2014 ("April 2014 Share Repurchase Program") and May 2013 ("May 2013 Share Repurchase Program") in 2016, 2015 and 2014, respectively. We were authorized to purchase up to 10% of our outstanding shares under each of these programs. In May 2016, our shareholders approved a proposal to authorize us to repurchase up to an additional 10% of our outstanding ordinary shares through November 2017 ("May 2016 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, which are recorded at cost, are classified 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:

| | 2016 | | |
|---|---|---|---|
| **Millions of U.S. Dollars, except shares and per share amounts** | **Shares Repurchased** | **Average Purchase Price** | **Total Purchase Price, Including Commissions** |
| May 2015 Share Repurchase Program | 15,302,707 | $ 80.15 | $ 1,226 |
| May 2016 Share Repurchase Program | 21,316,627 | 79.18 | 1,688 |
| | 36,619,334 | $ 79.58 | $ 2,914 |

| | 2015 | | |
|---|---|---|---|
| | **Shares Repurchased** | **Average Purchase Price** | **Total Purchase Price, Including Commissions** |
| April 2014 Share Repurchase Program | 19,892,101 | $ 86.40 | $ 1,719 |
| May 2015 Share Repurchase Program | 31,947,812 | 90.66 | 2,896 |
| | 51,839,913 | $ 89.03 | $ 4,615 |

Due to the timing of settlements, total cash paid for share repurchases for the years ended December 31, 2016 and 2015 was $2,938 million and $4,656 million, respectively.

*Ordinary Shares*—The changes in the outstanding number of ordinary and treasury shares are as follows:

| | 31 December | |
|---|---|---|
| | **2016** | **2015** |
| Ordinary shares outstanding: | | |
| Beginning balance | 440,150,069 | 486,969,402 |
| Share-based compensation | 418,892 | 4,972,908 |
| Warrants exercised | 200 | 1,989 |
| Employee stock purchase plan | 96,504 | 45,683 |
| Purchase of ordinary shares | (36,619,334) | (51,839,913) |
| Ending balance | 404,046,331 | 440,150,069 |
| Ordinary shares held as Treasury shares: | | |
| Beginning balance | 138,285,201 | 91,463,729 |
| Share-based compensation | (418,892) | (4,972,908) |
| Warrants exercised | - - | 150 |
| Employee stock purchase plan | (96,504) | (45,683) |
| Purchase of ordinary shares | 36,619,334 | 51,839,913 |
| Ending balance | 174,389,139 | 138,285,201 |
| Ordinary shares issued at end of period | 578,435,470 | 578,435,270 |

## 24 Non-Controlling Interests

Non-controlling interests primarily represent the interest 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.

In June 2015, we received $24 million from a holder of a minority interest in one of our consolidated partnerships to exit the partnership. Accordingly, our interest in this partnership increased resulting in an impact to equity of a $4 million reduction of Non-controlling interests and a $20 million increase in Additional paid-in capital.

## 25 Borrowings

The carrying amounts of the borrowings and the fair value of the non-current borrowings as of 31 December are as follows:

| | 2016 | | 2015 | |
|---|---|---|---|---|
| **Millions of U.S. Dollars** | **Carrying Value** | **Fair Value** | **Carrying Value** | **Fair Value** |
| **Non-current:** | | | | |
| Senior Notes due 2019, $2,000 million, 5.0% | $ 1,906 | $ 2,112 | $ 1,943 | $ 2,129 |
| Senior Notes due 2021, $1,000 million, 6.0% | 988 | 1,130 | 989 | 1,128 |
| Senior Notes due 2024, $1,000 million, 5.75% | 991 | 1,138 | 990 | 1,105 |
| Senior Notes due 2055, $1,000 million, 4.625% | 972 | 931 | 972 | 829 |
| Guaranteed Notes due 2044, $1,000 million, 4.875% | 979 | 1,030 | 979 | 915 |
| Guaranteed Notes due 2023, $750 million, 4.0% | 739 | 782 | 737 | 752 |
| Guaranteed Notes due 2043, $750 million, 5.25% | 721 | 803 | 721 | 746 |
| Guaranteed Notes due 2027, $300 million, 8.1% | 300 | 391 | 300 | 392 |
| Guaranteed Notes due 2022, €750 million 1.875% | 785 | 786 | - - | - - |
| Other | 92 | 89 | 128 | 36 |
| Total | $ 8,473 | $ 9,192 | $ 7,759 | $ 8,032 |
| **Current:** | | | | |
| Other | $ 616 | $ 624 | $ 377 | $ 346 |
| Total borrowings | $ 9,089 | $ 9,816 | $ 8,136 | $ 8,378 |

The fair values of the senior notes and guaranteed notes are based on data obtained from well-established and recognized vendors of market data for debt valuations. The fair value of the finance payable to investees and the Other equals the carrying amount, as the impact of discounting is not significant.

Our 5% Senior Notes due 2019 include gains of $42 million and $35 million for the years ended 31 December 2016 and 2015, respectively, related to adjustments for our fixed-for-floating interest rate swaps, which are recognized in Finance cost in the Consolidated Statement of Income. Since inception in 2014, we have recognized net gains of $84 million related to adjustments for these fixed-for-floating interest rate swaps. Our 6% Senior Notes due 2021 also includes a $3 million gain related to our fixed-for-floating interest rate swaps. This gain is also recognized in interest income.

The carrying amounts of our borrowings are denominated in the following currencies at 31 December:

| | 31 December | |
|---|---|---|
| **Millions of U.S. Dollars** | **2016** | **2015** |
| USD | $ 8,191 | $ 8,020 |
| EUR | 789 | 6 |
| Other | 109 | 110 |
| | $ 9,089 | $ 8,136 |

Aggregate maturities of debt during the next five years are $616 million in 2017, $13 million in 2018, $2,015 million in 2019, $14 million in 2020, $1,019 million in 2021 and $5,622 million thereafter.

*Long-Term Debt*

*Guaranteed notes due 2022*—In March 2016, LYB International Finance II B.V. ("LYB Finance II"), a direct, 100% owned finance subsidiary of LyondellBasell Industries N.V. issued €750 million of 1.875% guaranteed notes due 2022 at a discounted price of 99.607%

These unsecured notes, which are fully and unconditionally guaranteed by LyondellBasell Industries N.V., rank equally in right of payment to all of the LYB Finance II's existing and future unsecured indebtedness and to all of LyondellBasell N.V.'s existing and future unsupported indebtedness. There are no significant restrictions that would impede LyondellBasell Industries N.V., as a guarantor, from obtaining funds by dividend or loan from its subsidiaries.

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 or subsidiaries that own significant property, enter into any sale and leaseback 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 3 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 Comparable Government Bond Rate plus 35 basis points) on the notes to be redeemed. The notes may also be redeemed on or after the date that it is accrued and unpaid interest. The notes are also redeemable upon certain tax events.

*Senior Notes due 2055*—In March 2015, we issued $1,000 million of 4.625% Notes due 2055 at a discounted price of 98.353%.

These unsecured notes rank equally in right of payment to all of LyondellBasell N.V.'s existing and future unsubordinated indebtedness.

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 35 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 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% guaranteed 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% guaranteed 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 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 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.

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.

*Short-Term Debt*

*Senior Revolving Credit Facility—*In June 2016, the term of our revolving credit facility was extended for one year to June 2021 pursuant to a consent agreement. We also amended the revolving credit facility in June 2016 to increase its size to $2,500 million. All other material terms of the revolving credit facility remained unchanged.

The revolving credit facility may be used for dollar and euro denominated borrowings, has a $500 million sublimit for dollar and euro denominated letters of credit, a $1,000 million uncommitted accordion feature, and supports our commercial paper program. The aggregate balance of outstanding borrowings and letters of credit under the facility may not exceed $2,500 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.

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 31 December 2016.

At 31 December 2016, there were no outstanding letters of credit and no outstanding borrowings under the facility.

*U.S. Receivables Securitization Facility—*Our $900 million U.S. accounts receivable securitization facility, which expires in 2018, has a purchase limit of $900 million in addition to a $300 million uncommitted accordion feature. This facility provides liquidity through the sale or contribution of trade receivables by certain of our U.S. subsidiaries to a wholly owned, bankruptcy-remote subsidiary on an ongoing basis and without recourse. The bankruptcy-remote subsidiary may then, at its option and subject to a borrowing base of eligible receivables, sell undivided interests in the pool of trade receivables to financial institutions participating in the facility. In the event of 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. This 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. We are in compliance with these covenants as of 31 December 2016. Performance obligations under the facility are guaranteed by our parent company.

There were no borrowings or letters of credit outstanding under the facility.

*European Receivables Securitization Facility***—**Our €450 million European receivables securitization facility expired in April 2016.

*Commercial Paper Program***—**In June 2016, in connection with the increase of our revolving credit facility, we increased the size of our commercial paper program to $2,500 million. We may issue up to $2,500 million of privately placed, unsecured, short-term promissory notes ("commercial paper") under this program, which is backed by our $2,500 million Senior Revolving Credit Facility. Proceeds from the issuance of commercial paper may be used for general corporate purposes, including dividends and share repurchases. At 31 December 2016, we had $500 million of outstanding commercial paper.

*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.

## 26 Deferred Income Tax

The gross movement in the deferred income tax account is as follows:

| Millions of U.S. Dollars | Note | 31 December 2016 | 31 December 2015 |
|---|---|---|---|
| Opening balance | | $ 1,629 | $ 1,483 |
| Income statement charge | 12 | 430 | 126 |
| Tax charge/(credit) relating to components of other comprehensive income | 12 | (28) | 12 |
| Tax charge/(credit) directly relating to equity | 12 | 1 | 101 |
| Tax charge/(credit) relating to reclass from deferred tax liabilities | | (3) | (77) |
| Currency translation adjustment | | 3 | (16) |
| Deferred tax liabilities, net | | $ 2,032 | $ 1,629 |

The deferred tax movement 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 are as follows:

| Millions of U.S. Dollars | Retirement Benefit Obligation | Tax Attributes | Other | Total |
|---|---|---|---|---|
| **Deferred income tax assets:** | | | | |
| Balance at 1 January 2015 | $ 569 | $ 278 | $ 101 | $ 948 |
| (Charged)/credited to the income statement | (20) | (73) | (9) | (102) |
| (Charged)/credited to other comprehensive income | (7) | - - | (5) | (12) |
| (Charged)/credited to equity | (99) | - - | (2) | (101) |
| (Charged)/credited for deferred tax liabilities and current tax liabilities reclassification | (4) | 21 | - - | 17 |
| Currency translation adjustment | (17) | (25) | (4) | (46) |
| Balance at 31 December 2015 | $ 422 | $ 201 | $ 81 | 704 |
| Reclassification | | | | (440) |
| Net deferred taxes | | | | $ 264 |

| Millions of U.S. Dollars | Retirement Benefit Obligation | Tax Attributes | Other | Total |
|---|---|---|---|---|
| Balance at 1 January 2016 | $ 422 | $ 201 | $ 81 | $ 704 |
| (Charged)/credited to the income statement | (13) | (23) | (17) | (53) |
| (Charged)/credited to other comprehensive income | 29 | (3) | 2 | 28 |
| (Charged)/credited to equity | (1) | - - | - - | (1) |
| (Charged)/credited for deferred tax liabilities and current tax liabilities reclassification | (11) | (5) | (17) | (33) |
| Currency translation adjustment | (4) | (9) | - - | (13) |
| Balance at 31 December 2016 | $ 422 | $ 161 | $ 49 | 632 |
| Reclassification | | | | (452) |
| Net deferred taxes | | | | $ 180 |

| Millions of U.S. Dollars | Intangible Assets | Accelerated Tax Depreciation | Inventory | Other | Total |
|---|---|---|---|---|---|
| **Deferred income tax liabilities** | | | | | |
| Balance at 1 January 2015 | $ 274 | $ 1,473 | $ 349 | $ 335 | $ 2,431 |
| Charged/(credited) to the income statement | (36) | 160 | (187) | 87 | 24 |
| (Charged)/credited for deferred tax assets and current tax liabilities reclassification | (8) | (72) | 9 | 11 | (60) |
| Currency translation adjustment | (4) | (42) | (9) | (7) | (62) |
| Balance at 31 December 2015 | $ 226 | $ 1,519 | $ 162 | $ 426 | 2,333 |
| Reclassification | | | | | (440) |
| Net deferred taxes | | | | | $ 1,893 |
| Balance at 1 January 2016 | $ 226 | $ 1,519 | $ 162 | $ 426 | $ 2,333 |
| Charged/(credited) to the income statement | (77) | 411 | 114 | (71) | 377 |
| (Charged)/credited for deferred tax assets and current tax liabilities reclassification | 3 | 3 | (4) | (38) | (36) |
| Currency translation adjustment | - - | (11) | 2 | (1) | (10) |
| Balance at 31 December 2016 | $ 152 | $ 1,922 | $ 274 | $ 316 | 2,664 |
| Reclassification | | | | | (452) |
| Net deferred taxes | | | | | $ 2,212 |

At 31 December 2016 and 2015, we had realizable tax attributes available in the amount of $523 million and $649 million, respectively, for which a deferred tax asset was recognized at 31 December 2016 and 2015 of $161 million and $201 million, respectively.

