



First Quarter 2016 Earnings

April 22, 2016

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 cyclicalities 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, 2015, 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 recent 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) and book capital are measures commonly used by investors, free cash flow and book capital, 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 and book capital means total debt plus stockholders' equity plus minority interests.

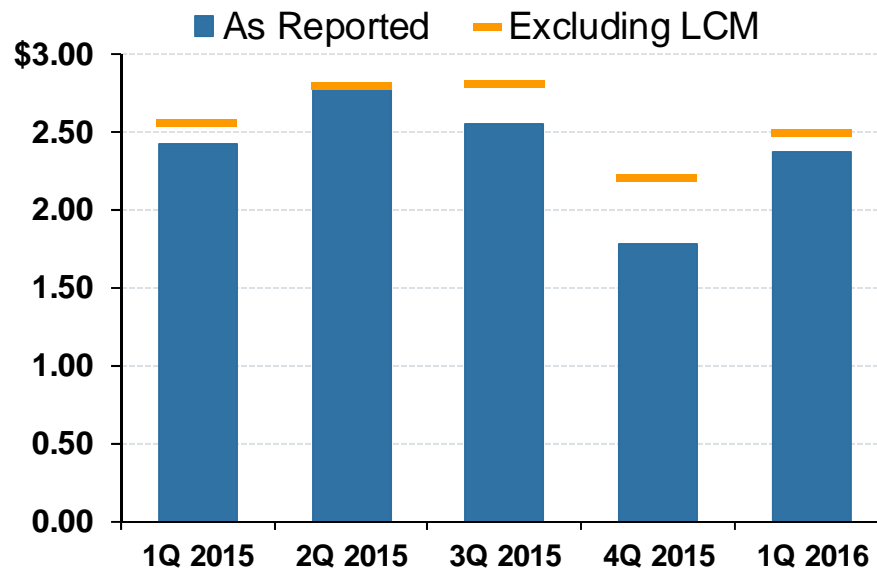
Reconciliations for our non-GAAP measures can be found on our website at www.lyb.com/investorrelations

1Q 2016 Highlights



| (\$ in millions, except per share data) | As Reported | | | Excluding LCM ⁽¹⁾ | | |
|----------------------------------------------------------|-------------|---------|---------|------------------------------|---------|---------|
| | 1Q15 | 4Q15 | 1Q16 | 1Q15 | 4Q15 | 1Q16 |
| EBITDA | \$1,952 | \$1,394 | \$1,807 | \$2,044 | \$1,678 | \$1,875 |
| Income from Continuing Operations | \$1,167 | \$797 | \$1,030 | \$1,225 | \$982 | \$1,077 |
| Diluted Earnings (\$ / share) from Continuing Operations | \$2.42 | \$1.78 | \$2.37 | \$2.54 | \$2.20 | \$2.48 |

Strong EPS Performance



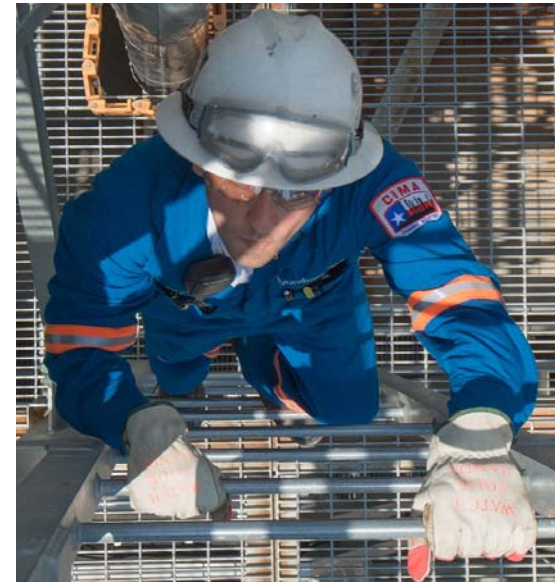
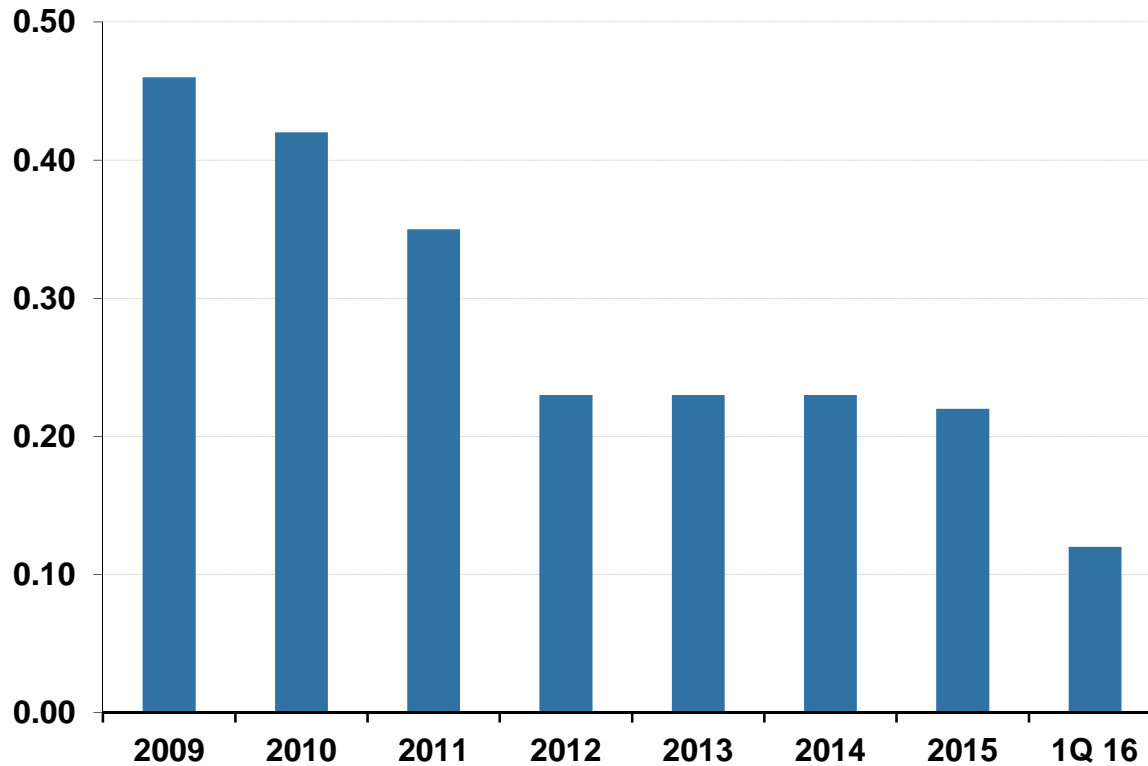
Highlights

- Polyolefins capturing strong O&P chain margins
- Improving seasonal markets
- Completed refinery turnaround
- Completed sale of Argentine subsidiary Petroken with gain of \$78 million; Completed second India PP compounding acquisition (Zylog) during early April
- Issued €750 million six-year euro bonds at 1.875% rate
- \$1.3 billion in 1Q16 share repurchases and dividends

(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: All results include \$78 million after-tax gain on sale of Petroken; \$57 million gain for O&P Americas for polypropylene assets and \$21 million gain for O&P EAI for compounding assets.

