Second Quarter 2024 Earnings

August 2, 2024

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 of LyondellBasell which are believed to be reasonable at the time made and are subject to significant risks and uncertainties. When used in this presentation, the words “estimate,” “believe,” “continue,” “could,” “intend,” “may,” “plan,” “potential,” “predict,” “should,” “will,” “expect,” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain such identifying words. Actual results could differ materially based on factors including, but not limited to, market conditions, 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; our ability to successfully implement initiatives identified pursuant to our Value Enhancement Program and generate anticipated earnings; 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 manage costs; future financial and operating results; our ability to align our assets and grow and upgrade our core, including the results of our strategic review of certain European assets; legal and environmental proceedings; tax rulings, consequences or proceedings; technological developments, and our ability to develop new products and process technologies; our ability to meet our sustainability goals, including the ability to operate safely, increase production of recycled and renewable-based polymers to meet our targets and forecasts, and reduce our emissions and achieve net zero emissions by the time set in our goals; our ability to procure energy from renewable sources; our ability to build a profitable Circular & Low Carbon Solutions business; the continued operation of and successful shut down and closure of the Houston Refinery, including within the expected timeframe; 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 to repay 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, 2023, 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. There is no assurance that any of the actions, events or results of the forward-looking statements will occur, or if any of them do, what impact they will have on our results of operations or financial condition. Forward-looking statements speak only as of the date they were made and are based on the estimates and opinions of management of LyondellBasell at the time the statements are made. LyondellBasell does not assume any obligation to update forward-looking statements should circumstances or management’s estimates or opinions change, except as required by law.

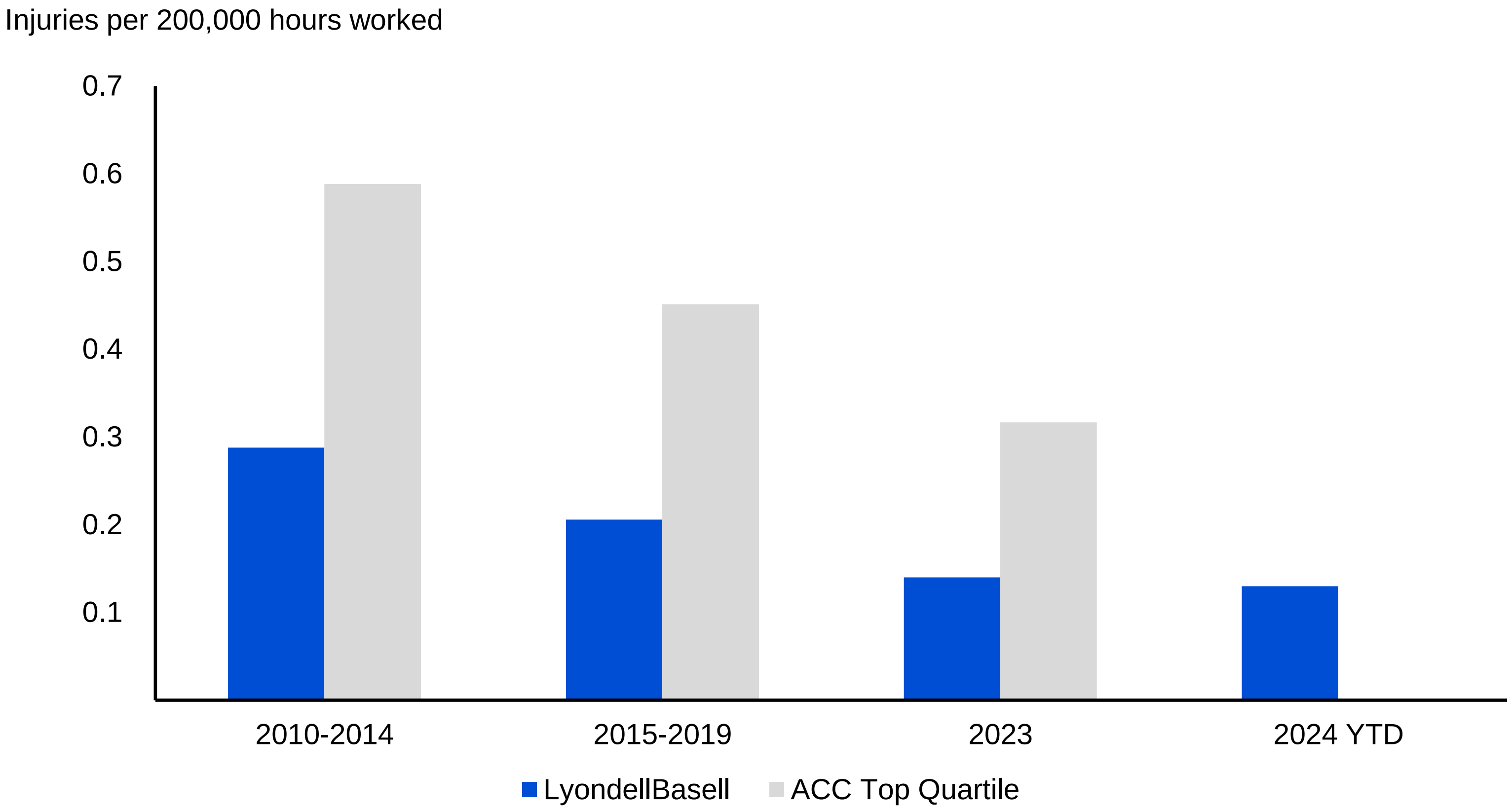
This presentation contains time sensitive information that is accurate only as of the date hereof. Information contained in this presentation is unaudited and is subject to change.

