First Quarter 2017 Earnings

April 28, 2017

Building for the Future
Cautionary Statement

The statements in this presentation relating to matters that are not historical facts are forward-looking statements. These forward-looking statements are based upon assumptions of management which are believed to be reasonable at the time made and are subject to significant risks and uncertainties. Actual results could differ materially based on factors including, but not limited to, the business cyclicality of the chemical, polymers and refining industries; the availability, cost and price volatility of raw materials and utilities, particularly the cost of oil, natural gas, and associated natural gas liquids; competitive product and pricing pressures; labor conditions; our ability to attract and retain key personnel; operating interruptions (including leaks, explosions, fires, weather-related incidents, mechanical failure, unscheduled downtime, supplier disruptions, labor shortages, strikes, work stoppages or other labor difficulties, transportation interruptions, spills and releases and other environmental risks); the supply/demand balances for our and our joint ventures’ products, and the related effects of industry production capacities and operating rates; our ability to achieve expected cost savings and other synergies; our ability to successfully execute projects and growth strategies; legal and environmental proceedings; tax rulings, consequences or proceedings; technological developments, and our ability to develop new products and process technologies; potential governmental regulatory actions; political unrest and terrorist acts; risks and uncertainties posed by international operations, including foreign currency fluctuations; and our ability to comply with debt covenants and service our debt. Additional factors that could cause results to differ materially from those described in the forward-looking statements can be found in the “Risk Factors” section of our Form 10-K for the year ended December 31, 2016, which can be found at www.lyondellbasell.com on the Investor Relations page and on the Securities and Exchange Commission’s website at www.sec.gov.

The illustrative results or returns of growth projects are not in any way intended to be, nor should they be taken as, indicators or guarantees of performance. The assumptions on which they are based are not projections and do not necessarily represent the Company’s expectations and future performance. You should not rely on illustrated results or returns or these assumptions as being indicative of our future results or returns.

This presentation contains time sensitive information that is accurate only as of the date hereof. Information contained in this presentation is unaudited and is subject to change. We undertake no obligation to update the information presented herein except as required by law.
Information Related to Financial Measures

This presentation makes reference to certain “non-GAAP” financial measures as defined in Regulation G of the U.S. Securities Exchange Act of 1934, as amended. The non-GAAP measures we have presented include income from continuing operations excluding LCM, diluted earnings per share excluding LCM, EBITDA and EBITDA excluding LCM. LCM stands for “lower of cost or market,” which is an accounting rule consistent with GAAP related to the valuation of inventory. Our inventories are stated at the lower of cost or market. Cost is determined using the last-in, first-out (“LIFO”) inventory valuation methodology, which means that the most recently incurred costs are charged to cost of sales and inventories are valued at the earliest acquisition costs. Market is determined based on an assessment of the current estimated replacement cost and selling price of the inventory. In periods where the market price of our inventory declines substantially, cost values of inventory may be higher than the market value, which results in us writing down the value of inventory to market value in accordance with the LCM rule, consistent with GAAP. This adjustment is related to our use of LIFO accounting and the decline in pricing for many of our raw material and finished goods inventories. We report our financial results in accordance with U.S. generally accepted accounting principles, but believe that certain non-GAAP financial measures, such as EBITDA and earnings and EBITDA excluding LCM, provide useful supplemental information to investors regarding the underlying business trends and performance of the company’s ongoing operations and are useful for period-over-period comparisons of such operations. Non-GAAP financial measures should be considered as a supplement to, and not as a substitute for, or superior to, the financial measures prepared in accordance with GAAP.

EBITDA, as presented herein, may not be comparable to a similarly titled measure reported by other companies due to differences in the way the measure is calculated. We calculate EBITDA as income from continuing operations plus interest expense (net), provision for (benefit from) income taxes, and depreciation & amortization. EBITDA should not be considered an alternative to profit or operating profit for any period as an indicator of our performance, or as an alternative to operating cash flows as a measure of our liquidity. We have also presented financial information herein exclusive of adjustments for LCM.

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

Additionally, the ratio of total debt to LTM EBITDA excluding LCM is a measure that provides an indicator of value to investors. For purposes of this presentation, the ratio of total debt to LTM EBITDA excluding LCM means total debt at period end divided by EBITDA excluding LCM for the last twelve months.