Safety Benchmark: Injuries per 200,000 Hours Worked ⁽¹⁾



Continued improvement over our already strong 2015 safety performance

(1) Includes employees and contractors.

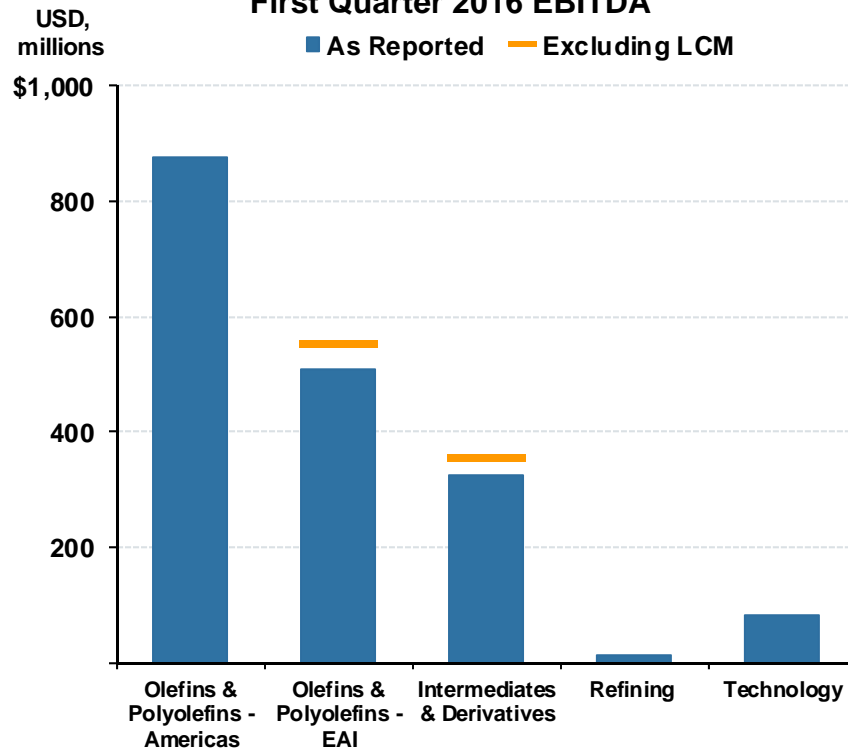
First Quarter 2016 and LTM Segment EBITDA



First Quarter 2016 ⁽¹⁾

| (\$, millions) | EBITDA | Op. Income |
|---------------------|---------|------------|
| As Reported | \$1,807 | \$1,360 |
| As Adjusted for LCM | \$1,875 | \$1,428 |

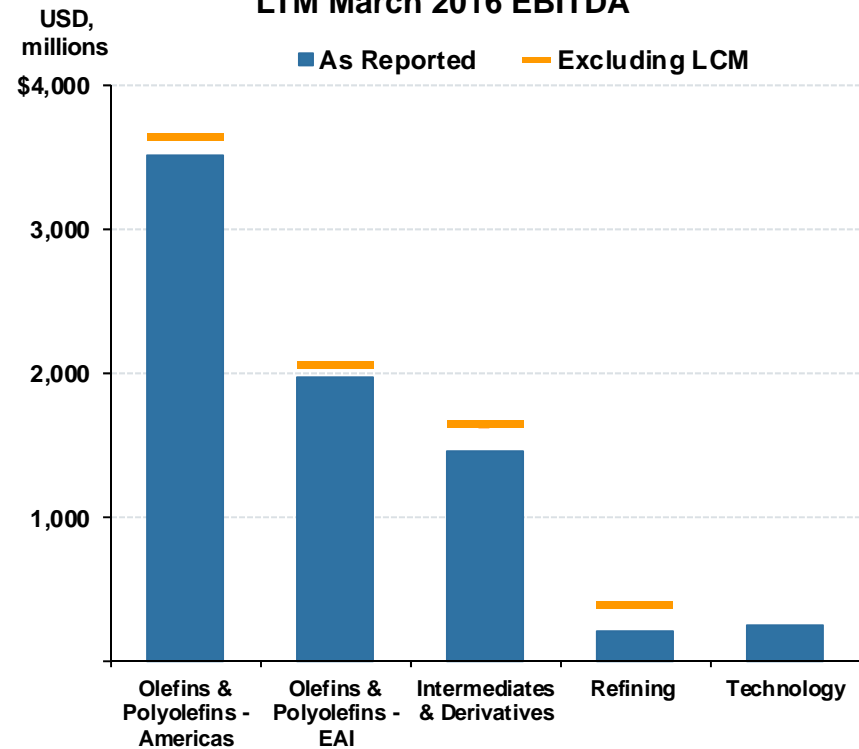
First Quarter 2016 EBITDA



LTM March 2016 ⁽¹⁾

| (\$, millions) | EBITDA | Op. Income |
|---------------------|---------|------------|
| As Reported | \$7,388 | \$5,907 |
| As Adjusted for LCM | \$7,912 | \$6,431 |