We undertake no obligation to update the information presented herein except as required by law.

See APPENDIX for a discussion of the Company’s use of non-GAAP financial measures.

Safety performance

LYB continues to improve its top-tier safety performance



Sources: American Chemistry Council (ACC) and LyondellBasell.
Notes: Medium and large companies only. Number of hours worked includes employees and contractors.

Second quarter 2024 highlights

Higher volumes due to increased LYB production and improved seasonal demand

$0.9 B Net income	**$2.82** Diluted EPS	**$1.6 B** EBITDA	**$1.3 B** Cash from operating activities
$0.7 B Net income ex. identified items	**$2.24** Diluted EPS ex. identified items	**$1.4 B** EBITDA ex. identified items	**10%** Return on Invested Capital LTM

Note: Identified items include adjustments for lower of cost or market ("LCM"), gain on sale of business, impairments and refinery exit costs. Return on invested capital means income from continuing operations, adjusted for interest expense, net of tax and items affecting comparability between periods divided by a two-year average of invested capital adjusted for items affecting comparability.

Advancing our strategy

Committing to strategic growth and sustainable value creation

Our Focus Area Today

Grow and upgrade the core

Shaping our portfolio to leverage strengths, support growth, increase resiliency and drive higher returns

Build a profitable Circular & Low Carbon Solutions business

Building a leading CLCS business at scale to meet current and growing future demand for sustainable solutions

Step up performance and culture

Unlocking significant opportunities across the portfolio by reshaping culture to focus on continuous value creation

On track to realize our 2027 normalized profitability targets

LYB's strategic criteria to grow and upgrade the core

We are laser-focused on…

1. **Leading** market positions
2. **Growing** end markets
3. **Attractive returns** above cost of capital
4. Access to **advantaged feedstocks** and, increasingly, **circular and renewable feedstocks**
5. Strategically developing **Circular & Low Carbon Solutions**

Our portfolio upgrades continue at pace

- April 2022 | Divested Australia PP
- March 2023 | Started up new PO/TBA asset
- December 2023 | Closed PP asset in Brindisi
- May 2024 | Divested EO&D
- May 2024 | Acquired 35% stake in NATPET
- May 2024 | Announced European strategic review
- 1Q 2025 | Exiting refining business[1]

1. Exiting refining no later than end of first quarter 2025

Strengthening LYB by reshaping our portfolio

Sharpening our focus and extending our advantage

Growing our core businesses

Value Enhancement Program
Unlocking value

Capacity additions
Targeting advantaged positions with attractive returns

Disciplined M&A
Aligned with our strategic criteria

Enabled by LYB's industry-leading technologies

Upgrading our core businesses

EBITDA margins:

18%	+4%	+
LYB historical average EBITDA margin[1]	**Houston refinery closure** Historical average EBITDA margin[1] improvement	**Ongoing and future portfolio improvements** VEP Europe asset review NATPET expansion

1. EBITDA margin is EBITDA excluding identified items divided by revenues. Amounts reflect historical average for 2013-2022.