Deferred tax assets are recognized for tax attributes to the extent that the realization of the related tax benefit through future taxable profits is probable. Prior to the close of each reporting period, management considers the weight of all evidence, both positive and negative, to determine if the deferred tax assets for tax attributes and deductible temporary differences for each jurisdiction can be valued at full value. 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.

The Company did not recognize deferred tax assets of $99 million and $121 million with respect to tax attributes amounting to $449 million and $433 million and other temporary differences for the years ended 31 December 2016 and 2015, respectively, which can be carried forward against future taxable income. $26 million of the unrecognized tax attributes relating to the Spain net deferred tax assets on operating losses were recognized in 2016. Our Spanish operations are no longer in a three year cumulative loss position. Management now expects to be able to fully utilize the operating losses within the next nine years.

The expiration periods of the unrecognized tax attributes and the related deferred tax asset as of 31 December 2016 are as follows:

| Millions of U.S. Dollars | Gross Tax Attributes | Deferred Tax on Tax Losses |
|---|---|---|
| In 2017 | $ -- | $ -- |
| In 2018 | 31 | 11 |
| In 2019 | 35 | 9 |
| In 2020 | -- | -- |
| In 2021 | 40 | 3 |
| Thereafter | 176 | 36 |
| Indefinite | 167 | 40 |
| | $ 449 | $ 99 |

As of 31 December 2016 and 2015, deferred taxes of $47 million and $51 million, respectively, have been provided on the unremitted earnings (to the extent such earnings are subject to taxation on their future remittance) of certain equity joint ventures and subsidiaries.

*Contingencies*— Certain income tax returns of LyondellBasell N.V. and its subsidiaries are under examination by tax authorities. These audits may result in proposed assessments by the tax authorities. The Company believes that its tax positions comply with applicable tax law and intends to defend its positions through appropriate administrative and judicial processes.

Out of the total current income tax payable of $769 million, $311 million is expected to be settled within the next 12 months.

## 27 Retirement Benefit Obligations

| Millions of U.S. Dollars | Note | 2016 | 2015 |
|---|---|---|---|
| Asset in the Consolidated Statement of Financial Position: | | | |
| Defined benefit pension plans | | $ 5 | $ 3 |
| Liabilities in the Consolidated Statement of Financial Position: | | | |
| Defined benefit pension plans | | $ 955 | $ 883 |
| Other post-employment benefit plans | | 343 | 340 |
| Total liabilities | | $ 1,298 | $ 1,223 |
| Net defined benefit liabilities | | $ 1,293 | $ 1,220 |
| Income statement charge: | 7 | | |
| Defined benefit pension plans | | $ 103 | $ 102 |
| Other post-employment benefit plans | | 18 | 20 |
| Total charges | | $ 121 | $ 122 |
| Remeasurements recognized in the Consolidated Statement of Other Comprehensive Income (loss) in the period (before tax): | | | |
| Defined benefit pension plans | | $ (108) | $ 4 |
| Other post-employment benefit plans | | (3) | 63 |
| Total recognized in Other Comprehensive Income in the period | | $ (111) | $ 67 |

We have defined benefit pension plans which cover employees in various 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 Italy and Germany, we provide other post-employment benefits such as early retirement and deferred compensation severance benefits. We use a measurement date of 31 December for all of our benefit plans.

The U.S. defined benefit pension plans are subject to the provisions of the Employee Retirement Income Security Act of 1974 (“ERISA”), including minimum funding requirements. The benefits under the U.S. defined benefit plans are determined either under a cash balance formula or another formula based on the participant’s earnings history or service or both. The benefit payments are made from a trust or insurance contract. The plans are administered by the Benefits Administrative Committee (“BAC”) and investment of the trust assets is directed by external investment managers hired and monitored by the Benefits Finance Committee (“BFC”). Both the BAC and BFC consist of individuals appointed by the Board of Directors of Lyondell Chemical Company, a wholly owned subsidiary of the Company.

The non-U.S. defined benefit pension plans are subject to the regulatory framework and minimum funding requirements of applicable jurisdictions in which the plans are operated. The benefits under the non-U.S. defined benefit pension plan are also generally calculated based on the participant’s earnings history or service or both. The benefit payments from certain non-U.S. plans are made from a trust or insurance contract; however, there are also a number of unfunded plans under which the Company meets each benefit payment obligation as it falls due. Management of non-U.S. plan assets is governed by local regulations and practice in each applicable jurisdiction.

### *Defined benefit pension plans*

The amounts recognized in the Statement of Financial Position are determined as follows:

| | 31 December | |
|---|---|---|
| **Millions of U.S. Dollars** | **2016** | **2015** |
| Present value of benefit obligations | $ (3,337) | $ (3,383) |
| Fair value of plan assets | 2,395 | 2,512 |
| Deficit of defined benefit pension plans | (942) | (871) |
| Effect of asset limitation and minimum funding requirement | (8) | (9) |
| Net liability | $ (950) | $ (880) |

The changes in the net defined benefit liability over the year are as follows:

| **Millions of U.S. Dollars** | **Present value of obligation** | **Fair value of plan assets** | **Total** | **Effect of asset limitation and minimum funding requirement** | **Total** |
|---|---|---|---|---|---|
| At 1 January 2015 | $ 3,586 | $ (2,633) | $ 953 | $ 7 | $ 960 |
| Current service cost | 70 | - - | 70 | - - | 70 |
| Past service cost | - - | - - | - - | - - | - - |
| Interest expense (income) | 122 | (89) | 33 | - - | 33 |
| | 192 | (89) | 103 | - - | 103 |
| Remeasurements: | | | | | |
| - Return on plan assets (excluding interest income) | - - | 54 | 54 | - - | 54 |
| - Effect of changes in demographic assumptions | (26) | - - | (26) | - - | (26) |
| - Effect of changes in financial assumptions | (40) | - - | (40) | - - | (40) |
| - Effect of changes in experience adjustments | 6 | - - | 6 | - - | 6 |
| - Changes in asset ceiling (excluding interest income) | - - | - - | - - | 2 | 2 |
| | (60) | 54 | (6) | 2 | (4) |
| Exchange differences | (147) | 75 | (72) | - - | (72) |
| Contributions: | | | | | |
| - Employers | - - | (107) | (107) | - - | (107) |
| - Plan participants | 1 | (1) | - - | - - | - - |
| Payments from plans: | | | | | |
| - Benefit payments | (189) | 189 | - - | - - | - - |
| At 31 December 2015 | $ 3,383 | $ (2,512) | $ 871 | $ 9 | $ 880 |

| Millions of U.S. Dollars | Present value of obligation | Fair value of plan assets | Total | Effect of asset limitation and minimum funding requirement | Total |
|---|---|---|---|---|---|
| At 1 January 2016 | $ 3,383 | $ (2,512) | $ 871 | $ 9 | $ 880 |
| Current service cost | 70 | - - | 70 | - - | 70 |
| Past service cost | - - | - - | - - | - - | - - |
| Interest expense (income) | 120 | (88) | 32 | - - | 32 |
| Loss on settlements | 3 | - - | 3 | - - | 3 |
| | 193 | (88) | 105 | - - | 105 |
| Remeasurements: | | | | | |
| - Return on plan assets (excluding interest income) | - - | (148) | (148) | - - | (148) |
| - Effect of changes in demographic assumptions | (14) | - - | (14) | - - | (14) |
| - Effect of changes in financial assumptions | 308 | - - | 308 | - - | 308 |
| - Effect of changes in experience adjustments | (33) | - - | (33) | - - | (33) |
| - Effect of business combinations/ divestitures/transfers | (11) | - - | (11) | - - | (11) |
| - Changes in asset ceiling (excluding interest income) | - - | - - | - - | (1) | (1) |
| | 250 | (148) | 102 | (1) | 101 |
| Exchange differences | (72) | 50 | (22) | - - | (22) |
| Contributions: | | | | | |
| - Employers | - - | (114) | (114) | - - | (114) |
| - Plan participants | 1 | (1) | - - | - - | - - |
| Payments from plans: | | | | | |
| - Benefit payments | (168) | 168 | - - | - - | - - |
| - Settlement payments | (250) | 250 | - - | - - | - - |
| At 31 December 2016 | $ 3,337 | $ (2,395) | $ 942 | $ 8 | $ 950 |

During 2016, we offered a voluntary lump sum program to certain former employees in select U.S. pension plans. Payments of $250 million related to this offer were made from existing plan assets.

The defined benefit obligation and plan assets are composed by country as follows:

| | 2016 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Millions of U.S. Dollars** | U.S. | Canada | France | Germany | Netherlands | U.K. | Other | Total |
| Present value of obligation | $ 1,846 | $ 91 | $ 173 | $ 447 | $ 555 | $ 194 | $ 31 | $ 3,337 |
| Fair value of plan assets | (1,571) | (97) | (18) | - - | (527) | (177) | (5) | (2,395) |
| Effect of asset limitation and minimum funding requirement | - - | 6 | - - | - - | 2 | - - | - - | 8 |
| Total | $ 275 | $ - - | $ 155 | $ 447 | $ 30 | $ 17 | $ 26 | $ 950 |

| | 2015 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Millions of U.S. Dollars** | U.S. | Canada | France | Germany | Netherlands | U.K. | Other | Total |
| Present value of obligation | $ 2,066 | $ 85 | $ 180 | $ 393 | $ 440 | $ 183 | $ 36 | $ 3,383 |
| Fair value of plan assets | (1,789) | (90) | (26) | - - | (427) | (176) | (4) | (2,512) |
| Effect of asset limitation and minimum funding requirement | - - | 5 | - - | - - | 4 | - - | - - | 9 |
| Total | $ 277 | $ - - | $ 154 | $ 393 | $ 17 | $ 7 | $ 32 | $ 880 |

As of 31 December 2016, the present value of the defined benefit obligation was comprised of approximately $1,551 million relating to active employees, $570 million relating to vested deferred members and $1,216 million relating to members in retirement. As of 31 December 2015, the present value of the defined benefit obligation was comprised of approximately $1,491 million relating to active employees, $757 million relating to vested deferred members and $1,135 million relating to members in retirement.

The expected contributions to be paid to the defined benefit pension plans and the multi-employer plan during 2017 are $111 million and $7 million, respectively.

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 Company or other oversight bodies actively monitor investment results. Investments are well diversified such that the failure of any single position would not have a material effect on the overall level of assets.

The actual return on plan assets was a gain of $236 million (a gain of $35 million in 2015).

The major categories of plan assets as a percentage of total plan assets are:

| | 2016 | 2015 |
|---|---|---|
| Equity securities | 28% | 43% |
| Fixed income securities | 53% | 44% |
| U.S. government securities | 6% | 1% |
| Alternatives [(a)] | 13% | 12% |

(a) Include investments in real estate, hedge funds, private equity and insurance annuity contracts.