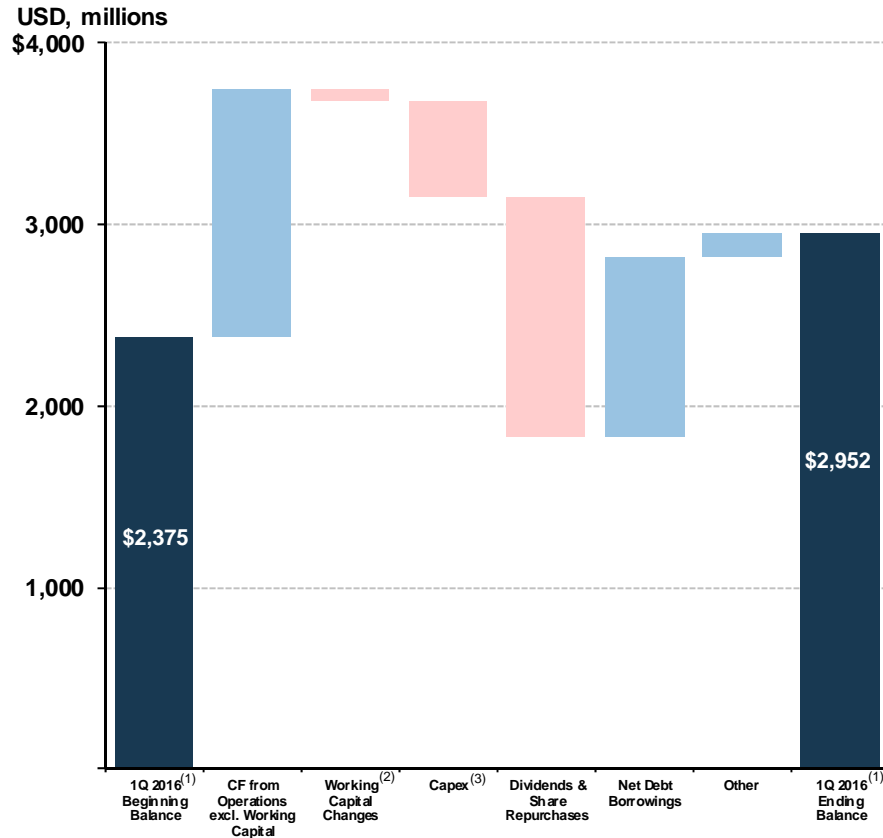
LTM March 2016 EBITDA



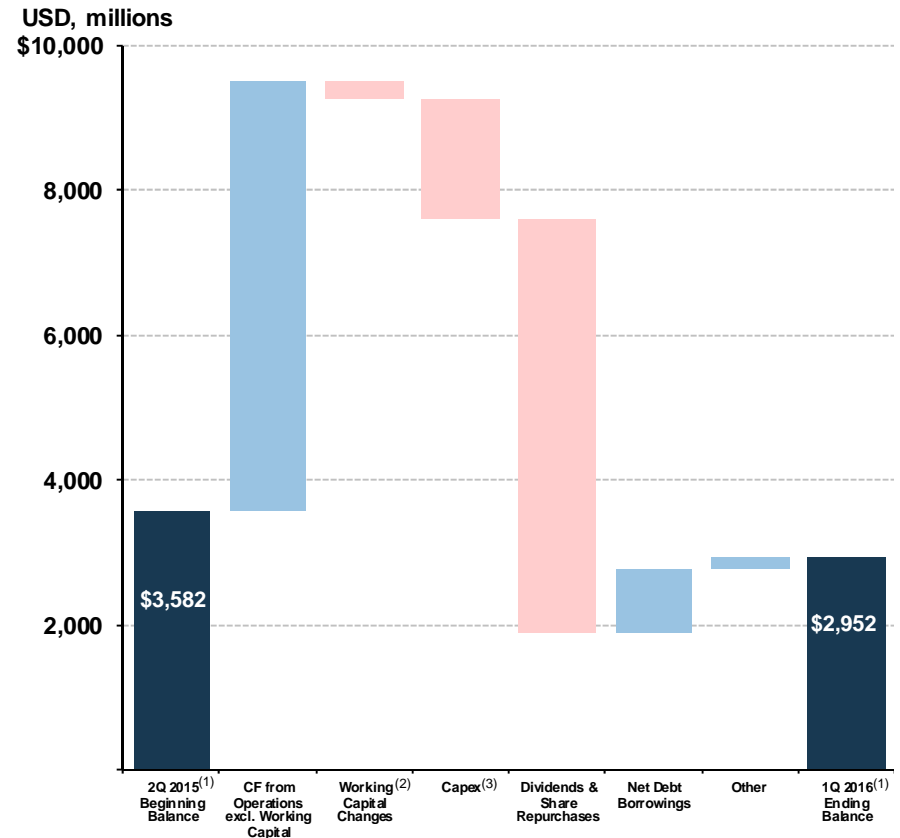
(1) Includes \$78 million after-tax gain on sale of Petroken: \$57 million gain for O&P Americas for polypropylene assets and \$21 million gain for O&P EAI for compounding assets.

Cash Flow

First Quarter 2016



LTM March 2016



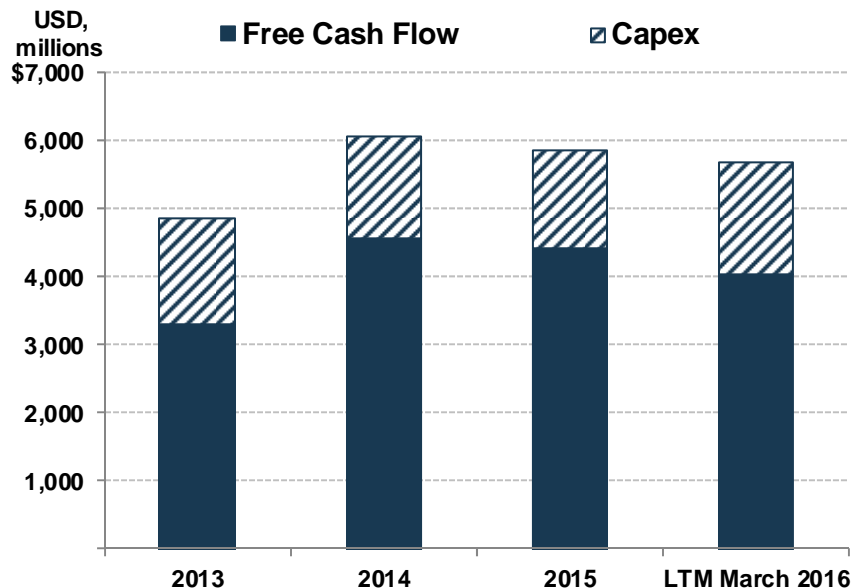
~ \$5.7 billion in cash from operations generated over the last 12 months

(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.

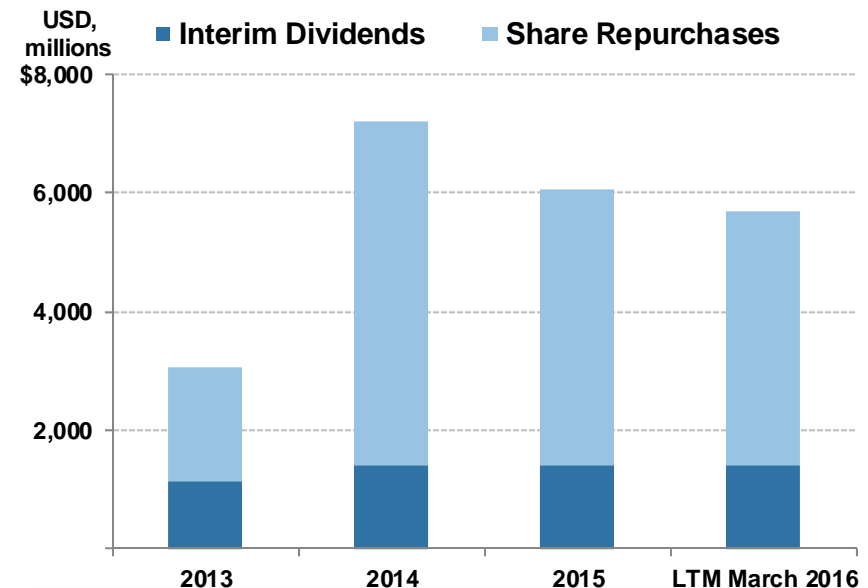
Strong Cash Generation, Share Repurchases & Dividends



Cash From Operations



Dividends & Share Repurchases



Key Statistics

Snapshot at March 31, 2016

LTM FCF⁽¹⁾: \$4.0 billion
 LTM Capex: \$1.7 billion
 Cash⁽²⁾: \$3.0 billion
 Total Debt/LTM EBITDA ex. LCM: 1.2x