Creating a sustainable European footprint

Bold actions underway to strengthen future profitability

European assets within strategic review[1]

Location	Segment
Berre, France	O&P EAI
Muenchmuenster, Germany	O&P EAI
Brindisi, Italy	O&P EAI
Tarragona, Spain	O&P EAI
Carrington, United Kingdom	O&P EAI
Maasvlakte, Netherlands	I&D

Core European assets[1]

Location	Segment
Wesseling (Cologne), Germany	O&P EAI
Knapsack (Cologne), Germany	O&P EAI
Frankfurt, Germany	Technology, O&P EAI
Ferrara, Italy	Technology, O&P EAI
Moerdijk, Netherlands	O&P EAI
QCP, Belgium/Netherlands	O&P EAI
Botlek, Netherlands	I&D
Fos-sur-Mer, France	I&D

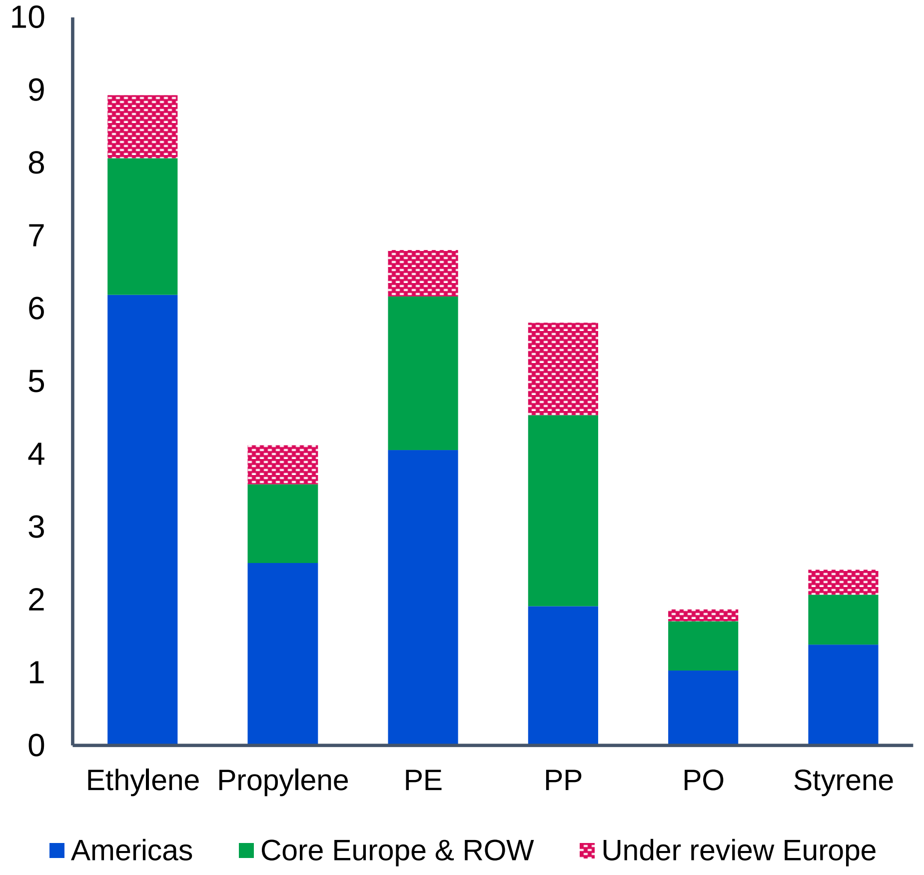
Options for assets under review

- Profitability improvement
- Alternative owners
- Rationalization

Europe remains core for LYB

- Investment in Cologne recycling hub
- Access to advantaged circular and renewable feedstocks
- Proprietary low-cost and low-emission technologies
- Synergies with Technology segment