Reconciliations for our non-GAAP measures can be found on our website at www.lyb.com/investorrelations
1Q 2017 Highlights

$ in millions, except per share data)

<table>
<thead>
<tr>
<th></th>
<th>1Q16</th>
<th>4Q16</th>
<th>1Q17</th>
<th>1Q16</th>
<th>4Q16</th>
<th>1Q17</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBITDA</td>
<td>$1,807</td>
<td>$1,406</td>
<td>$1,617</td>
<td>$1,875</td>
<td>$1,435</td>
<td>$1,617</td>
</tr>
<tr>
<td>Income from Continuing Operations</td>
<td>$1,030</td>
<td>$770</td>
<td>$805</td>
<td>$1,077</td>
<td>$788</td>
<td>$805</td>
</tr>
<tr>
<td>Diluted Earnings ($ / share) from Continuing Operations</td>
<td>$2.37</td>
<td>$1.89</td>
<td>$2.00</td>
<td>$2.48</td>
<td>$1.94</td>
<td>$2.00</td>
</tr>
</tbody>
</table>

EPS Performance

- Improved results in Olefins and Polyolefins as well as Intermediates and Derivatives
- Completed Refining planned maintenance and Tier 3 gasoline upgrade
- Allocated $500 million in 1Q17 share repurchases and dividends
- Issued $1 billion of 10-year bonds with a coupon rate of 3.5% due in 2027; redeemed $1 billion of outstanding 5.0% bonds due in 2019

(1) LCM stands for “lower of cost or market.” An explanation of LCM and why we have excluded it from our financial information in this presentation can be found on the third page of this presentation under “Information Related to Financial Measures.”

Note: 1Q16 results include $78 million after-tax gain on sale of Petroken: $57 million gain for O&P Americas for the polypropylene business and $21 million gain for O&P EAI for the compounding business.
LyondellBasell Safety Performance

Safety - Injuries per 200,000 Hours Worked (1)

Dedicated to Continue our Strong Safety Performance

(1) Includes employees and contractors.
First Quarter 2017 and LTM Segment EBITDA

### First Quarter 2017 (1)

<table>
<thead>
<tr>
<th>(USD, millions)</th>
<th>EBITDA</th>
<th>Op. Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>As Reported</td>
<td>$1,617</td>
<td>$1,210</td>
</tr>
<tr>
<td>As Adjusted for LCM</td>
<td>$1,617</td>
<td>$1,210</td>
</tr>
</tbody>
</table>

### LTM March 2017 (1)

<table>
<thead>
<tr>
<th>(USD, millions)</th>
<th>EBITDA</th>
<th>Op. Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>As Reported</td>
<td>$6,412</td>
<td>$4,910</td>
</tr>
<tr>
<td>As Adjusted for LCM</td>
<td>$6,373</td>
<td>$4,871</td>
</tr>
</tbody>
</table>

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**First Quarter 2017 EBITDA**

- **OLP Americas**: $600 million
- **OLP EAI**: $1,000 million
- **Intermediates & Derivatives**: $400 million
- **Refining**: $200 million
- **Technology**: $0 million

**As Reported**

**LTM March 2017 EBITDA ex. LCM**

- **OLP Americas**: $6,412 million
- **OLP EAI**: $4,910 million
- **Intermediates & Derivatives**: $3,168 million
- **Refining**: $1,930 million
- **Technology**: $1,000 million

(1) Includes a $31 million gain in O&P Americas for the sale of the Lake Charles assets.
### First Quarter 2017

<table>
<thead>
<tr>
<th>Description</th>
<th>USD, millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>$2,391</td>
<td></td>
</tr>
<tr>
<td>$2,158</td>
<td></td>
</tr>
<tr>
<td>500</td>
<td></td>
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<td>1,000</td>
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<td>3,000</td>
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<td>3,500</td>
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<tr>
<td>$4,000</td>
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</tbody>
</table>

### LTM March 2017

<table>
<thead>
<tr>
<th>Description</th>
<th>USD, millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>$2,952</td>
<td></td>
</tr>
<tr>
<td>$2,158</td>
<td></td>
</tr>
<tr>
<td>$2,952</td>
<td></td>
</tr>
<tr>
<td>$2,158</td>
<td></td>
</tr>
</tbody>
</table>

~ $4.9 billion in cash from operations generated over the last 12 months

(1) Beginning and ending cash balances include cash and liquid investments.
(2) Includes accounts receivable, inventories and accounts payable.
(3) Includes capital and maintenance turnaround spending.
Strong Cash Generation, Share Repurchases & Dividends