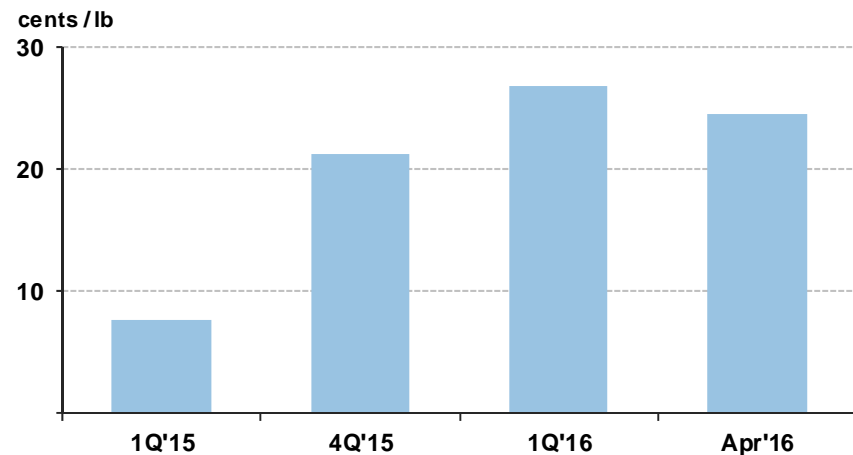
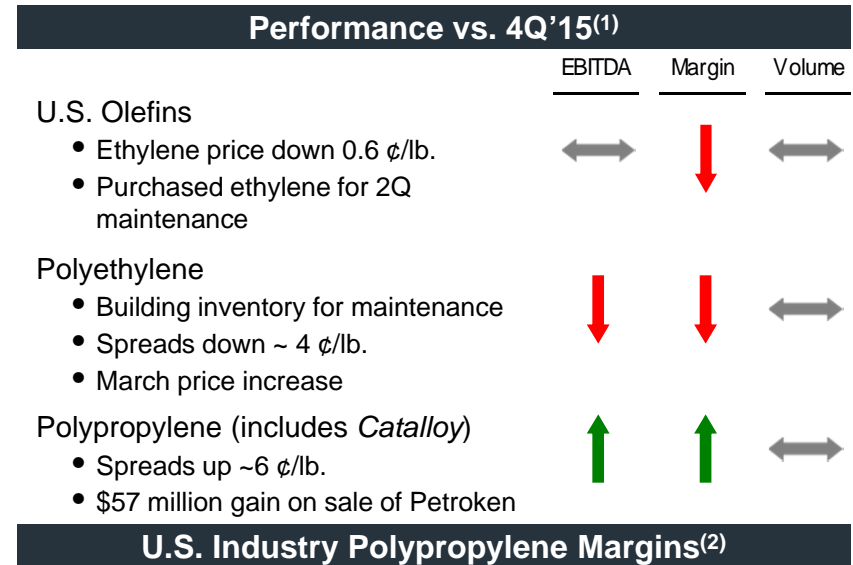
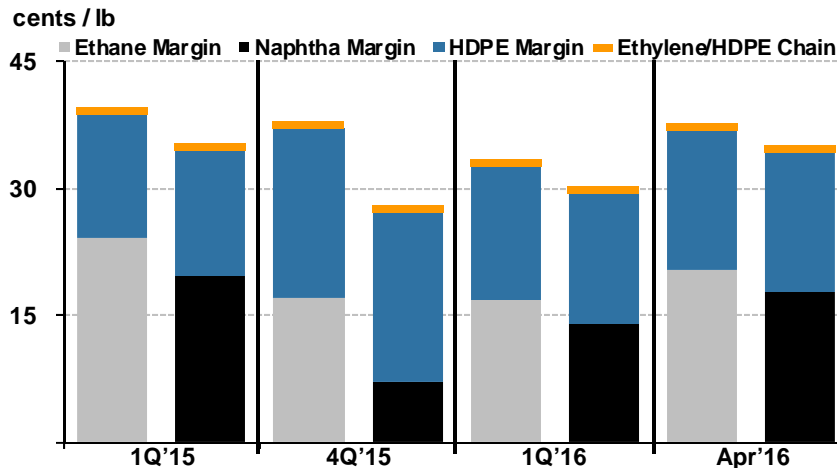
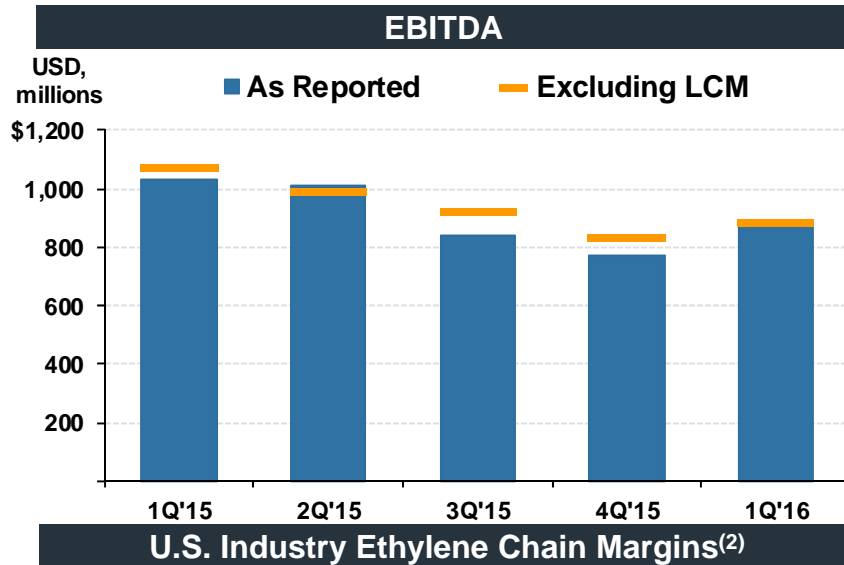
- 12.3 million shares (2.8% of outstanding) purchased during the first quarter
- \$1.3 billion in share repurchases and dividends during 1Q 2016
- Issued €750 million six-year bonds at 1.875% coupon rate

(1) Free Cash Flow = Cash from Operations – Capital Expenditures.

(2) Cash balances include cash and liquid investments.