LYB selected key product capacities[2]
MM tons

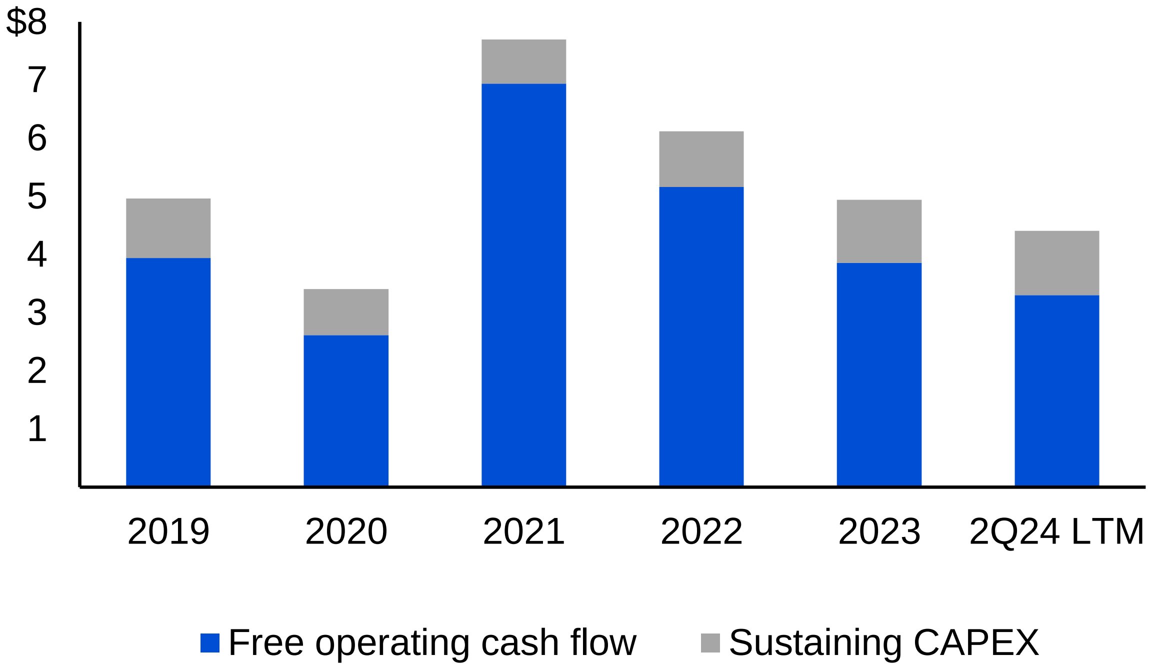


1. Assets fully owned except Maasvlakte (50% JV with Covestro). APS segment and all JVs within O&P EAI are excluded from the review.
2. ROW (rest of world) represents LYB capacity excluding the Americas and Europe. Capacities include LYB proportional share of JVs.

Resilient cash generation

Excellent cash conversion delivering strong shareholder returns despite market headwinds