Cash From Operations

USD, millions

- Free Cash Flow
- Capex

2014 | 2015 | 2016 | LTM March 2017

Dividends & Share Repurchases

USD, millions

- Interim Dividends
- Share Repurchases

2014 | 2015 | 2016 | LTM March 2017

Key Statistics

Snapshot at March 31, 2017

LTM Free Cash Flow\(^{(1)}\): $2.8 billion
LTM Capex: $2.1 billion
Cash\(^{(2)}\): $2.2 billion
Total Debt/LTM EBITDA ex. LCM: 1.4x

- 1.5 million shares purchased during Q1 2017
- $500 million in share repurchases and dividends during Q1 2017
- Proposal of up to 10% share repurchase for approval at May 24 annual general meeting

(1) Free Cash Flow = (Cash from Operations – Capital Expenditures).
(2) Cash balances include cash and liquid investments.

Building for the Future
Olefins & Polyolefins – Americas
Highlights and Business Drivers – 1Q’17

**EBITDA ex. LCM**

USD, millions

- **As Reported**
- **Excluding LCM**

<table>
<thead>
<tr>
<th>Quarter</th>
<th>1Q’16</th>
<th>2Q’16</th>
<th>3Q’16</th>
<th>4Q’16</th>
<th>1Q’17</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBITDA</td>
<td>800</td>
<td>800</td>
<td>800</td>
<td>600</td>
<td>800</td>
</tr>
<tr>
<td>Margin</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volume</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Performance vs. 4Q’16**

- **U.S. Olefins**
  - Ethylene price up 2¢/lb
  - Production up post Corpus turnaround and expansion

- **Polyethylene**
  - Spread down 2¢/lb on improved olefin pricing

- **Polypropylene (includes Catalloy)**
  - Spread down 4¢/lb on improved olefin pricing

**U.S. Industry Ethylene Chain Margins**

- Ethane Margin
- Naphtha Margin
- HDPE Margin
- Ethylene/HDPE Chain

**U.S. Industry Polypropylene Margins**

- 1Q’16
- 4Q’16
- 1Q’17
- Apr’17

(1) Arrow direction reflects our underlying business metrics.
(2) Source: Quarterly and April 21, 2017 month-to-date average IHS industry data.

Building for the Future
Trends Support Further Increases in USGC Ethane Supply

- Growing demand focused on U.S. Gulf Coast markets
- Ethane content in natural gas steadily increasing
- Drilling concentrated in oil fields with rich associated gas
- Increased drilling concentrated in Texas, Oklahoma, and New Mexico
- ~60% in Permian and Eagle Ford

These trends could lead to an upside of several hundred thousand barrels per day of ethane

Source: Tudor Pickering Holt, Baker Hughes, Enterprise, Bentek, EIA, and LYB.

Building for the Future
Olefins & Polyolefins – Europe, Asia, International
Highlights and Business Drivers – 1Q’17

EBITDA ex. LCM

USD, millions

<table>
<thead>
<tr>
<th>Period</th>
<th>As Reported</th>
<th>Excluding LCM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1Q'16</td>
<td>$500</td>
<td>$400</td>
</tr>
<tr>
<td>2Q'16</td>
<td>$550</td>
<td>$450</td>
</tr>
<tr>
<td>3Q'16</td>
<td>$500</td>
<td>$400</td>
</tr>
<tr>
<td>4Q'16</td>
<td>$450</td>
<td>$350</td>
</tr>
<tr>
<td>1Q'17</td>
<td>$500</td>
<td>$400</td>
</tr>
</tbody>
</table>

Performance vs. 4Q’16(1)

- **EU Olefins**
  - Ethylene price up 3 ¢/lb
  - Volume up post turnaround

- **Polyethylene**
  - Sales volume up 7%

- **Polypropylene (includes Catalloy)**
  - Sales volume up 8%

- **PP Compounds + PB-1**

- **JV equity income**

European Industry Ethylene Chain Margins(2)

<table>
<thead>
<tr>
<th>Period</th>
<th>Naphtha Margin</th>
<th>HDPE Margin</th>
<th>Ethylene/HDPE Chain</th>
</tr>
</thead>
<tbody>
<tr>
<td>1Q'16</td>
<td>30</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>4Q'16</td>
<td>25</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>1Q'17</td>
<td>20</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Apr'17</td>
<td>15</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

European Industry Polypropylene Margins(2)

<table>
<thead>
<tr>
<th>Period</th>
<th>Cent / lb</th>
</tr>
</thead>
<tbody>
<tr>
<td>1Q'16</td>
<td>10</td>
</tr>
<tr>
<td>4Q'16</td>
<td>10</td>
</tr>
<tr>
<td>1Q'17</td>
<td>10</td>
</tr>
<tr>
<td>Apr'17</td>
<td>10</td>
</tr>
</tbody>
</table>

(1) Arrow direction reflects our underlying business metrics. (2) Source: Quarterly and April 21, 2017 month-to-date average IHS industry data.