Olefins & Polyolefins – Americas

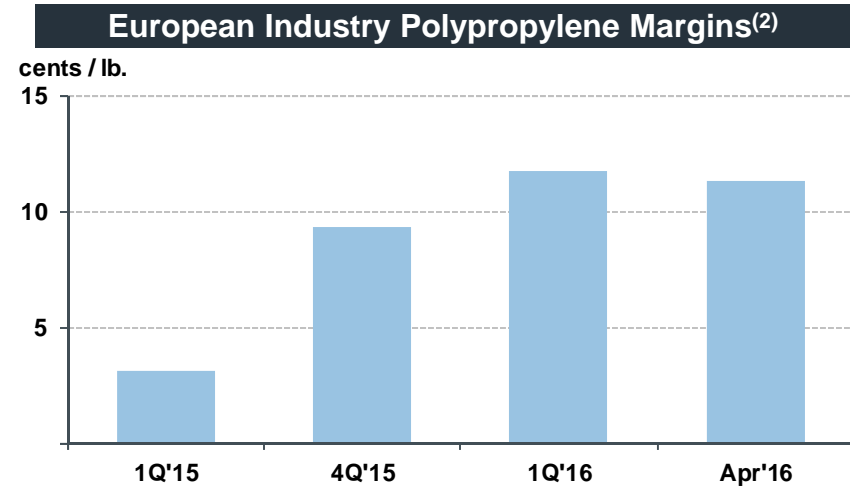
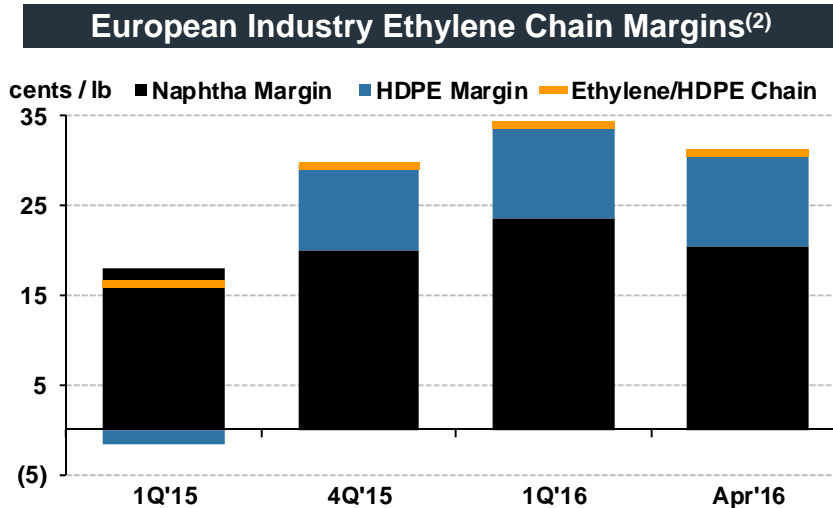
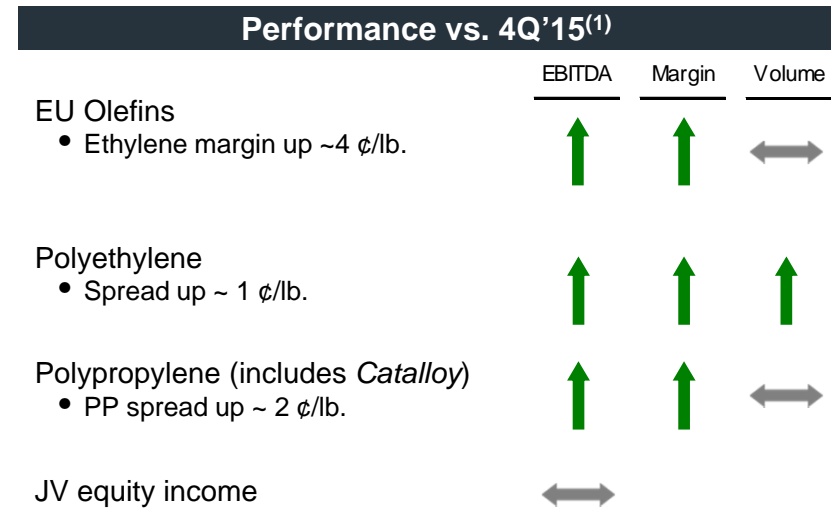
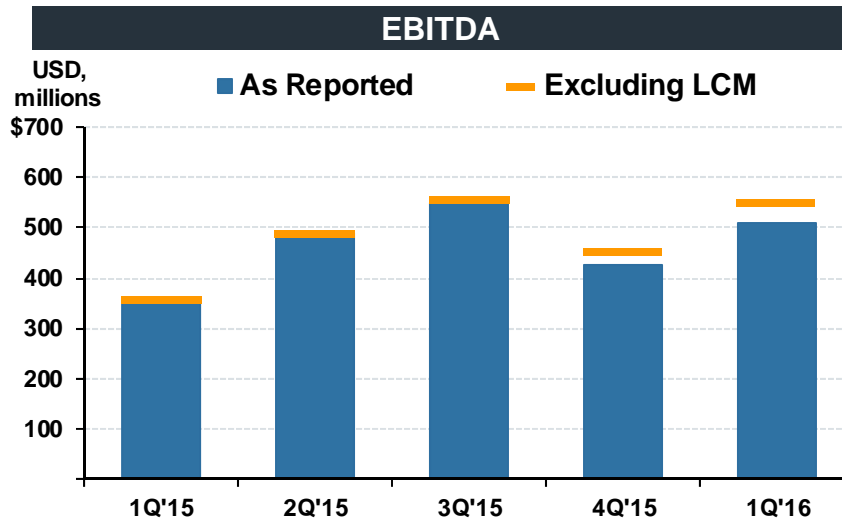
Highlights and Business Drivers – 1Q'16



(1) The direction of the arrows reflects our underlying business metrics. (2) Source: Quarterly and April 15, 2016 month-to-date average industry data from IHS.

STRONG. CONSISTENT. FOCUSED.

Olefins & Polyolefins – Europe, Asia, International Highlights and Business Drivers – 1Q'16



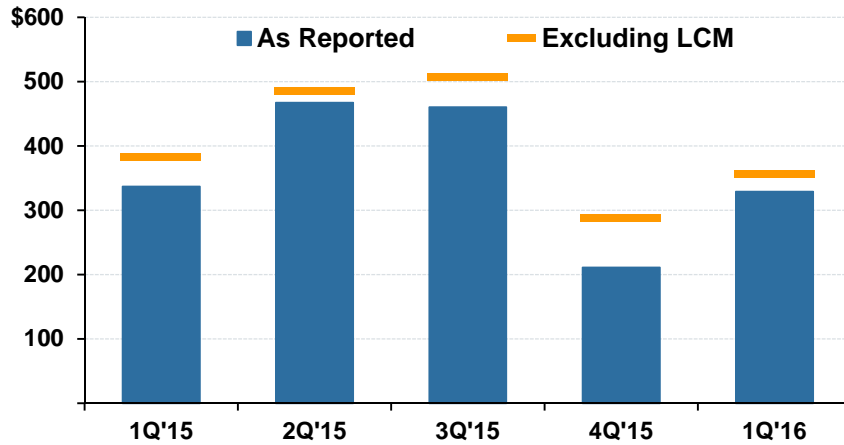
(1) The direction of the arrows reflects our underlying business metrics. (2) Source: Quarterly and April 15, 2016 month-to-date average industry data from IHS.

Intermediates & Derivatives Highlights and Business Drivers – 1Q'16



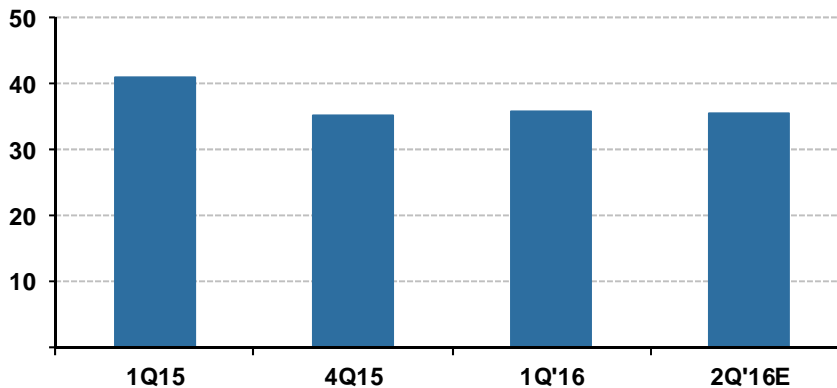
EBITDA

USD, millions



Propylene Glycol Raw Material Margins (per Chemdata)