Cash from operating activities
USD, billions



$4.4 B Cash from operating activities 2Q24 last 12 months

$2.9 B Cash and cash equivalents June 30, 2024

1.8x Net debt to EBITDA ex. identified items June 30, 2024

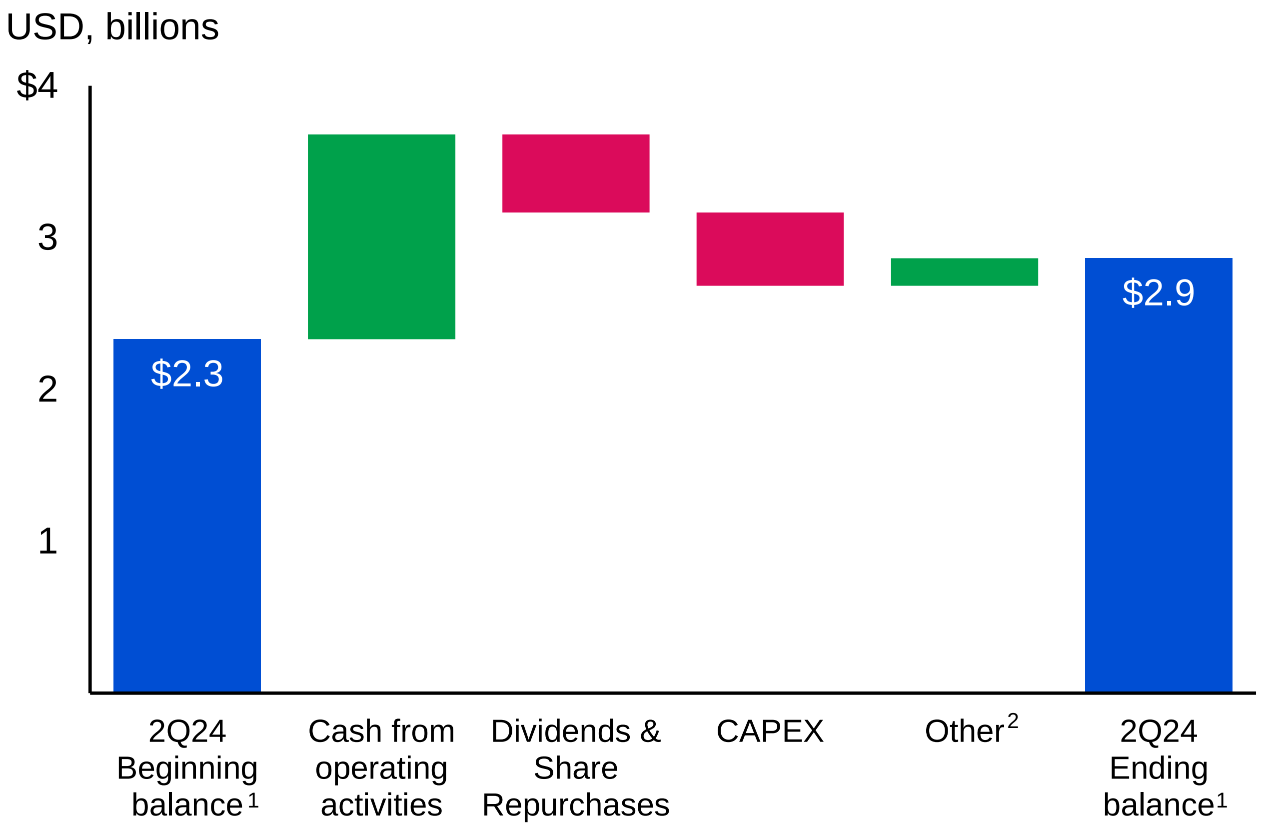
95% Cash conversion 2Q24 last 12 months

$1.8 B Returned to shareholders in dividends and share repurchases 2Q24 LTM

Notes: Free operating cash flow is cash from operating activities minus sustaining (maintenance and HSE) capital expenditures. Net debt to EBITDA excluding identified items is gross debt, net of cash and cash equivalents, restricted cash and short-term investments, divided by EBITDA excluding identified items. Cash conversion equals net cash provided by operating activities divided by EBITDA excluding LCM, gain on sale of business and impairment. LTM is “last twelve months”.

Capital allocation

Disciplined capital allocation supporting our strategy to grow and upgrade the LYB portfolio



Delivering resilient results

- $1.3 B cash from operating activities in 2Q24
- Achieved 95% cash conversion[3] over last 12 months

Generating value for shareholders

- Increased quarterly dividend by 7%
- Returned over $500 MM to shareholders through dividends and share repurchases in 2Q24

Growing and upgrading core businesses

- Divested the EO&D business for ~$700 million
- Invested ~$500 million to acquire a 35% stake in the NATPET joint venture in Saudi Arabia

Maintaining strong balance sheet

- $7.0 B of available liquidity
- Successfully upsized revolving credit facility to $3.75 B in July enhancing robust liquidity position

1. Beginning and ending cash balances include cash and cash equivalents, restricted cash, and liquid investments.
2. Includes proceeds from the sale of the EO&D business and investment in the NATPET joint venture.
3. Cash conversion equals cash provided by operating activities divided by EBITDA excluding LCM, gain on sale of business and impairment.

Accelerating VEP results in 2024

~$400 MM[2] expected contribution to EBITDA in 2024

$600 MM

Recurring annual EBITDA[1] by year end 2024

~$400 MM[2]

Estimated 2024 EBITDA contribution

Estimated 2024 EBITDA contribution ($MM)[2]	O&P Americas	O&P EAI	I&D	Total
Product mix and variable margin	~$190	~$50	~$40	~$280
Volume	~$60	~$15	~$20	~$95
Fixed cost	~$15	~$5	~$5	~$25
Total	**~$265**	**~$70**	**~$65**	**~$400**

VEP is embedded in our culture

- Enhancing product mix by high-grading portfolio and improving variable margins by optimizing operations
- Increasing volumes through higher reliability and incremental capacity
- Lowering fixed costs across manufacturing and corporate functions
- Evergreen process revisiting sites to continue unlocking value