The plan assets are summarized as follows at 31 December:

| | 2016 | | | 2015 | | |
|---|---|---|---|---|---|---|
| **Millions of U.S. Dollars** | Quoted | Unquoted | Total | Quoted | Unquoted | Total |
| Common and preferred stock | | | | | | |
| Domestic | $ 192 | $ - - | $ 192 | $ 347 | $ - - | $ 347 |
| International | 204 | - - | 204 | 298 | - - | 298 |
| Fixed income securities | | | | | | |
| Corporate bonds | 667 | - - | 667 | 592 | - - | 592 |
| Municipal bonds | 11 | - - | 11 | 13 | - - | 13 |
| Commingled funds | | | | | | |
| Domestic equity | 105 | - - | 105 | 99 | - - | 99 |
| International equity | 172 | - - | 172 | 332 | - - | 332 |
| Fixed income | 275 | - - | 275 | 459 | - - | 459 |
| Real estate | - - | 100 | 100 | - - | 97 | 97 |
| Hedge funds | - - | 126 | 126 | - - | 140 | 140 |
| Private equity | - - | 77 | 77 | - - | 60 | 60 |
| U.S. government securities | | | | | | |
| Agency securities | 2 | - - | 2 | 2 | - - | 2 |
| U.S. Treasury securities | 136 | - - | 136 | 34 | - - | 34 |
| Cash and cash equivalents | 315 | - - | 315 | 60 | - - | 60 |
| Total Pension Assets | $ 2,079 | $ 303 | $ 2,382 | $ 2,236 | $ 297 | $ 2,533 |

Our pension plans have not directly invested in securities of LyondellBasell Industries N.V. and there have been no significant transactions between any of the pension plans and the Company or related parties thereof.

The weighted average assumptions used to determine benefit obligations were as follows:

| | 2016 | 2015 |
|---|---|---|
| Discount rate | 2.96% | 3.72% |
| Rate of salary increase | 3.25% | 3.38% |
| Rate of price inflation | 2.28% | 2.39% |
| Rate of pension increase | 1.89% | 1.96% |

The weighted average assumptions used to determine net pension cost were as follows:

| | 2016 | 2015 |
|---|---|---|
| Discount rate | 3.72% | 3.57% |
| Rate of salary increase | 3.38% | 3.40% |
| Rate of price inflation | 2.40% | 2.32% |
| Rate of pension increase | 1.94% | 1.62% |

The sensitivity analysis presented in the following table is based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated.

The sensitivity of the benefit obligations to changes in the discount rate is as follows:

| Millions of U.S. Dollars | Effects on benefit obligations in 2016 | Change % | Effects on benefit obligations in 2015 | Change % |
|---|---|---|---|---|
| Present value of obligations | $ 3,337 | | $ 3,383 | |
| Discount rate increases by 50 basis points | (215) | -6.4% | (204) | -6.0% |
| Discount rate decreases by 50 basis points | 243 | 7.3% | 231 | 6.8% |

Reasonably foreseeable changes to the other principal assumptions would not result in a material impact to the benefit obligations and the benefit costs of our pension plans.

The defined benefit pension plans and the other post-employment benefit plans are subject to a number of risks, the most significant of which are discussed below:

Market price risk—Significant changes in investment performance may result in corresponding increases and decreases in the value of the plan assets.

Changes in bond yields—A decrease in corporate bond yields will increase plan liabilities, although this will be partially offset by an increase in the value of the plan's bond holdings.

Inflation risk—Some of the pension plans' benefit arrangements are directly related to the salary levels so that a significant increase in salaries could lead to an increase in the pension obligations of the plans.

Life expectancy—Some plan obligations provide benefits for the lifetime of the member and so increases in life expectancy could result in an increase in the plans' liabilities.

*Multi-employer Plan*—The Company participates in a multi-employer pension arrangement Pensionskasse der BASF WaG V.VaG (Pensionskasse), which provides for benefits to the majority of our employees in Germany. The plan provides fixed, monthly retirement payments on the basis of the credits earned by the participating employees. The Company-specific plan information for the Pensionskasse is not publicly available and the plan is not subject to a collective-bargaining agreement. Up to a certain salary level, the benefit obligations are covered by contributions of the Company and the employees to the Pensionskasse. To the extent that the Pensionskasse is underfunded or for benefits owed but not subject to the Pensionskasse arrangement, the Company's future contributions to the plan or payments to retirees may increase. The Pensionskasse was overfunded in 2016 and 2015. To the extent that benefit obligations under the plan are funded by Pensionskasse, the related Company contributions are expensed as incurred. The amounts accrued for expected future benefits payable which are not funded by Pensionskasse was $54 million and $45 million at 31 December 2016 and 2015, respectively. The remeasurements recognized in the Consolidated Statement of Other Comprehensive Income are a loss of $11 million and $33 million at 31 December 2016 and 2015, respectively.

The amounts recognized in the Consolidated Statement of Income are as follows:

| | 31 December | |
|---|---|---|
| **Millions of U.S. Dollars** | **2016** | **2015** |
| Company contributions to Pensionskasse | $ 7 | $ 7 |

***Other post-employment benefits plans***

The amounts recognized in the Consolidated Statement of Financial Position are determined as follows:

| | 31 December | |
|---|---|---|
| **Millions of U.S. Dollars** | **2016** | **2015** |
| Present value of benefit obligations | $ 343 | $ 340 |
| Fair value of plan assets | - - | - - |
| Net liability | $ 343 | $ 340 |

The changes in the net defined benefit liability over the year are as follows:

| **Millions of U.S. Dollars** | **Present value of obligation** | **Fair value of plan assets** | **Total** |
|---|---|---|---|
| At 1 January 2015 | $ 407 | $ - - | $ 407 |
| Current service cost | 6 | - - | 6 |
| Interest expense | 14 | - - | 14 |
| | 20 | - - | 20 |
| Remeasurements: | | | |
| - Effect of changes in demographic assumptions | (16) | - - | (16) |
| - Effect of changes in financial assumptions | (9) | - - | (9) |
| - Effect of changes in experience adjustments | (39) | - - | (39) |
| | (64) | - - | (64) |
| Exchange differences | (7) | - - | (7) |
| Contributions: | | | |
| - Employers | - - | (16) | (16) |
| - Plan participants | 8 | (8) | - - |
| Payments from plans: | | | |
| - Benefit payments | (24) | 24 | - - |
| At 31 December 2015 | $ 340 | $ - - | $ 340 |

| **Millions of U.S. Dollars** | **Present value of obligation** | **Fair value of plan assets** | **Total** |
|---|---|---|---|
| At 1 January 2016 | $ 340 | $ - - | $ 340 |
| Current service cost | 5 | - - | 5 |
| Interest expense | 13 | - - | 13 |
| | 18 | - - | 18 |
| Remeasurements: | | | |
| - Effect of changes in demographic assumptions | (2) | - - | (2) |
| - Effect of changes in financial assumptions | 16 | - - | 16 |
| - Effect of changes in experience adjustments | (12) | - - | (12) |
| | 2 | - - | 2 |
| Exchange differences | (1) | - - | (1) |
| Contributions: | | | |
| - Employers | - - | (16) | (16) |
| - Plan participants | 7 | (7) | - - |
| Payments from plans: | | | |
| - Benefit payments | (23) | 23 | - - |
| At 31 December 2016 | $ 343 | $ - - | $ 343 |

The weighted average assumptions used to determine benefit obligations were as follows:

| | 2016 | 2015 |
|---|---|---|
| Discount rate | 3.61% | 3.98% |
| Rate of salary increase | 4.00% | 3.87% |
| Rate of price inflation | 1.60% | 1.90% |

The weighted average assumptions used to determine net benefit cost were as follows:

| | 2016 | 2015 |
|---|---|---|
| Discount rate | 3.98% | 3.71% |
| Rate of salary increase | 3.87% | 3.85% |
| Rate of price inflation | 1.90% | 2.00% |

The following table reflects the sensitivity of the benefit obligations of our other post-employment benefit plans to changes in the discount rate:

| Millions of U.S. Dollars | Effects on benefit obligations in 2016 | Change % | Effects on benefit obligations in 2015 | Change % |
|---|---|---|---|---|
| Present value of obligations | $ 343 | | $ 340 | |
| Discount rate increases by 50 basis points | (20) | -5.8% | (20) | -5.9% |
| Discount rate decreases by 50 basis points | 24 | 7.0% | 23 | 6.8% |

Reasonably foreseeable changes to the other principal assumptions would not result in a material impact to the benefit obligations and the benefit costs of our other post-employment benefit plans.

The weighted average duration of the defined benefit obligation for the defined benefit pension plans and other post-employment benefit plans is 13.2 years and 12.7 years, respectively.

As of 31 December 2016, future expected benefit payments by our defined benefit pension plans and other post-employment benefit plans which reflect expected future service, as appropriate, are as follows:

| Millions of U.S. Dollars | 2017 | 2018 | 2019 | 2020 | 2021 | Thereafter | Total |
|---|---|---|---|---|---|---|---|
| Defined benefit pension plans | $ 198 | $ 196 | $ 191 | $ 187 | $ 184 | $ 903 | $ 1,859 |
| Other post-employment benefit plans | 20 | 21 | 22 | 22 | 22 | 108 | 215 |
| Total | $ 218 | $ 217 | $ 213 | $ 209 | $ 206 | $ 1,011 | $ 2,074 |

## 28 Trade and Other Payables

| Millions of U.S. Dollars | Note | 31 December 2016 | 31 December 2015 |
|---|---|---|---|
| Trade payables | | $ 2,085 | $ 1,913 |
| Amounts due to related parties | 31 | 444 | 270 |
| Social securities and other taxes | | 30 | 31 |
| Accrued expenses | | 942 | 1,306 |
| | | $ 3,501 | $ 3,520 |

## 29 Provisions for Other Liabilities and Charges

| Millions of U.S. Dollars | Asset Retirement Obligation | Environmental | Restructuring | Other | Total |
|---|---|---|---|---|---|
| **Balance at 1 January 2015** | $ 117 | $ 106 | $ 65 | $ 78 | $ 366 |
| Charged/(credited) to the income statement: | | | | | |
| Additional provisions | 1 | 20 | 3 | 2 | 26 |
| Unused amounts reversed | - - | - - | - - | (1) | (1) |
| Unwinding of discount | 2 | - - | - - | - - | 2 |
| Changes in estimate | 1 | 2 | (4) | 6 | 5 |
| Used during the period | (1) | (14) | (21) | (1) | (37) |
| Exchange differences | (12) | (8) | (5) | (7) | (32) |
| Other | - - | - - | 24 | (4) | 20 |
| **At 31 December 2015** | $ 108 | $ 106 | $ 62 | $ 73 | $ 349 |
| **Of which:** | | | | | |
| Non-current | $ 95 | $ 90 | $ 43 | $ 34 | $ 262 |
| Current | 13 | 16 | 19 | 39 | 87 |
| **Closing balance** | $ 108 | $ 106 | $ 62 | $ 73 | $ 349 |
| **Balance at 1 January 2016** | $ 108 | $ 106 | $ 62 | $ 73 | $ 349 |
| Charged/(credited) to the income statement: | | | | | |
| Additional provisions | - - | 5 | - - | - - | 5 |
| Unused amounts reversed | (1) | - - | (7) | - - | (8) |
| Unwinding of discount | 2 | - - | - - | - - | 2 |
| Changes in estimate | - - | 15 | 4 | - - | 19 |
| Used during the period | (4) | (29) | (16) | (2) | (51) |
| Exchange differences | (3) | (2) | (1) | (1) | (7) |
| Other | 1 | - - | (10) | (9) | (18) |
| **At 31 December 2016** | $ 103 | $ 95 | $ 32 | $ 61 | $ 291 |

| Millions of U.S. Dollars | Asset Retirement Obligation | Environmental | Restructuring | Other | Total |
|---|---|---|---|---|---|
| **Of which:** | | | | | |
| Non-current | $ 93 | $ 82 | $ 20 | $ 25 | $ 220 |
| Current | 10 | 13 | 12 | 36 | 71 |
| **Closing balance** | $ 103 | $ 95 | $ 32 | $ 61 | $ 291 |

*Asset retirement obligations*—At some locations, we are contractually obligated to decommission our plants upon site exit. We have provided for the net present value of the estimated costs. Typically such costs are incurred within three years of a plant's closure.