cents / lb

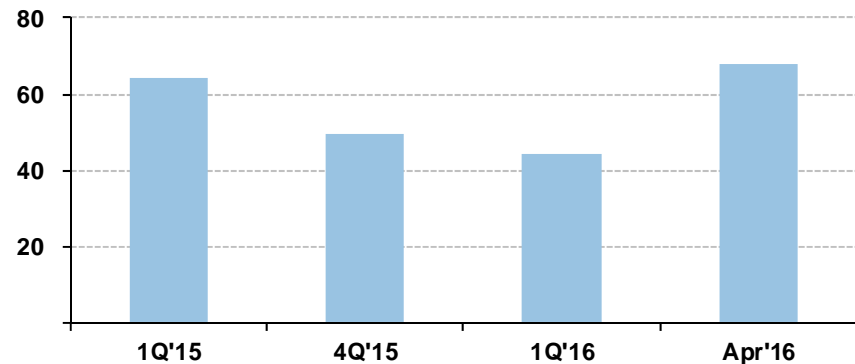


Performance vs. 4Q'15⁽¹⁾

| | EBITDA | Margin | Volume |
|---------------------------------------------------------------------------------------------------------------------------------------|--------|--------|--------|
| Propylene Oxide and Derivatives | ↔ | ↓ | ↑ |
| <ul style="list-style-type: none"> • Volume up ~ 16% • Margins lower due to sales mix | | | |
| Intermediates | ↑ | ↑ | ↑ |
| <ul style="list-style-type: none"> • Styrene margins up ~ 2 ¢/lb. • Volume improvements after 4Q maintenance. | | | |
| Oxyfuels | ↔ | ↓ | ↑ |
| <ul style="list-style-type: none"> • Volume up ~ 4% • Low seasonal margins. | | | |

EU MTBE Raw Material Margins (per Platts)⁽²⁾

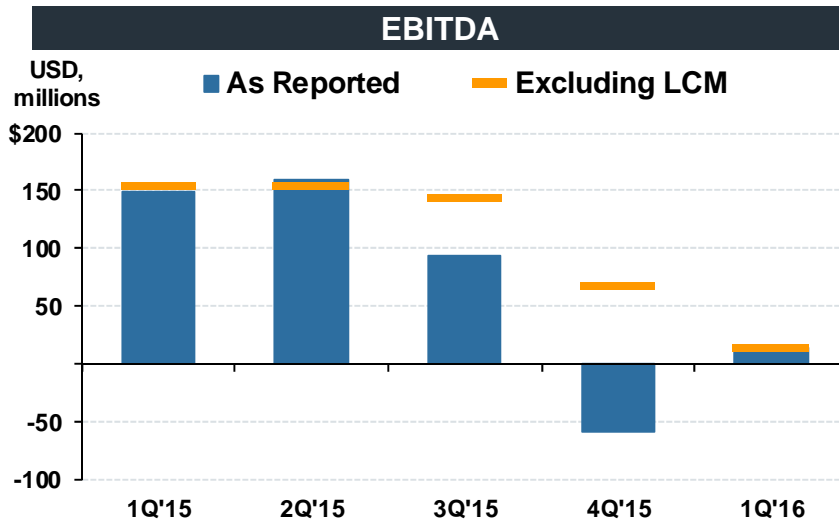
cents / gallon



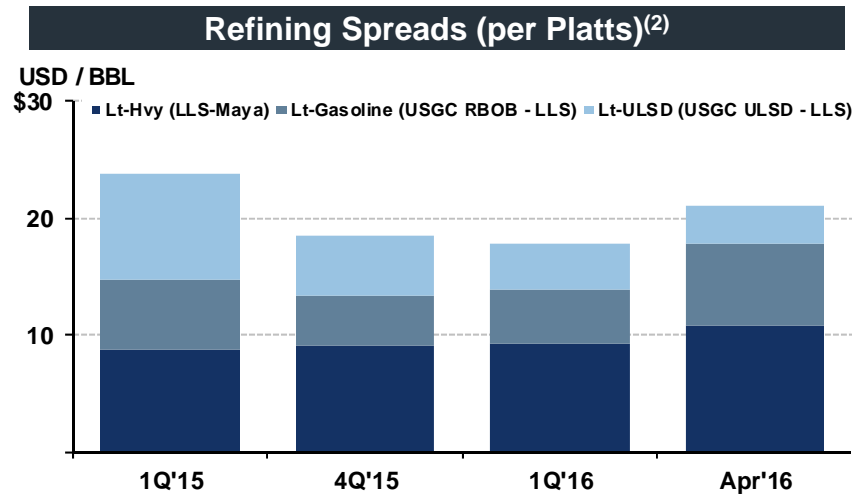
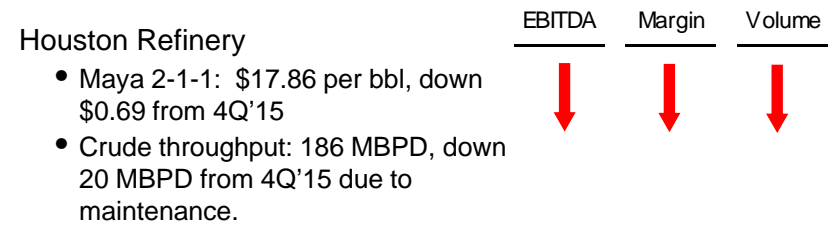
(1) The direction of the arrows reflects our underlying business metrics. (2) Quarterly and April 15, 2016 month-to-date averages.

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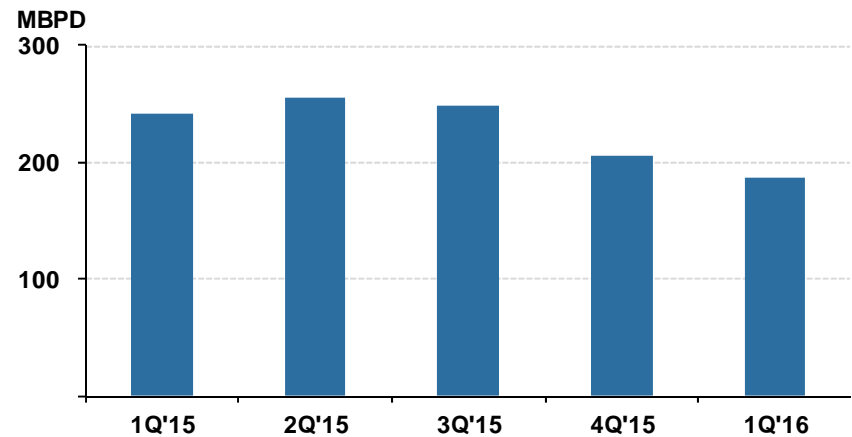
Refining Highlights and Business Drivers – 1Q'16



Performance vs. 4Q'15⁽¹⁾



Refining Throughput



(1) The direction of the arrows reflects our underlying business metrics.