Building for the Future
Global Ethylene Operating Rates Remain Strong Despite New Capacity

2017 – 2021 global ethylene operating rates average above 2010-2016 rates

Source: IHS, LYB estimates, effective operating rate assuming 6% industry downtime. Based on 2017 updated balances.
Intermediates & Derivatives
Highlights and Business Drivers – 1Q’17

EBITDA ex. LCM

USD, millions

As Reported
Excluding LCM

Propylene Oxide and Derivatives
- PO margins higher due to sales mix

Intermediates
- Methanol margin up 25 ¢/gal
- Styrene margin up 1 ¢/lb

Oxyfuels & Related Products
- Volumes down due to seasonal demand

Performance vs. 4Q’16

Propylene Glycol Raw Material Margins

EU MTBE Raw Material Margins

(1) Arrow direction reflects our underlying business metrics.
(2) Source: ChemData April 2017 Report
(3) Source: Platts quarterly and April 21, 2017 month-to-date averages.
Refining
Highlights and Business Drivers – 1Q’17

EBITDA
USD, millions

- $100
- $50
- $0
1Q'16 2Q'16 3Q'16 4Q'16 1Q'17

As Reported

Performance vs. 4Q’16(1)

Houston Refinery
- Crude throughput: 202 MBPD
- 4Q benefited from a full year adjustment reflecting consumption of low cost crude from inventory in 2016
- Completed 1Q planned maintenance and investment in Tier 3 low-sulfur gasoline

Refining Spreads(2)
USD / BBL

Lt-Hvy (LLS-Maya) Lt-Gasoline (USGC RBOB - LLS) Lt-ULSD (USGC ULSD - LLS)

1Q'16 4Q'16 1Q'17 Apr'17

Refining Throughput
MBPD

1Q'16 2Q'16 3Q'16 4Q'16 1Q'17

(1) Arrow direction reflects our underlying business metrics.
(2) Light Louisiana Sweet (LLS) is the referenced light crude. Data represents quarterly and April 21 2017 month-to-date average per Platts.
First Quarter Summary and Outlook

First Quarter Summary

- Olefins and Polyolefins - Continued strong global demand
- Intermediates and Derivatives – Improved styrene and methanol results
- Refining - Completed planned maintenance and investment in Tier 3 low-sulfur gasoline
- $500 million in share repurchases and dividends
- Issued $1 billion of 10-year bonds with a coupon rate of 3.5% due in 2027; redeemed $1 billion of outstanding 5.0% bonds due in 2019

Near-Term Outlook

- Global olefin and polyolefin markets remain favorable
- Oxyfuels and refining spreads following typical seasonal conditions
- Poised to capture benefits of refining capacity and olefins expansion
Guided by a Clear and Value-Oriented Strategy

- Achieve Top Quartile Operations
- Practice Relentless Cost Discipline
- Prudent Financial Stewardship
- Pursue Profitable Organic Growth
- Capture Opportunities In Cycles

Value Creation

- Run What We Have Really Well
- Find Opportunities in Cycles
- Maintain Financial Discipline, Steady Organic Growth

Building for the Future
We Can Generate Value by Leveraging Skills and Strategy

1. Formation
2. Establishment
3. Development

Beyond
4. Sustainable Growth

Capabilities
Establish and Stabilize Culture and Systems

2010
2016

- Manage Costs
- Increase Profitability
- Increase Cash Flow
- Create Value

Optimize Footprint
Rapid Capture of Latent Opportunities
Build on Success and Skills

2010
2016

2010
2016

2010
2016

2010
2016
We Are Well-Positioned for Value-Driven Growth

**Strong Foundation**
- Global reach
- Leading technology
- World-class operator
- Balance sheet capacity

**Strong Earnings Upside at a Low Valuation**
- Portfolio breadth with differentiated products
- Feedstock advantage and flexibility
- Strong and secure dividend

**Talented People and Robust Processes**
- Ownership culture
- Incentives aligned with shareholders
- Disciplined capital deployment processes