*Environmental remediation*—Our accrued liability for future environmental remediation costs at current and former plant sites and other remediation sites totaled $95 million and $106 million for the years ended 31 December 2016 and 2015. At 31 December 2016, the accrued liabilities for individual sites range from less than $1 million to $16 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.

*Restructuring*—In connection with current restructuring activities, we recognized severance charges totaling $(7) million and $3 million for the years ended 31 December 2016 and 2015, respectively, for the separation of employees. The restructuring cost primarily relates to the suspension of operations at the Berre refinery in France and optimization of our operations in Europe and North America. We may incur additional costs related to these activities that cannot be reasonably estimated at this time.

## 30 Contingencies and Commitments

### Contingencies—Litigation and Other Matters

*Access Indemnity Demand*—In December 2010, one of our subsidiaries received demand letters from subsidiaries 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 Court held closing arguments in February 2017 and the parties are waiting on a ruling.

The Access Entities have also demanded $100 million in management fees under a 2007 management agreement between an Access subsidiary 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 subsidiary 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-subsidiary 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.

*409A Matter*—Certain of the Company's current and former executives are being audited by the Internal Revenue Service for the 2012 tax year. The IRS has issued proposed assessments of additional taxes to these individuals for wages and penalties under Section 409A of the Internal Revenue Code. In early 2017, the individuals agreed in principle to settlements with the IRS relating to the audits of tax year 2012. The Supervisory Board has approved the Company reimbursing the individuals for the settlement costs, on an after-tax basis. We expect to reimburse an aggregate of $1.7 million in payment of the settlement costs. The Company believes that any additional future liability that may arise related to this issue will be immaterial.

*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 31 December 2016, 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.

## Commitments

*Purchase 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 31 December 2016 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.

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

The operating lease expense for 2016 and 2015 totaled $426 million and $422 million, respectively.

The aggregate future estimated purchase obligations and minimum lease payments under non-cancellable operating leases are as follows:

| | 2016 | | | |
|---|---|---|---|---|
| | Purchase Obligations | | | |
| **Millions of U.S. Dollars** | **Associates** | **Joint Ventures** | **Consolidated Entities** | **Operating Leases** |
| No later than 1 year | $ - - | $ 837 | $ 4,856 | $ 341 |
| Later than 1 year and no later than 5 years | - - | 3,646 | 10,057 | 816 |
| Later than 5 years | - - | - - | 2,966 | 493 |
| Total | $ - - | $ 4,483 | $ 17,879 | $ 1,650 |

| | 2015 | | | |
|---|---|---|---|---|
| | Purchase Obligations | | | |
| **Millions of U.S. Dollars** | **Associates** | **Joint Ventures** | **Consolidated Entities** | **Operating Leases** |
| No later than 1 year | $ - - | $ 957 | $ 4,801 | $ 372 |
| Later than 1 year and no later than 5 years | - - | 2,871 | 9,664 | 936 |
| Later than 5 years | - - | - - | 3,345 | 491 |
| Total | $ | $ 3,828 | $ 17,810 | $ 1,799 |

## 31 Related Parties

The Company has related party transactions with one of our major shareholders, Access Industries ("Access") and with the Company's associates and joint ventures.

*Access*—In December 2010, one of our subsidiaries received demand letters from subsidiaries 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 subsidiary 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 30.

*Associates and Joint Ventures*—The Company has related party transactions with its associates and joint ventures. These related party transactions include the sales and purchases of goods in the normal course of business as well as certain financing arrangements and are at arm's length basis. In addition, under contractual arrangements with certain of the Company's equity investees, we receive certain services, utilities and materials at some of our manufacturing sites and we provide certain services to our associates and joint ventures.

We have guaranteed €17 million ($18 million) of the indebtedness of one of our joint ventures as of 31 December 2016. In 2015, we received a payment totaling $19 million related to a loan made to our joint venture, Al-Waha Petrochemicals Ltd., in 2010.

The related party transactions are summarized as follows:

| Millions of U.S. Dollars | 31 December 2016 | 31 December 2015 |
|---|---|---|
| **The Company billed related parties for:** | | |
| Sale of products – | | |
| Joint Ventures | $ 12 | $ 8 |
| Associates | 46 | 33 |
| Shared services agreements – | | |
| Joint Ventures | 4 | 3 |
| Associates | 19 | 14 |
| **Related parties billed the Company for:** | | |
| Sale of products – | | |
| Joint Ventures | $ 817 | $ 763 |
| Associates | 502 | 605 |
| Shared services agreements – | | |
| Associates | 71 | 72 |
| **Year-end balances with related parties:** | | |
| Receivable from Joint Ventures | $ 3 | $ 2 |
| Receivable from Associates | 5 | 11 |
| Loans to Associates and Joint Ventures | - - | 8 |
| Loans from Associates and Joint Ventures | 3 | 4 |
| Payables to Joint Ventures | 210 | 221 |
| Payables to Associates | 89 | 49 |

## 32 Segment and Related Information

Our operations are managed through five operating segments, as shown below. Each of the operating segments is 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 and co-products, polyethylene and polypropylene.

- Olefins and Polyolefins–Europe, Asia, and International ("O&P–EAI"). Our O&P–EAI segment produces and markets olefins and co-products, polyethylene, and polypropylene, including polypropylene compounds.

- Intermediates and Derivatives ("I&D"). Our I&D segment produces and markets propylene oxide and its derivatives; oxyfuels and related products and intermediate chemicals such as styrene monomer, acetyls, ethylene oxide and ethylene glycol.

- 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 into refined products, including gasoline and distillates.

- Technology. Our Technology segment develops and licenses chemical and polyolefin process technologies and manufactures and sells polyolefin catalysts.

Our chief operating decision maker uses EBITDA as the primary measure for reviewing our segments' profitability and therefore, we have presented EBITDA for all segments. We define EBITDA as earnings before interest, taxes and depreciation and amortization.

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. Accounting policies for internal reporting are based on U.S. GAAP and are materially similar to those described in Summary of Significant Accounting Policies (see Note 2), except for:

*Inventories*—The Group measures its inventories in accordance with the Last In, First Out ("LIFO") method, which is permitted under U.S. GAAP. According to IAS 2, *Inventories,* the LIFO method is prohibited under IFRS. Therefore, the inventories are measured using the First In, First Out ("FIFO") method for the Consolidated Financial Statements. This inventory measurement difference between the reportable segments and the consolidated information results in different costs of sale and net profit for the period.

*Employee Benefits*—Under U.S. GAAP, ASC Topic 715, *Compensation–Retirement Benefits* ("ASC 715") requires the interest expense component of pension expense to be calculated as the product of the defined benefit liability and the discount rate. Such interest expense is netted against interest income resulting from the expected rate of return on plan assets applied to 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 that the discount rate, reflecting long-term market expectations, rather than current fluctuations in market conditions. Under IFRS, in accordance with *IAS 19, Employee Benefits,* the Company recognizes a net interest expense (income), which is the product of the net defined benefit liability (asset) and the discount rate, as a component of its pension expense on defined benefit plans.

Under ASC 715, past service cost and actual return on plan assets in excess of expected return are initially recorded in other comprehensive income and subsequently recognized in earnings over the average remaining service period of the participants to the extent it exceeds the "corridor". The corridor is defined as the greater of 10 percent of the accumulated projected benefit obligation or the fair value of the plan assets as of the beginning of the year. Under IFRS, the Company recognizes immediately past service cost and net interest expense (income) as discussed above in the Consolidated Statement of Income. Actual return of plan assets in excess of recognized interest income is permanently recorded in other comprehensive income.

*Other*—Amongst others, there are minor differences between IFRS and U.S. GAAP with respect to the adoption of IFRS 11, *Joint Arrangements* as well as discontinued operations, the subsequent measurement of asset retirement obligations, capitalization of development costs related to Research and development and amortization of debt issuance costs. If material, these differences are separately disclosed in the Consolidated Financial Statements reconciliation.

Summarized financial information concerning reportable segments is shown in the following table for the periods presented:

| | Year Ended 31 December 2016 | | | | | | |
|---|---|---|---|---|---|---|---|
| **Millions of U.S. Dollars** | **O&P – Americas** | **O&P – EAI** | **I&D** | **Refining** | **Technology** | **Other** | **Total** |
| Sales and other operating revenues: | | | | | | | |
| Customers | $ 6,757 | $ 10,404 | $ 7,085 | $ 4,559 | $ 378 | $ - - | $ 29,183 |
| Intersegment | 2,320 | 175 | 141 | 576 | 101 | (3,313) | - - |
| | 9,077 | 10,579 | 7,226 | 5,135 | 479 | (3,313) | 29,183 |
| Depreciation and amortization expense | 362 | 229 | 269 | 163 | 41 | - - | 1,064 |
| Other income, net | 63 | 42 | - - | 8 | - - | (2) | 111 |
| Income from equity investments | 59 | 302 | 6 | - - | - - | - - | 367 |
| Capital expenditures | 1,376 | 261 | 333 | 224 | 36 | 13 | 2,243 |
| EBITDA | 2,877 | 2,067 | 1,333 | 72 | 262 | (9) | 6,602 |

| | Year Ended 31 December 2015 | | | | | | |
|---|---|---|---|---|---|---|---|
| **Millions of U.S. Dollars** | **O&P – Americas** | **O&P – EAI** | **I&D** | **Refining** | **Technology** | **Other** | **Total** |
| Sales and other operating revenues: | | | | | | | |
| Customers | $ 7,344 | $ 11,371 | $ 7,596 | $ 6,059 | $ 365 | $ - - | $ 32,735 |
| Intersegment | 2,620 | 205 | 176 | 498 | 100 | (3,599) | - - |
| | 9,964 | 11,576 | 7,772 | 6,557 | 465 | (3,599) | 32,735 |
| Depreciation and amortization expense | 353 | 219 | 233 | 196 | 46 | - - | 1,047 |
| Other income (expense), net | 10 | 14 | 4 | 2 | - - | (5) | 25 |
| Income from equity investments | 42 | 283 | 14 | - - | - - | - - | 339 |
| Capital expenditures | 668 | 186 | 441 | 108 | 24 | 13 | 1,440 |
| EBITDA | 3,661 | 1,825 | 1,475 | 342 | 243 | (13) | 7,533 |

The difference between sales reported and the IFRS income statement and the difference between capital expenditures reported and the IFRS statement of cash flows are caused by the difference in accounting for joint arrangements under IFRS and US GAAP as explained in this note.

Reconciliation of EBITDA for reportable segments to the Company's Consolidated Statement of Income is summarized in the following table:

| | 31 December | |
|---|---|---|
| **Millions of U.S. Dollars** | **2016** | **2015** |
| EBITDA: | | |
| Total segment EBITDA | $ 6,611 | $ 7,546 |
| Other EBITDA | (9) | (13) |
| | 6,602 | 7,533 |
| **Less:** | | |
| Depreciation and amortization expense | (1,064) | (1,047) |
| Other income (expense), net | (111) | (25) |
| Income from equity investments | (367) | (339) |
| **U.S. GAAP operating income** | 5,060 | 6,122 |
| **Measurement difference:** | | |
| Inventory valuation | 487 | (337) |
| Pension expense | 23 | (49) |
| **Classification difference:** | | |
| Other income (expense), net | 115 | 338 |
| Adoption of IFRS 11, *Joint Arrangements* | 90 | 90 |
| Other | (6) | (18) |
| **Total Company's operating profit** | $ 5,769 | $ 6,146 |

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:

| | Revenue | |
|---|---|---|
| **Millions of U.S. Dollars** | **2016** | **2015** |
| The Netherlands | $ 727 | $ 856 |
| United States | 13,962 | 16,101 |
| Germany | 2,474 | 2,697 |
| France | 1,055 | 1,201 |
| Italy | 1,203 | 1,349 |
| Mexico | 1,026 | 951 |
| Other | 8,836 | 9,679 |
| Total revenue | $ 29,283 | $ 32,834 |

| | Long-Lived Assets | |
|---|---|---|
| **Millions of U.S. Dollars** | **2016** | **2015** |
| United States | $ 8,236 | $ 7,089 |
| Germany | 1,321 | 1,379 |
| The Netherlands | 618 | 669 |
| France | 584 | 491 |
| Italy | 324 | 354 |
| Mexico | 175 | 153 |
| Other | 1,458 | 1,533 |
| Total | $ 12,716 | $ 11,668 |

Long-lived assets include Property, plant and equipment, Intangible assets excluding goodwill and Investments in associates and joint ventures.