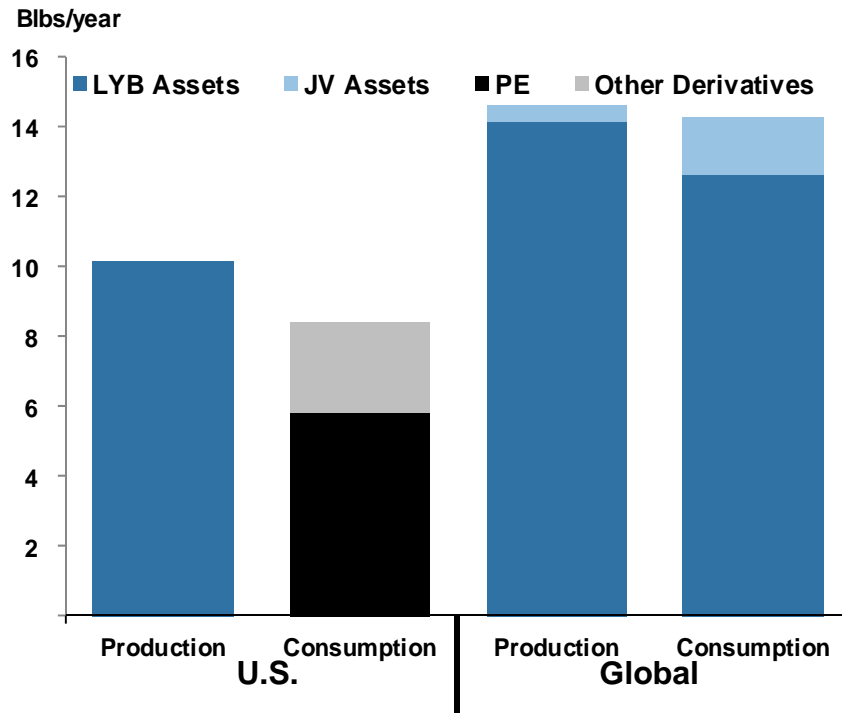
(2) Light Louisiana Sweet (LLS) is the referenced light crude. Data represents quarterly and April 15, 2016 month-to-date average.

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O&P Profitability Shift to Polymers: LYB Benefitting from Strong Ethylene Integration

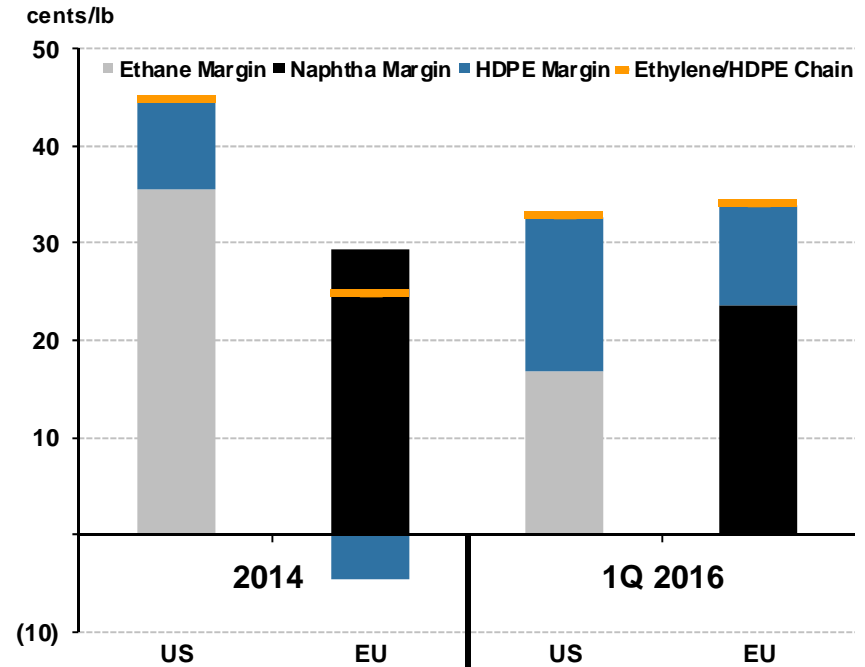


Internal Ethylene Balances for LYB ⁽¹⁾



Globally balanced with length in US ethylene

Ethylene and Polyethylene Margins ⁽²⁾



Margin shifting from monomer to polymer

Benefitting from integration of monomer, polymer and other downstream derivatives

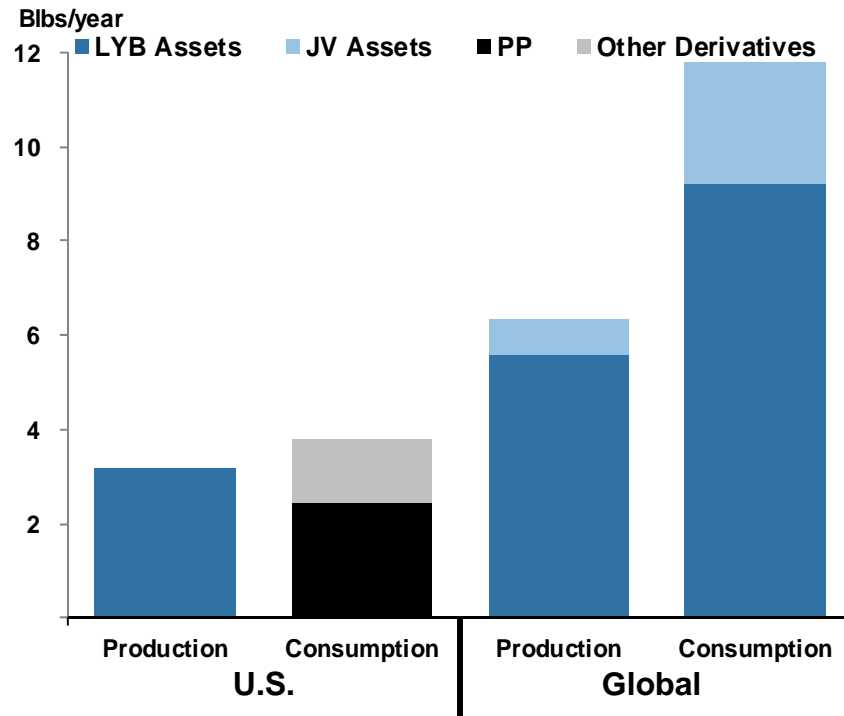
(1) Typical 2016 LYB production and consumption. Global capacities includes LYB share of JV capacities. Consumption includes PE, metathesis, ethylene oxide and derivatives, styrene, VAM, PP and ethanol.

(2) Source: Industry data from IHS.