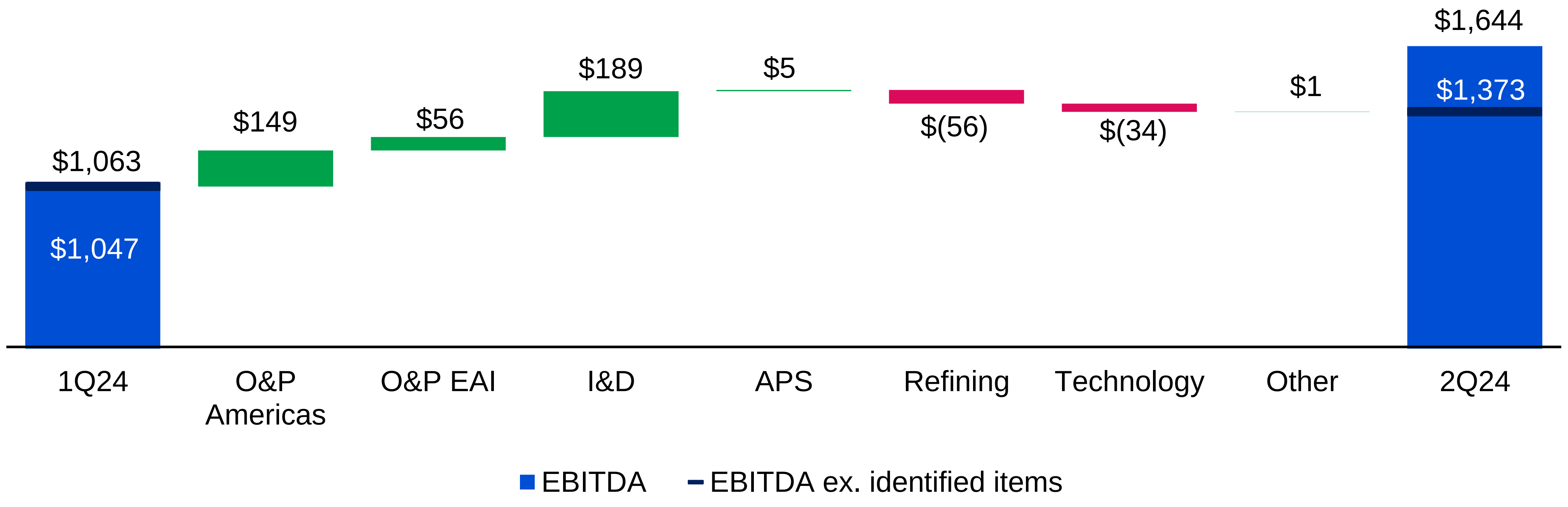
LYB

1. Year-end EBITDA run rate based on 2017-2019 mid-cycle margins and modest inflation relative to 2021 baseline. One-time CAPEX/OPEX costs to achieve estimated at up to $325 MM in 2024.
2. Based on estimated 2024 margins, estimated 2024 volume changes relative to 2021 volumes and cost reduction initiatives relative to 2021 cost.