## 33 Subsequent Events

On 21 February 2017, LYB International Finance II B.V., a direct, 100% owned finance subsidiary of LyondellBasell Industries, N.V. issued $1.0 billion of 3.5% Guaranteed Notes due 2027. The notes are fully and unconditionally guaranteed by LyondellBasell N.V.

On February 21, 2017, the Company provided notice to Wells Fargo Bank, National Association, as trustee, of its intent to redeem $1 billion in aggregate principal amount of its outstanding 5.0% Senior Notes due 2019, pursuant to the Indenture, dated as of April 9, 2012, as supplemented, between the Company and the Trustee.

The Company used the net proceeds from the sale of the Notes, together with available cash from its balance sheet, to complete the partial redemption of the 2019 Notes on March 24, 2017. The redemption price of the 2019 Notes is equal to the principal amount thereof plus accrued and unpaid interest up to, but excluding, the redemption date, plus an applicable premium in accordance with the 2012 Indenture.

On 17 February 2017 the Supervisory Board authorized the company’s Management Board to declare an interim dividend of $0.85 per share. The interim dividend is paid 13 March 2017 to shareholders of record as of 6 March 2017.

**LyondellBasell Industries N.V.**

**Appendix - A**

| Entity Name | Jurisdiction of Formation |
| --- | --- |
| ***Subsidiaries*** | |
| Basell (Thailand) Holdings B.V. | Netherlands |
| Basell Advanced Polyolefins (Suzhou) Co. Ltd. | China |
| Basell Advanced Polyolefins (Thailand) Company Ltd. | Thailand |
| Basell Arabie Investissements SAS | France |
| Basell Asia Pacific Consulting (Shanghai) Co., Ltd. | China |
| Basell Asia Pacific Limited | Hong Kong |
| Basell Bayreuth Chemie GmbH | Germany |
| Basell Benelux B.V. | Netherlands |
| Basell Canada Inc. | Ontario |
| Basell Cayman Corporation | Cayman |
| Basell Chemie Köln GmbH | Germany |
| Basell Deutschland GmbH | Germany |
| Basell Europe Holdings B.V. | Netherlands |
| Basell France S.A.S. | France |
| Basell Germany Holdings GmbH | Germany |
| Basell Holdings Middle East GmbH | Germany |
| Basell Ibérica Poliolefinas Holdings S.L. | Spain |
| Basell International Holdings B.V. | Netherlands |
| Basell International Trading FZE | United Arab Emirates |
| Basell Italia S.r.l | Italy |
| Basell Mexico, S. de R.L. de C.V. | Mexico |
| Basell Moyen Orient Investissements SAS | France |
| Basell North America Inc. | Delaware |
| Basell Poliolefinas Comercial Espagnola S.L. | Spain |
| Basell Poliolefinas Iberica S.L. | Spain |
| Basell Poliolefinas Ltda. | Brazil |
| Basell Poliolefinas, S. de R.L. de C.V. | Mexico |
| Basell Poliolefine Italia S.r.l. | Italy |
| Basell Polyolefin Istanbul Ticaret Limited Sirketi | Turkey |
| Basell Polyolefine GmbH | Germany |
| Basell Polyolefines France S.A.S. | France |
| Basell Polyolefins Company BVBA | Belgium |
| Basell Polyolefins India Private Limited | India |
| Basell Polyolefins Korea Ltd. | Korea |
| Basell Polyolefins UK Limited | United Kingdom |
| Basell Sales & Marketing Company B.V. | Netherlands |
| Basell Service Company B.V. | Netherlands |
| Basell Slovakia s.r.o. | Slovakia |
| Basell Trading (Shanghai) Co. Ltd. | Shanghai |
| Basell UK Holdings Limited | United Kingdom |
| Basell UK Ltd. | United Kingdom |

**LyondellBasell Industries N.V.**

| Entity Name | Jurisdiction of Formation |
|---|---|
| Compagnie de Distribution des Hydrocarbures SAS | France |
| Compagnie Petrochimique de Berre SAS | France |
| Complejo Industrial Taqsa A.I.E. | Spain |
| Equistar Bayport, LLC | Delaware |
| Equistar Chemicals, LP | Delaware |
| Equistar GP, LLC | Delaware |
| Equistar LP, LLC | Delaware |
| Equistar Mont Belvieu Corporation | Delaware |
| Equistar Olefins G.P., LLC | Delaware |
| Equistar Olefins Offtake G.P., LLC | Delaware |
| Equistar Olefins Offtake LP | Delaware |
| GuangZhou Basell Advanced Polyolefins Co., Ltd. | China |
| Hisane A.I.E. | Spain |
| Houston Refining LP | Delaware |
| Industriepark Münchsmünster GmbH & Co. KG | Germany |
| Industriepark Münchsmünster Verwaltungsgesellschaft mbH | Germany |
| LaPorte Methanol Company, L.P. | Delaware |
| Limited Liability Company "LyondellBasell Polyolefins" | Tolyatti, Samara Region |
| LYB Americas Finance Company LLC | Delaware |
| LYB Americas Finance Holdings B.V. | Netherlands |
| LYB Bermuda Ltd. | Bermuda |
| LYB Disc Inc. | Delaware |
| LYB Equistar Holdings LLC | Delaware |
| LYB Finance Company B.V. | Netherlands |
| LYB Financial Services LP | Delaware |
| LYB International Finance B.V. | Netherlands |
| LYB International Finance II B.V. | Netherlands |
| LYB International Finance III LLC | Delaware |
| LYB Ireland Limited | Ireland |
| LYB Luxembourg II S.à .r.l. | Luxembourg |
| LYB Luxembourg S.à r.l. | Luxembourg |
| LYB Receivables LLC | Delaware |
| LYB Trading Company B.V. | Netherlands |
| LYB (Barbados) SRL | Barbados |
| Lyondell Asia Holdings Limited | Hong Kong |
| Lyondell Asia Pacific, Ltd. | Delaware |
| Lyondell Centennial Corp. | Delaware |
| Lyondell Chemical Company | Delaware |
| Lyondell Chemical Espana Co. | Delaware |
| Lyondell Chemical Europe, Inc. | Delaware |
| Lyondell Chemical International Company | Delaware |
| Lyondell Chemical Overseas Services, Inc. | Delaware |
| Lyondell Chemical Pan America, Inc. | Delaware |
| Lyondell Chemical Products Europe LLC | Delaware |

**LyondellBasell Industries N.V.**

| Entity Name | Jurisdiction of Formation |
|---|---|
| Lyondell Chemical Properties, L.P. | Delaware |
| Lyondell Chemical Technology 1 Inc. | Delaware |
| Lyondell Chemical Technology Management, Inc. | Delaware |
| Lyondell Chemical Technology, L.P. | Delaware |
| Lyondell Chemie (PO-11) B.V. | Netherlands |
| Lyondell Chemie (POSM) B.V. | Netherlands |
| Lyondell Chemie Nederland B.V. | Netherlands |
| Lyondell Chimie France LLC | Delaware |
| Lyondell Chimie France SAS | France |
| Lyondell China Holdings Limited | Hong Kong |
| Lyondell Europe Holdings Inc. | Delaware |
| Lyondell France Holdings SAS | France |
| Lyondell Greater China Holdings Limited | Hong Kong |
| Lyondell Greater China Trading Limited | China |
| Lyondell Greater China, Ltd. | Delaware |
| Lyondell Japan, Inc. | Japan |
| Lyondell PO-11 C.V. | Netherlands |
| Lyondell POJVGP, LLC | Delaware |
| Lyondell POJVLP, LLC | Delaware |
| Lyondell POTechGP, Inc. | Delaware |
| Lyondell POTechLP, Inc. | Delaware |
| LyondellBasell Brasil Ltda. | Brazil |
| Lyondell Refining Company LLC | Delaware |
| Lyondell Refining I LLC | Delaware |
| Lyondell South Asia Pte Ltd | Singapore |
| LyondellBasell Acetyls Holdco, LLC | Delaware |
| LyondellBasell Acetyls, LLC | Delaware |
| LyondellBasell Advanced Polyolefins Mexico, S.A. de C.V. | Mexico |
| LyondellBasell Australia (Holdings) Pty Ltd | Australia |
| LyondellBasell Australia Pty Ltd | Australia |
| LyondellBasell China Holdings B.V. | Netherlands |
| LyondellBasell F&F Holdco, LLC | Delaware |
| LyondellBasell Finance Company | Delaware |
| LyondellBasell Holdings France SAS | France |
| LyondellBasell Industries Holdings B.V. | Netherlands |
| LyondellBasell Investment LLC | Delaware |
| LyondellBasell Transportation Company LLC | Delaware |
| LyondellBasell Methanol GP, Inc. | Delaware |
| LyondellBasell Methanol LP, Inc. | Delaware |
| LyondellBasell Services France S.A.S. | France |
| LyondellBasell Subholdings B.V. | Netherlands |
| LyondellBasell Syrma SAS | France |
| OE Insurance Ltd | Bermuda |
| Olefins JV, LP | Delaware |

**LyondellBasell Industries N.V.**

| Entity Name | Jurisdiction of Formation |
|---|---|
| PO JV, LP | Delaware |
| PO Offtake, LP | Delaware |
| POSM II Limited Partnership, L.P. | Delaware |
| POSM II Properties Partnership LLC | Delaware |
| Société du Noir d'Acétylene de l'Aubette SAS | France |
| Technology JV, LP | Delaware |
| TRV Thermische Rückstandsverwertung GmbH & Co. KG | Germany |
| TRV Thermische Rückstandsverwertung Verwaltungs-GmbH | Germany |
| | |
| ***Investments in Associates and Joint Ventures*** | |
| Basell Orlen Polyolefins Sp. Z.o.o. | Poland |
| PolyPacific Pty. Ltd. | Australia |
| Saudi Polyolefins Company | Kingdom of Saudi Arabia |
| Saudi Ethylene & Polyethylene Company Ltd. | Kingdom of Saudi Arabia |
| Al-Waha Petrochemicals Ltd. | Kingdom of Saudi Arabia |
| PolyMirae Co. Ltd. | South Korea |
| HMC Polymers Company Ltd. | Thailand |
| Indelpro S.A. de C.V. | Mexico |
| Ningbo ZRCC Lyondell Chemical Co. Ltd. | China |
| Ningbo ZRCC Lyondell Chemical Marketing Co. | China |
| NOC Asia Ltd. | Hong Kong |
| Geosel | France |

# Corporate Financial Statements

**LyondellBasell Industries N.V.**

## CORPORATE STATEMENT OF INCOME

| Millions of U.S. Dollars | Year Ended 31 December 2016 | Year Ended 31 December 2015 |
|---|---|---|
| Income from Group companies after tax | $ 3,908 | $ 3,882 |
| Other income (expense), net of tax | 284 | 329 |
| Profit attributable to the equity holders | $ 4,192 | $ 4,211 |