O&P Profitability Shift to Polymers: LYB Benefitting from Strong Polypropylene Position

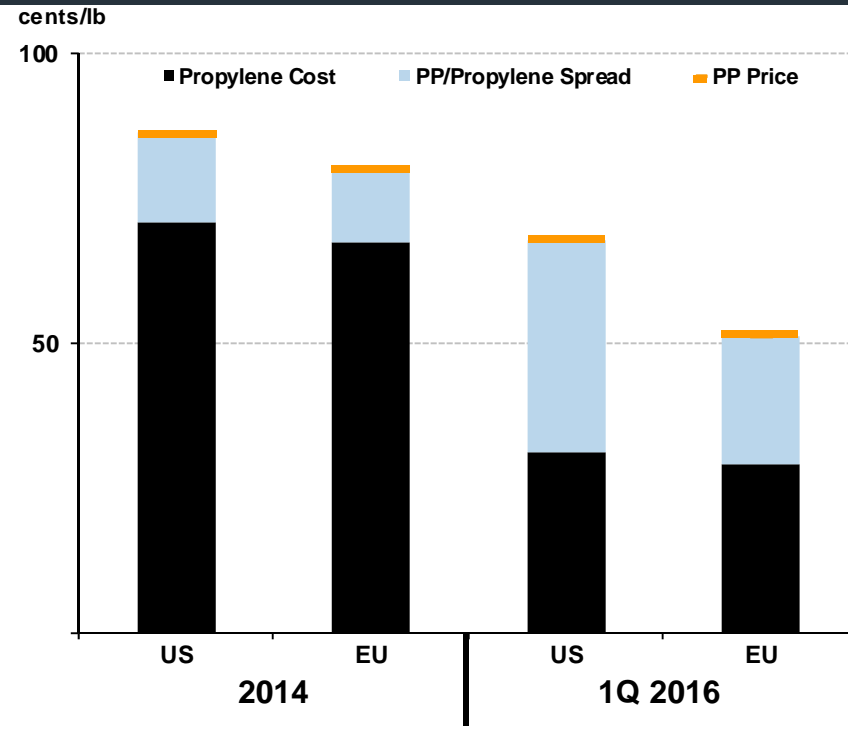


Internal Propylene Balances for LYB (1)



Short propylene in a well-supplied global market

Polypropylene Spreads and Prices (2)



Growing polypropylene margin

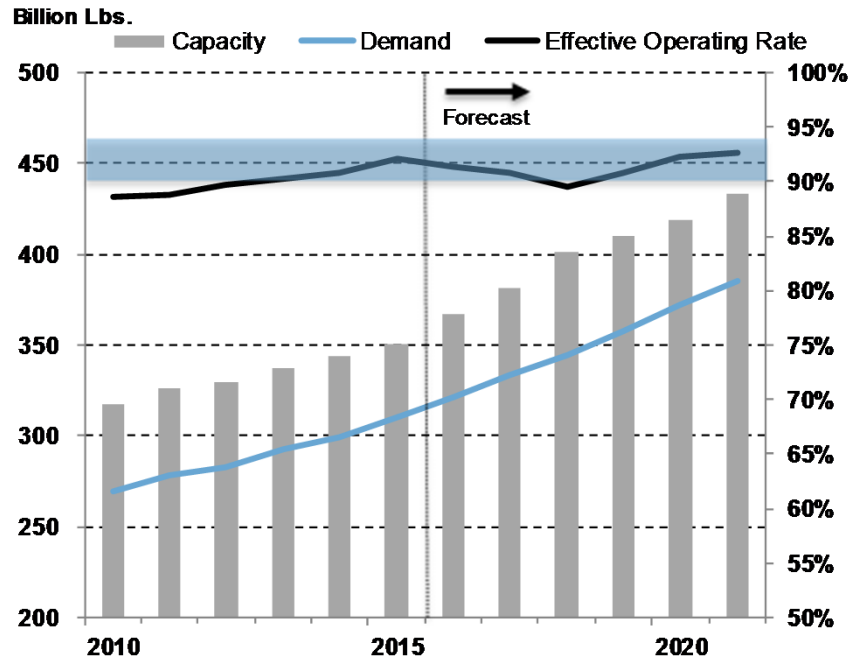
Benefitting from strong polymer margins with a leading global position in polypropylene

(1) Typical 2014 to 2016 LYB production and consumption. Global capacities includes LYB share of JV capacities. Production includes crackers, refinery and metathesis. Consumption includes polyolefins and propylene oxide and derivatives.

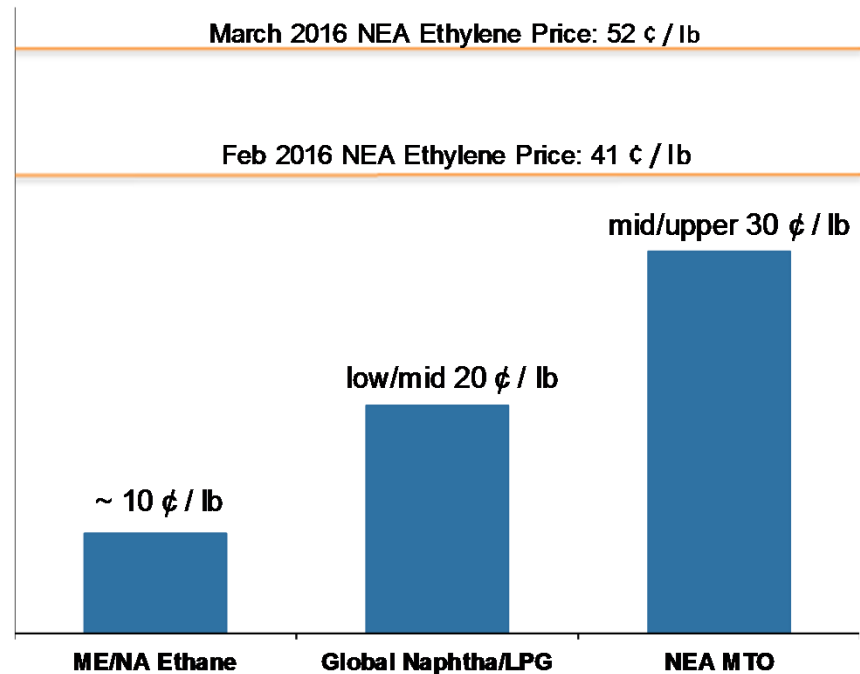
(2) Source: Industry data from IHS.

MTO Capacity Appears To Support Global Pricing

Global Ethylene Supply / Demand ⁽¹⁾



March 2016 Global Ethylene Cash Cost and Prices ⁽²⁾



- Global operating rates forecast to remain in the balanced/transition zone for coming years
- Advantaged feedstocks should see strong operating rates throughout the cycle
- MTO seems to be setting the global price; tight Asian supply/demand driving March higher

1) Source: IHS 2016 Balance Update

2) Source: IHS and LYB analysis

First Quarter Summary and Outlook

First Quarter Summary

- First quarter developed as anticipated
- O&P Americas and O&P EAI continued to benefit from strong polyolefin margins and demand in all regions
- I&D results improved with completion of 4Q2015 maintenance and strong styrene margins
- Refining results declined as a result of planned maintenance and lower Maya 211 spread
- €750MM bond issuance at 1.875% rate
- Petroken transaction completed
- \$1.3 billion share repurchase and dividends

Near-Term Outlook

- Global O&P markets are tight due to strong global demand and planned industry maintenance
- Typical seasonal improvements visible in oxyfuels and refining spreads
- Refinery expected to run at 75% during 2Q due to April 8 coker fire
- Planned maintenance activities will impact 2Q by ~ \$20 to 30 MM and refinery repair will impact results by an additional ~ \$40 to 70 MM.
- Natural gas and NGL supply, inventory, and price remain favorable