2Q24 segment highlights

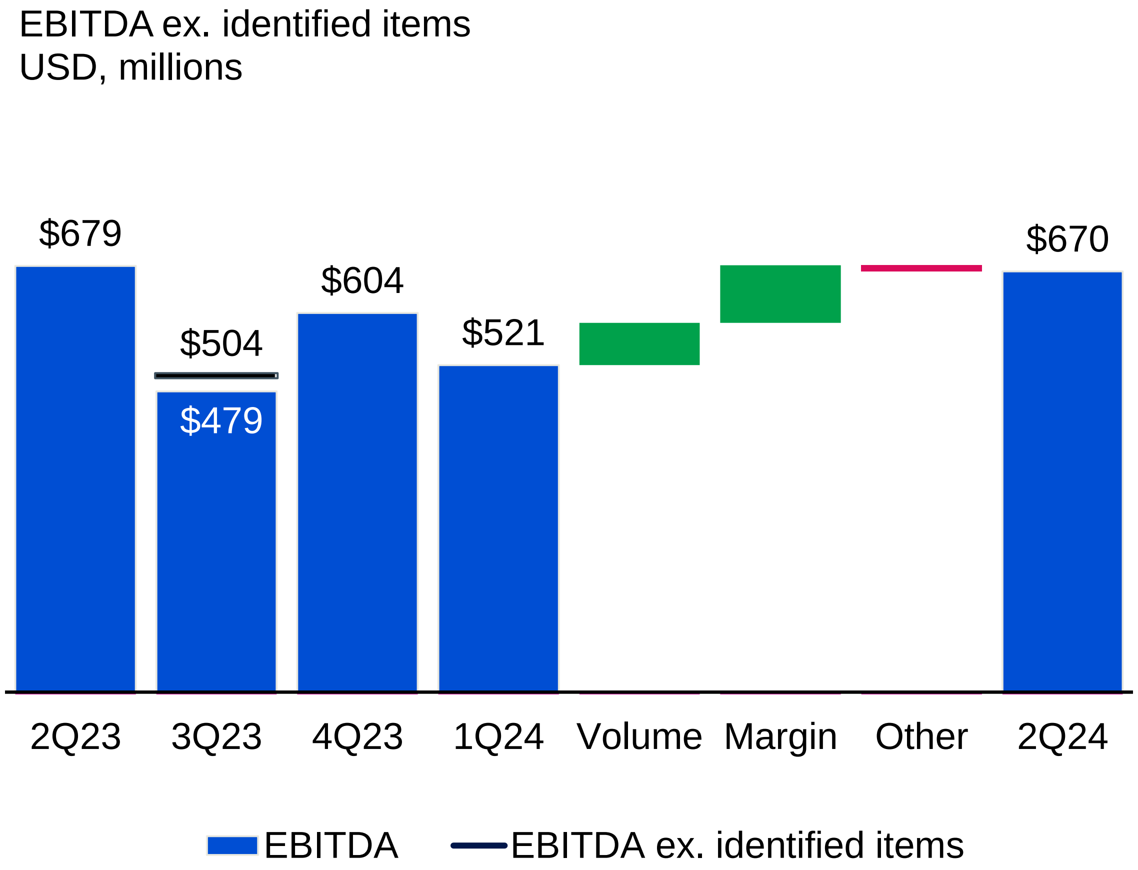
Seasonal demand improvements coupled with higher production and margins for most businesses

EBITDA variance by segment ex. identified items
USD, millions



Olefins & Polyolefins – Americas

Higher margins coupled with improved production



2Q24 market dynamics

- June 2024 YTD North American polyethylene industry sales increased ~11% over prior year[1]
- Improved seasonal demand

Near-term outlook

- Steady seasonal summer demand
- North American ethane and natural gas costs to remain advantaged relative to oil-based production
- Targeting ~85% operating rates in 3Q24

Our actions

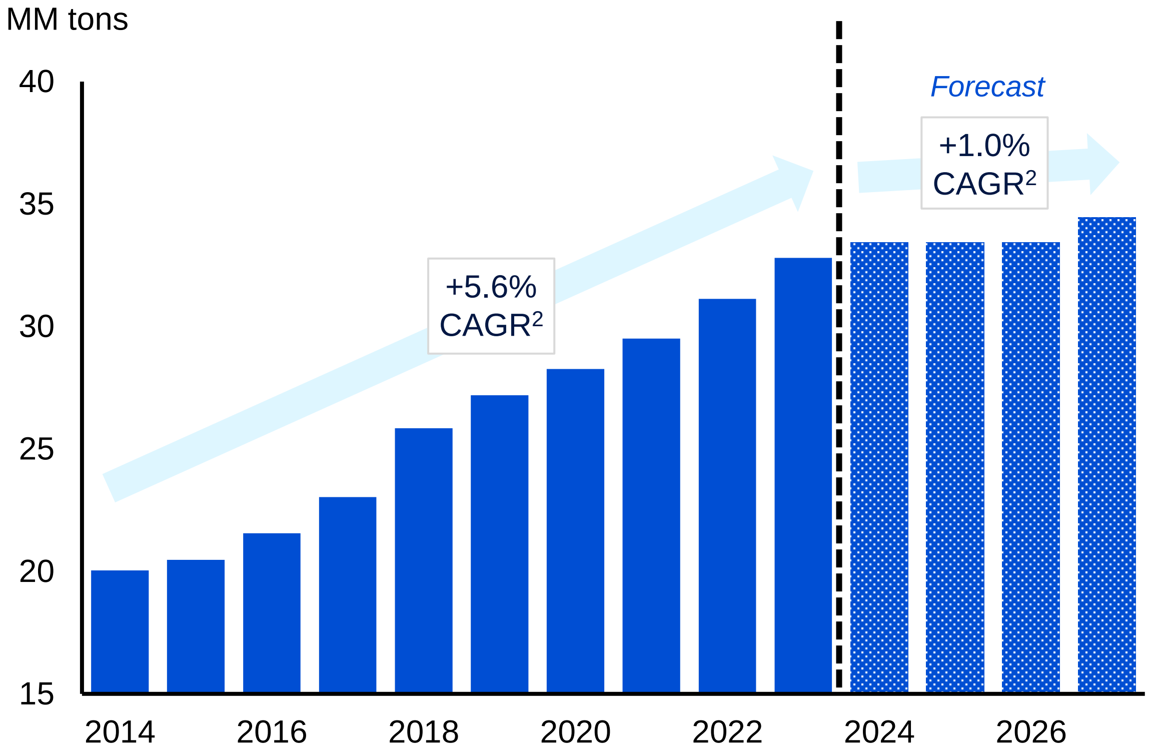
Increasing utilization rates to meet improving domestic and export demand