**LyondellBasell Industries N.V.**

## CORPORATE STATEMENT OF FINANCIAL POSITION

**Before appropriation of profit**

| **Millions of U.S. Dollars** | **Note** | **31 December 2016** | **31 December 2015** |
|---|---|---|---|
| *Non-current assets* | | | |
| Goodwill | 2 | $ 317 | $ 319 |
| Investments in Group companies | 2 | 11,291 | 11,670 |
| Long-term loans to Group companies | 6 | 10,460 | 11,460 |
| Other assets | | 8 | 20 |
| Total non-current assets | | 22,076 | 23,469 |
| *Current assets* | | | |
| Receivables from Group companies | | 55 | 52 |
| Prepaid expense and other current assets | | 16 | 10 |
| Short term loans to Group companies | | 1,000 | -- |
| Cash and cash equivalents | 3 | 27 | 234 |
| Total current assets | | 1,098 | 296 |
| **Total assets** | | **$ 23,174** | **$ 23,765** |
| *Equity* | 4 | | |
| Share capital | | $ 31 | $ 31 |
| Share premium | | 10,009 | 10,007 |
| Legal reserves | | (900) | (748) |
| Retained earnings | | 7,128 | 4,262 |
| Profit for the year | | 4,192 | 4,211 |
| Treasury shares | | (14,945) | (12,086) |
| Total equity attributable to equity holders | | 5,515 | 5,677 |
| *Non-current liabilities* | | | |
| Deferred tax liability | | 20 | 9 |
| Long-term debt | 5 | 4,857 | 4,894 |
| Other long-term liabilities | | 16 | 6 |
| Deferred income | 7 | 4,909 | 6,517 |
| *Current liabilities* | | | |
| Bank overdraft | | 2 | 5 |
| Short-term loans from Group companies | 6 | 7,740 | 6,532 |
| Other liabilities | | 115 | 125 |
| **Total equity and liabilities** | | **$ 23,174** | **$ 23,765** |

## Notes to the Corporate Financial Statements

### 1 General

LyondellBasell Industries N.V. (the "Company" or "LyondellBasell N.V."), together with its consolidated subsidiaries (collectively, the "Group") applies the option provided in Section 2:362 (8) of the Dutch Civil Code for the principles applicable to the recognition and measurement of assets and liabilities and the determination of results for its Corporate Financial Statements. Accordingly, the principles for recognition and measurement of assets and liabilities and determination of results (hereinafter referred to as "accounting policies") of the Company's Corporate Statement of Financial Position are the same as those applied for the Consolidated Financial Statements under International Financial Reporting Standards ("IFRS"), as adopted by the European Union, for the periods ended 31 December 2016 and 2015, except as noted below:

- Investments in subsidiaries and other companies in which the Company has control are measured at net asset value, which is based on the net book value of assets, provisions and liabilities, in accordance with the accounting policies applied in the Consolidated Financial Statements.

- Goodwill presented in the Corporate Statement of Financial Position reflects the goodwill of subsidiaries directly acquired by the Company and is measured in accordance with the accounting policies of the Consolidated Financial Statements. Goodwill of subsidiaries indirectly owned (via intermediate subsidiaries) is recognized as part of the net asset value of such intermediate subsidiary.

At 31 December 2016 and 2015, the Company had fourteen and respectively thirteen full-time employees all located outside of The Netherlands.

### 2 Goodwill and Investments

| Millions of U.S. Dollars | Goodwill | Investments |
|---|---|---|
| **Balance at 1 January 2015** | $ 327 | $ 10,962 |
| Income from investments, net of tax | - - | 1,792 |
| Equity settled transactions | - - | 15 |
| Dividends received | - - | (744) |
| Additions to other reserves | (8) | (355) |
| **Balance at 31 December 2015** | **$ 319** | **$ 11,670** |
| **Balance at 1 January 2016** | $ 319 | $ 11,670 |
| Income from investments, net of tax | - - | 2,300 |
| Equity settled transactions | - - | 53 |
| Equity contributions | - - | 60 |
| Dividends received | - - | (2,702) |
| Additions to other reserves | (2) | (90) |
| **Balance at 31 December 2016** | $ 317 | $ 11,291 |

*Equity settled transactions*—Equity settled transactions represent share-based compensation granted to directors and employees.

*Dividends received*—The Company received a cash dividend of $2,333 million from LyondellBasell Subholdings B.V. during the period ended December 31, 2016.

During 2016, the Company received a dividend of $319 million from LyondellBasell Luxemburg II S.a.r.l.

During 2016, the company received a dividend of $50 million from LYB Americas finance holding B.V which was paid out of its share premium.

*Additions to other reserves*—Primarily represents movements for Currency translation differences and remeasurements of post-employment benefits obligations, which are non-distributable.

## 3 Cash and Cash Equivalents

The Company's cash and cash equivalents are held by its in-house banking unit, LYB Finance Company B.V. The interest rate on the account with LYB Finance Company B.V. is subject to a floating interest rate, based on current market rates. At 31 December 2016, the lending rates were 0.47% and less than one basis point for the U.S. dollar and euro accounts, respectively, and the borrowing rates were 1.86% and 1.25% for the U.S. dollar and euro accounts, respectively. At 31 December 2015, the lending rates were 0.09% and less than one basis point for the U.S. dollar and euro accounts, respectively, and the borrowing rates were 1.49% and 1.25% for the U.S. dollar and euro accounts, respectively.

## 4 Equity Attributable to Equity Holders

For a breakdown of Equity attributable to equity holders, reference is made to the Consolidated Statement of Changes in Group Equity and the notes thereto.

*Share capital*—Share capital is converted from euro to U.S. dollar with the month-end rate of euro 0.95 at 31 December 2016.

*Legal reserves*—Movements in legal reserves (net of tax), which cannot be distributed freely, are presented below:

| **Millions of U.S. Dollars** | **Currency Translation Differences** | **Group Companies** | **Total** |
|---|---|---|---|
| **Balance at 1 January 2015** | $ (491) | $ 168 | $ (323) |
| Net current period change | (390) | (35) | (425) |
| **Balance at 31 December 2015** | $ (881) | $ 133 | $ (748) |
| **Balance at 1 January 2016** | $ (881) | $ 133 | $ (748) |
| Net current period change | 14 | (166) | (152) |
| **Balance at 31 December 2016** | $ (867) | $ (33) | $ (900) |

The item "Group Companies" relates to the "*Wettelijke reserve deelnemingen,*" which is required by Dutch Law. This reserve relates to any legal or economic restrictions on the ability of group companies to transfer funds to the parent in the form of dividends.

*Retained earnings*—Movements in retained earnings are as follows:

| | 31 December | | | |
|---|---|---|---|---|
| **Millions of U.S. Dollars** | | **2016** | | **2015** |
| Opening balance | $ | 4,262 | $ | 1,652 |
| Dividend distribution | | (1,395) | | (1,410) |
| Previous year results | | 4,211 | | 3,937 |
| Additions to legal reserves | | 49 | | 72 |
| Tax credits related to share-based awards | | - - | | 12 |
| Other | | 1 | | (1) |
| Closing balance | $ | 7,128 | $ | 4,262 |

Pursuant to Dutch Law, limitations exist relating to the distribution of share capital of $31 million and Legal reserves of ($900) million at 31 December 2016 (($748) million in 2015).

In general, gains related to currency translation differences cannot be distributed as part of shareholders' equity as they form part of the legal reserves protected under Dutch Law. By their nature, losses related to currency translation differences and "group companies" reduce shareholders' equity and thereby distributable amounts.

The reconciliation of the Company's retained earnings to those of the Group reflected in the Group's Consolidated Statement of Financial Position is as follows:

| | 31 December | | | |
|---|---|---|---|---|
| **Millions of U.S. Dollars** | | **2016** | | **2015** |
| Retained earnings as per Consolidated Statement of Financial Position | $ | 11,691 | $ | 8,894 |
| Non-distributable reserves of Group companies | | (371) | | (420) |
| Profit for the year | | (4,192) | | (4,211) |
| Other | | -- | | (1) |
| Retained earnings as per Corporate Statement of Financial Position | $ | 7,128 | $ | 4,262 |

## Proposed Appropriation of Result

The Management Board, with the approval of the Supervisory Board, paid an aggregate dividend of $3.33 per share from its 2016 annual accounts. This included an interim dividend of $0.78 per share paid to shareholders of record on 29 February 2016; and an interim dividend of $0.85 per share paid to shareholders of record on 24 May 2016, 16 August 2016 and 29 November 2016. These dividend payments, totaling $1,395 million, have been charged to retained earnings.

The Management Board and the Supervisory Board will propose that the general meeting approve the dividends already paid, as described above.

## 5 Long-term Debt

*Senior Notes due 2055*—In March 2015, we issued $1,000 million of 4.625% Notes due 2055 at a discounted price of 98.353%.

*5% and 5.75% Senior Notes*—In April 2012, the Company 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%.

*6% Senior Notes*—In November 2011, the Company issued $1,000 million of 6% senior notes due 2021. These notes, which mature on 15 November 2021, bear interest at 6% annum.

## 6 Group Company Loans

The following table summarizes, as of 31 December 2016, the maturities of our Long-Term Loan Receivable from our Subsidiary and Loans Payable to our Subsidiaries for the next five years and thereafter:

| Millions of U.S. Dollars | Total | 2017 | 2018 | 2019 | 2020 | 2021 | Thereafter |
|---|---|---|---|---|---|---|---|
| **Non-current receivables:** | | | | | | | |
| Senior note receivable due July 2018, $2,000 million | $ 2,000 | $ - - | $ 2,000 | $ - - | $ - - | $ - - | $ - - |
| Senior note receivable due July 2020, $2,000 million | 2,000 | - - | - - | - - | 2,000 | - - | - - |
| Senior note receivable due July 2025, $2,000 million | 2,000 | - - | - - | - - | - - | - - | 2,000 |
| Senior note receivable due July 2026, $500 million | 500 | - - | - - | - - | - - | - - | 500 |
| Note receivable due April 2019, $1,974 million | 1,974 | - - | - - | 1,974 | - - | - - | - - |
| Note receivable due April 2024, $986 million | 986 | - - | - - | - - | - - | - - | 986 |
| Note receivable due November 2021, $1,000 million | 1,000 | - - | - - | - - | - - | 1,000 | - - |
| Total non-current receivables | $ 10,460 | $ - - | $ 2,000 | $ 1,974 | $ 2,000 | $ 1,000 | $ 3,486 |
| | | | | | | | |
| **Current receivables:** | | | | | | | |
| Senior note receivable due July 2017, $1,000 million | $ 1,000 | $ 1,000 | $ - - | $ - - | $ - - | $ - - | $ - - |
| Total non-current receivables | $ 1,000 | $ 1,000 | $ - - | $ - - | $ - - | $ - - | $ - - |
| | | | | | | | |
| **Current payables:** | | | | | | | |
| Loan payable due October 2018, $2,000 million | $ 1,369 | $ 1,369 | $ - - | $ - - | $ - - | $ - - | $ - - |
| Loan payable due February 2017, $5,000 million | 4,359 | 4,359 | - - | - - | - - | - - | - - |
| Loan payable due July 2018, $2,000 million | 2,000 | 2,000 | - - | - - | - - | - - | - - |
| Other | 12 | 12 | - - | - - | - - | - - | - - |
| Total current payables | $ 7,740 | $ 7,740 | $ - - | $ - - | $ - - | $ - - | $ - - |

*Long-Term Loan Receivable from our Subsidiary*—In July 2014, we and our wholly owned subsidiary, LyondellBasell Finance Company, entered into five separate notes with an aggregate principal amount of $7,500 million in lieu of a $7,500 million inter-company dividend. These notes consist of a $1,000 million 3.09% senior note due 1 July 2017; a $2,000 million 3.75% senior note due 1 July 2018; a $2,000 million 4.63% senior note due 1 July 2020; a $2,000 million 6.14% senior note due 1 July 2025 and a $500 million 6.30% senior note due 1 July 2026.

In April 2012, we and our indirectly wholly owned subsidiary, Lyondell Chemical Company ("Lyondell Chemical"), entered into a $1,974 million note receivable. The note bears per annum interest at 5.47% and matures on 15 April 2019. Interest is due semi-annually on 15 April and 15 October. In July 2012, we amended the terms of the note to include early prepayment restrictions and reduce the applicable interest. Lyondell Chemical may prepay all or part of the note at a specified redemption premium plus accrued and unpaid interest on the redemption date. At 31 December 2016 and 2015, the outstanding balance was $1,974 million.

In April 2012, we and Lyondell Chemical entered into another $986 million note receivable. The note bears per annum interest at 6.14% and matures on 15 April 2024. Interest is due semi-annually on 15 April and 15 October. In July 2012, we amended the terms of the note to include early prepayment restrictions and reduce the applicable interest. Lyondell Chemical may prepay all or part of the note at a specified redemption premium plus accrued and unpaid interest on the redemption date. At 31 December 2016 and 2015, the outstanding balance was $986 million.

In November 2011, we and Lyondell Chemical entered into a $1,000 million note receivable. The note bears interest at 6.45% per annum and matures on 15 November 2021. Interest is due semi-annually on 15 May and 15 November. In July 2012, the terms of the note were amended to include early prepayment restrictions. Lyondell Chemical may prepay all or part of the note at a specified redemption premium plus accrued and unpaid interest on the redemption date. At 31 December 2016 and 2015, the outstanding balance was $1,000 million.

*Loans Payable to our Subsidiaries*— In October 2015, we and our indirect, wholly owned subsidiary, LYB Treasury Services Ltd., entered into a $2,000 million loan, which matures on 6 October 2018. The loan is repayable on demand. The loan bears interest at a variable rate, which is set for a period of 3 months, using the U.S. LIBOR rate, plus 125 basis points. At 31 December 2016, the outstanding balance was $1,369 million.

In February 2015, we and our indirect, wholly owned subsidiary, LYB Americas Finance Company, entered into a $5,000 million loan, which matures on 1 February 2017. The loan is repayable on demand. The interest rate is equal to the Federal short-term rate determined under section 1274(d) of the Internal Revenue Code. At 31 December 2016, the outstanding balance was $4,359 million.

In July 2014, we and our indirect, wholly owned subsidiary, LYB Americas Finance Company, entered into a $2,000 million loan, which matures on 31 July 2016. The loan is repayable on demand. The interest rate is equal to the Federal short-term rate determined under section 1274(d) of the Internal Revenue Code. At 31 December 2016, the outstanding balance was $2,000 million.

In October 2011, we and our indirect, wholly owned subsidiary, LYB Finance Company B.V., entered into a $2,100 million unsecured loan, which matures on 3 October 2016. The loan bears interest at a variable rate, which is set for a period of 3 months, using the U.S. LIBOR rate, plus 300 basis points. In May 2013, LyondellBasell Subholdings B.V., a wholly owned subsidiary, assumed the $1,925 million outstanding balance of our $2,100 million unsecured loan in lieu of a $1,925 million inter-company dividend which was paid as a return of capital. At 31 December 2016, there was no outstanding balance.

Movements in Group company loans are presented below:

| **Millions of U.S. Dollars** | **Group Companies Loans** | |
|---|---|---|
| | **Receivables** | **Payables** |
| **Balance at 1 January 2015** | $ 11,460 | $ 2,000 |
| Borrowings | - - | 4,532 |
| Balance at 31 December 2015 | $ 11,460 | $ 6,532 |
| Of which: | | |
| Non-current | $ 11,460 | $ - - |
| Current | -- | 6,532 |
| **Balance at 31 December 2015** | $ 11,460 | $ 6,532 |
| **Balance at 1 January 2016** | $ 11,460 | $ 6,532 |
| Borrowings | - - | 1,208 |
| Discharge and assignments | - - | - - |
| Balance at 31 December 2016 | $ 11,460 | $ 7,740 |
| Of which: | | |
| Non-current | $ 10,460 | $ - - |
| Current | 1,000 | 7,740 |
| **Balance at 31 December 2016** | $ 11,460 | $ 7,740 |

## 7 Deferred Income

Deferred income represents the excess dividend paid by LBFC over its net asset value. This amount is reduced as the Company recognizes its share of LBFC's income. After the Deferred income is fully recognized, we will record our earnings from LBFC as additions to Investments in Group companies.

The movement in Deferred income, summarized below, represents our share of LBFC profit.

| **Millions of U.S. Dollars** | **2016** |
|---|---|
| **Balance at 1 January 2016** | $ 6,517 |
| Income from Group Companies, net of tax | (1,608) |
| **Balance at 31 December 2016** | $ 4,909 |

## 8 Commitments and Contingencies not included in the Balance Sheet

The Company has entered into guarantee agreements with counterparties on behalf of some of its subsidiaries for the supply of raw materials. At 31 December 2016 and 2015, the total guaranteed amount was $23.1 billion and $16.6 billion, respectively.

The Company receives an annual fee of 0.13% for guarantees of aggregate USD 7 billion and an annual fee between 0.17% and 0.19% for all other outstanding guarantees as of 31 December 2016. Fee levels applied in 2015 were an annual fee of 0.13% for guarantees of aggregate USD 7 billion and an annual fee of 0.17% for all other outstanding guarantees.

The Company is jointly and severally liable, as intended in article 403, Book2, of the Dutch Civil Code for the following subsidiaries in the Consolidated Financial Statements:

- LyondellBasell Subholdings B.V.
- LYB Americas Finance Holdings B.V.
- LYB International Finance B.V.
- LYB International Finance II B.V.
- Basell International Holdings B.V.
- Basell Europe Holdings B.V.
- LyondellBasell Industries Holdings B.V.
- LYB Trading Company B.V.
- LyondellBasell China Holdings B.V.

## 9 Independent auditor's Fee

The fees listed below relate to the procedures applied to the Company and its consolidated group entities by PricewaterhouseCoopers Accountants N.V., The Netherlands, the external independent auditor as referred to in section 1(1) of the Dutch Accounting Firms Oversight Act (Dutch acronym: Wta), as well as by other Dutch and foreign-based PricewaterhouseCoopers individual partnerships and legal entities, including their tax services and advisory groups:

| | Year Ended 31 December | |
|---|---|---|
| **Millions of U.S. Dollars** | **2016** | **2015** |
| Financial statements audit fees | $ 8.4 | $ 8.5 |
| Other assurance fees | 1.6 | 0.2 |
| All other fees | 0.2 | 0.2 |
| | $ 10.2 | $ 8.9 |

The total audit fees of PricewaterhouseCoopers Accountants N.V, The Netherlands, charged to the Company and its consolidated group entities amounted to $2.1 million and $2.0 million, respectively, in 2016 and 2015.

The financial statements audit fees above include the aggregate fees billed for professional services rendered for the audit of LyondellBasell Industries N.V.'s annual financial statements, annual statutory financial statements of subsidiaries and services that are normally provided by the independent auditor in connection with these audits.

This category also includes services such as comfort letters, statutory audits, attest services, consents and assistance with and review of documents.

The other assurance fees include the aggregate fees billed for assurance and related services that are reasonably related to the performance of the audit or review of the Group's financial statements and are not reported under audit services. This category includes fees related to the performance of audits of benefit plans, agreed-upon or expanded audit procedures relating to accounting records required to respond to or comply with financial, accounting or regulatory reporting matters and consultations as to the accounting or disclosure treatment of transactions or events and/or the actual or potential impact of final or proposed rules, standards or interpretations by regulatory or standard setting bodies.

Other fees relate to permitted services that are not included in the above categories.

## 10 Directors' Remuneration

Reference is made to Note 9, Key Management Remuneration, of the Consolidated Financial Statements.

London, 30 March 2017

**Supervisory Board**

Robert Gwin

Jacques Aigrain

Lincoln Benet

Jagjeet Bindra

Robin Buchanan

Stephen F. Cooper

Nance K. Dicciani

Bruce A. Smith

Rudy M.J. van der Meer

Claire S. Farley

Isabella D. Goren

**Management Board**

Bhavesh (Bob) V. Patel

Thomas Aebischer

Daniel Coombs

James Guilfoyle

Jeffrey A. Kaplan

## Other Information

### Proposed Appropriation of Result

Profit remaining after the appropriation to reserves shall be at the disposal of the general meeting (article 22 sub 3 Articles of Association). The Board of Management, with the approval of the Supervisory Board, may also appropriate the complete profit to the reserves.

### Legal Structure

The list of our subsidiaries and associates is available at the Chamber of Commerce in Rotterdam, The Netherlands.

# *Independent auditor's report*

To: the general meeting and supervisory board of LyondellBasell Industries N.V.

## *Report on the financial statements 2016*

### *Our opinion*

In our opinion:

- the accompanying consolidated financial statements give a true and fair view of the financial position of LyondellBasell Industries N.V. as at 31 December 2016 and of its result and cash flows for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union (EU-IFRS) and with Part 9 of Book 2 of the Dutch Civil Code;
- the accompanying corporate financial statements give a true and fair view of the financial position of LyondellBasell Industries N.V. as at 31 December 2016 and of its result for the year then ended in accordance with Part 9 of Book 2 of the Dutch Civil Code.

#### *What we have audited*

We have audited the accompanying financial statements 2016 of LyondellBasell Industries N.V., Rotterdam ('the company'). The financial statements include the consolidated financial statements of LyondellBasell Industries N.V. and its subsidiaries (together: 'the Group') and the corporate financial statements.

The consolidated financial statements comprise:

- the consolidated statement of financial position as at 31 December 2016;
- the following statements for 2016: the consolidated income statement and the consolidated statements of comprehensive income, changes in equity and cash flows; and
- the notes, comprising a summary of significant accounting policies and other explanatory information.

The corporate financial statements comprise:

- the company balance sheet as at 31 December 2016;
- the company profit and loss account for the year then ended;
- the notes, comprising a summary of the accounting policies and other explanatory information.

The financial reporting framework that has been applied in the preparation of the financial statements is EU-IFRS and the relevant provisions of Part 9 of Book 2 of the Dutch Civil Code for the consolidated financial statements and Part 9 of Book 2 of the Dutch Civil Code for the corporate financial statements.

### *The basis for our opinion*

We conducted our audit in accordance with Dutch law, including the Dutch Standards on Auditing. Our responsibilities under those standards are further described in the section 'Our responsibilities for the audit of the financial statements' of our report.

#### *Independence*

We are independent of LyondellBasell Industries N.V. in accordance with the 'Verordening inzake de onafhankelijkheid van accountants bij assuranceopdrachten' (ViO) and other relevant independence requirements in the Netherlands. Furthermore, we have complied with the ‘Verordening gedrags- en beroepsregels accountants’ (VGBA).

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

## ***Our audit approach***

### *Overview and context*

LyondellBasell Industries N.V. is a global chemical company. The company’s business operations are subject to the cyclical and volatile nature of the chemicals industry which results in fluctuations in profits from period to period and over business cycles. The chemicals industry has historically experienced alternative periods of capacity shortages, causing prices and profit margins to increase, followed by periods of excess capacity, resulting in oversupply and declining prices and profit margins. The volatility of results affected our determination of materiality as set out in the materiality section of our report. The company's primary accounting framework is US GAAP, which is used for the company's quarterly filings and annual Form 10-K. To comply with Dutch statutory requirements, the company uses IFRS, as adopted by the European Union, as their accounting framework for the Dutch annual report.

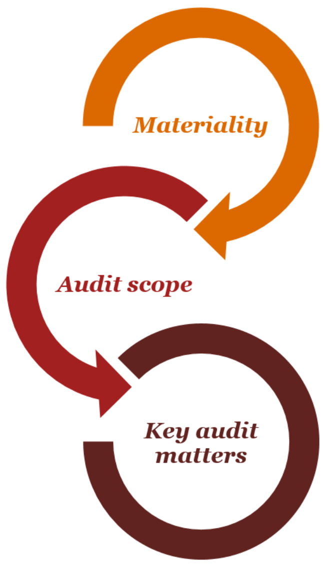
The group comprises of several components and therefore we considered our group audit scope and approach as set out in the scope of our group audit section. We paid specific attention to the areas of focus driven by the operations of the company, as set out below.

We designed our audit by determining materiality and assessing the risks of material misstatement in the financial statements. In particular, we looked at where the board of management made subjective judgements, for example in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. Given the significance of revenues recorded by the company, we considered this to be a key audit matter as set out in the key audit matter section in our report.

In addition to the key audit matter, other areas of focus were capitalization of assets, inventory costing and derivative financial instruments. As in all of our audits, we also addressed the risk of management override of internal controls, including evaluating whether there was evidence of bias by the board of management that may represent a risk of material misstatement due to fraud.

We ensured that the audit teams both at group and at component levels included the appropriate skills and competences which are needed for the audit. We included specialists in the areas of actuarial expertise, tax and financial instruments in our team.

The outlines of our audit approach were as follows:




### *Materiality*

- Overall materiality: USD 300 million.

### *Audit scope*

- We conducted audit work in and performed site visits to 4 locations: The Netherlands, United States of America, Germany and Saudi Arabia.
- We also performed procedures relating to three joint ventures in Poland, Saudi Arabia and the Netherlands which are being consolidated proportionately under IFRS 11.
- Audit coverage: 87% of consolidated revenue, 86% of consolidated total assets, and 85% of profit before tax.

### *Key audit matter*

- Audit approach to testing revenues

## *Materiality*

The scope of our audit is influenced by the application of materiality which is further explained in the section 'Our responsibilities for the audit of the financial statements'.

We set certain quantitative thresholds for materiality. These, together with qualitative considerations, helped us to determine the nature, timing and extent of our audit procedures on the individual financial statement line items and disclosures and to evaluate the effect of identified misstatements on our opinion.

Based on our professional judgement, we determined materiality for the financial statements as a whole as follows:

| | |
|---|---|
| ***Overall group materiality*** | USD 300 million |
| ***How we determined it*** | 5% of the three-year average of profit before income tax based on the US GAAP consolidated financial statements as filed on Form 10-K |
| ***Rationale for benchmark applied*** | Based on our analysis of the common information needs of users of the financial statements, we believe that profit before tax is an important metric for the financial performance of the company. The company uses two accounting frameworks for calculating profit before tax. The financial reporting frameworks that have been applied in the preparation of the financial statements are IFRS as adopted by the European Union (EU-IFRS) and Part 9 of Book 2 of the Dutch Civil Code ('Dutch GAAP'). The Accounting principles generally accepted in the United States of America (US GAAP) have been applied for the quarterly and annual earnings releases and the financial statements filed with the United States Securities and Exchange Commission and are applied in the daily operational accounting records.<br>In addition, we believe that the users of financial information of the company are primarily interested in the US GAAP financial information. Any user of these financial statements (EU-IFRS and Dutch GAAP) would likely not review this information in isolation; if users did review this information it would be in supplement to the US GAAP financial information. |

| | |
|---|---|
| | Therefore, for these financial statements (EU-IFRS and Dutch GAAP) we have applied a general accepted auditing practice benchmark of 5% on the three-year average profit before tax based on US GAAP.<br><br>We have applied a three-year average of the profit before income tax as the company's operations are subject to the cyclicality and volatility of the chemicals industry, hence operating results may vary substantially over the years. |
| ***Component materiality*** | To each component in our audit scope, we, based on our judgement, allocate materiality that is less than our overall group materiality. The range of materiality allocated across components was between USD 50 million and USD 270 million. |

We also take misstatements and/or possible misstatements into account that, in our judgement, are material for qualitative reasons.

We agreed with the supervisory board that we would report to them misstatements identified during our audit above USD 15 million as well as misstatements below that amount that, in our view, warranted reporting for qualitative reasons.

## *The scope of our group audit*

LyondellBasell Industries N.V. is the parent company of a group of entities. The financial information of this group is included in the consolidated financial statements of LyondellBasell Industries N.V.

Two components were subjected to audits of their complete financial information as those components are individually financially significant to the group. These components operate in the United States of America and The Netherlands. Two other components, located in Germany and the Netherlands, were also subjected to audits of their complete financial information. Eleven components (including one joint venture), operating in the USA, Germany and the Netherlands, were subjected to specific audit procedures as they have material balances in certain financial statement line items. Additionally, the two remaining joint ventures (in Poland and Saudi-Arabia) were selected for specified procedures to achieve appropriate coverage on financial line items in the consolidated financial statements. Based on the procedures performed we have obtained sufficient audit evidence to assess the proportional consolidation of the joint ventures as required by IFRS 11.

In total, in performing these procedures, we achieved the following coverage on the financial line items:

| | |
|---|---|
| ***Revenue*** | 87% |
| ***Total assets*** | 86% |
| ***Profit before tax*** | 85% |

None of the remaining components represented more than 2% of total group revenue or total group assets. For those remaining components we performed, among other things, risk based analytical procedures to corroborate our assessment that there were no significant risks of material misstatements within those components.

Where the work was performed by component auditors, we determined the level of involvement we needed to have in their audit work to be able to conclude whether sufficient appropriate audit evidence had been obtained as a basis for our opinion on the consolidated financial statements. We made site visits to United States of America and Germany. We reviewed their audit files and reports about their findings and held meetings with local management and the component audit teams. We also made a site visit to Saudi Arabia to perform specified procedures and meet with local management.

By performing the procedures above at components, combined with additional procedures at group level, we have obtained sufficient and appropriate audit evidence regarding the financial information of the group as a whole to provide a basis for our opinion on the consolidated financial statements.

## *Key audit matters*

Key audit matters are those matters that, in our professional judgement, were of most significance in the audit of the financial statements. We have communicated the key audit matters to the supervisory board, but they are not a comprehensive reflection of all matters that were identified by our audit and that we discussed. We described the key audit matters and included a summary of the audit procedures we performed on those matters.

The key audit matter was addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon. We do not provide a separate opinion on this matter or on specific elements of the financial statements. Any comments we make on the results of our procedures should be read in this context.

| ***Key audit matter*** | ***How our audit addressed the matter*** |
|---|---|
| ***Audit approach to testing revenues***<br>*Note 5 and 32* | |
| The company's revenues are largely homogeneous and high in volume and are significant to the company's performance. In addition, transactions are spread across multiple entities. Auditing revenues takes a significant portion of time due to extensive scoping considerations to ensure appropriate coverage on the revenue line item and the extensive test work as a result of this. | Our audit procedures involved gaining an understanding of the revenue processes, products and locations and a comprehensive scoping exercise to ensure sufficient coverage by our audit procedures over the recorded revenues. This is explained in 'the scope of our group audit' section in this report. We tested the effectiveness of internal controls, and determined that we could rely on those controls for the purpose of our audit. We also performed a variety of detailed testing including manual journal entry testing, detailed revenue transaction testing, cut-off testing, accounts receivable testing, and debits to sales testing. Our tests did not identify any material exceptions. |
| Additionally the company uses multiple types of shipping terms whereby title and risks pass from the company to the customer at different stages in the delivery process. This results in the requirement to defer revenue in cases where the terms are FOB destination. However, the majority of transactions are FOB shipping which means revenue recognition typically occurs when the product is shipped. Verification of the shipping term used is crucial in our assessment of revenue recognition and results in a higher inherent risk of inappropriate existence and cut-off of revenues. | We have performed specific testing on existence and cut-off on revenue. The use of multiple shipping terms complicates the moment of recording revenue, as the company has two sets of shipping documents, from loading and unloading at customer site. To address the risk of existence and cut-off, we perform testing which includes the review of customer contracts to inspect the agreed upon shipping terms. Once we determine the appropriate set of shipping documents upon which revenue should be recognized, we obtain those documents to assess whether revenue was appropriately recorded or deferred. |
| Given the significance of revenues recorded by the company, we considered this to be a key audit matter. | Our test results did not indicate any material exceptions. |

# Report on the other information included in the financial report

In addition to the financial statements and our auditor's report thereon, the annual report contains other information that consists of:

- the report of the board of management;
- governance and compliance paragraph, including the report by the supervisory board;
- the other information pursuant to Part 9 of Book 2 of the Dutch Civil Code;

Based on the procedures performed as set out below, we conclude that the other information:

- is consistent with the financial statements and does not contain material misstatements;
- contains all information that is required by Part 9 of Book 2 of the Dutch Civil Code.

We have read the other information. Based on our knowledge and understanding obtained in our audit of the financial statements or otherwise, we have considered whether the other information contains material misstatements.

By performing our procedures, we comply with the requirements of Part 9 Book 2 of the Dutch Civil Code and the Dutch Standard 720. The scope of such procedures were substantially less than the scope of those performed in our audit of the financial statements.

The board of management is responsible for the preparation of the other information, including the directors' report and the other information pursuant to Part 9 Book 2 of the Dutch Civil Code.

# Report on other legal and regulatory requirements

## Our appointment

We were appointed as auditors of LyondellBasell Industries N.V. following the passing of a resolution by the shareholders at the annual meeting held on 11 May 2016. The supervisory board had proposed the auditor appointment in their meeting held 16 February 2016. The appointment has been renewed annually by shareholders representing a total period of uninterrupted engagement appointment of 7 years.

# Responsibilities for the financial statements and the audit

## Responsibilities of the board of management and the supervisory board for the financial statements

The board of management is responsible for:

- the preparation and fair presentation of the financial statements in accordance with EU-IFRS and with Part 9 of Book 2 of the Dutch Civil Code; and for
- such internal control as the board of management determines is necessary to enable the preparation of the financial statements that are free from material misstatement, whether due to fraud or error.

As part of the preparation of the financial statements, the board of management is responsible for assessing the company's ability to continue as a going concern. Based on the financial reporting frameworks mentioned, the board of management should prepare the financial statements using the going-concern basis of accounting unless the board of management either intends to liquidate the company or to cease operations, or has no realistic alternative but to do so. The board of management should disclose events and circumstances that may cast significant doubt on the company's ability to continue as a going concern in the financial statements.

The supervisory board is responsible for overseeing the company's financial reporting process.

### *Our responsibilities for the audit of the financial statements*

Our responsibility is to plan and perform an audit engagement in a manner that allows us to obtain sufficient and appropriate audit evidence to provide a basis for our opinion. Our audit opinion aims to provide reasonable assurance about whether the financial statements are free from material misstatement. Reasonable assurance is a high but not absolute level of assurance which makes it possible that we may not detect all misstatements. Misstatements may arise due to fraud or error. They are considered to be material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

Materiality affects the nature, timing and extent of our audit procedures and the evaluation of the effect of identified misstatements on our opinion.

A more detailed description of our responsibilities is set out in the appendix to our report.

Utrecht, 30 March 2017
PricewaterhouseCoopers Accountants N.V.

A.C.M. van der Linden RA

# *Appendix to our auditor's report on the financial statements 2016 of LyondellBasell Industries N.V.*

In addition to what is included in our auditor's report we have further set out in this appendix our responsibilities for the audit of the financial statements and explained what an audit involves.

## *The auditor's responsibilities for the audit of the financial statements*

We have exercised professional judgement and have maintained professional scepticism throughout the audit in accordance with Dutch Standards on Auditing, ethical requirements and independence requirements. Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error. Our audit consisted, among other things of the following:

- Identifying and assessing the risks of material misstatement of the financial statements, whether due to fraud or error, designing and performing audit procedures responsive to those risks, and obtaining audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the intentional override of internal control.
- Obtaining an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control.
- Evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the board of management.
- Concluding on the appropriateness of the board of management's use of the going concern basis of accounting, and based on the audit evidence obtained, concluding whether a material uncertainty exists related to events and/or conditions that may cast significant doubt on the company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report and are made in the context of our opinion on the financial statements as a whole. However, future events or conditions may cause the company to cease to continue as a going concern.
- Evaluating the overall presentation, structure and content of the financial statements, including the disclosures, and evaluating whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

Considering our ultimate responsibility for the opinion on the company's consolidated financial statements we are responsible for the direction, supervision and performance of the group audit. In this context, we have determined the nature and extent of the audit procedures for components of the group to ensure that we performed enough work to be able to give an opinion on the financial statements as a whole. Determining factors are the geographic structure of the group, the significance and/or risk profile of group entities or activities, the accounting processes and controls, and the industry in which the group operates. On this basis, we selected group entities for which an audit or review of financial information or specific balances was considered necessary.

We communicate with the supervisory board regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We provide the supervisory board with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the supervisory board, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor’s report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, not communicating the matter is in the public interest.