1. Source: American Chemistry Council; Includes domestic and export sales

Shale-driven North American growth wave is slowing down

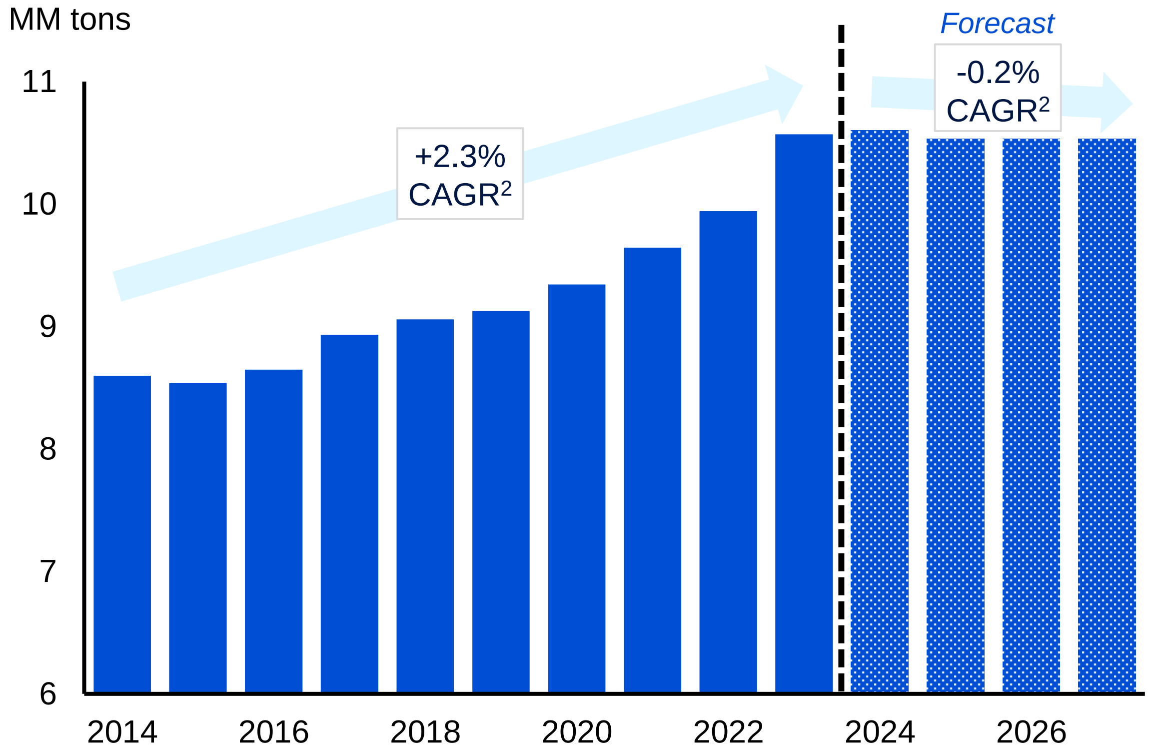
Limited polymer capacity growth following significant increase over the past 10 years

North American polyethylene capacity[1]



June 2024 YTD North American polyethylene sales growth[3]: 10.7%

North American polypropylene capacity[1]



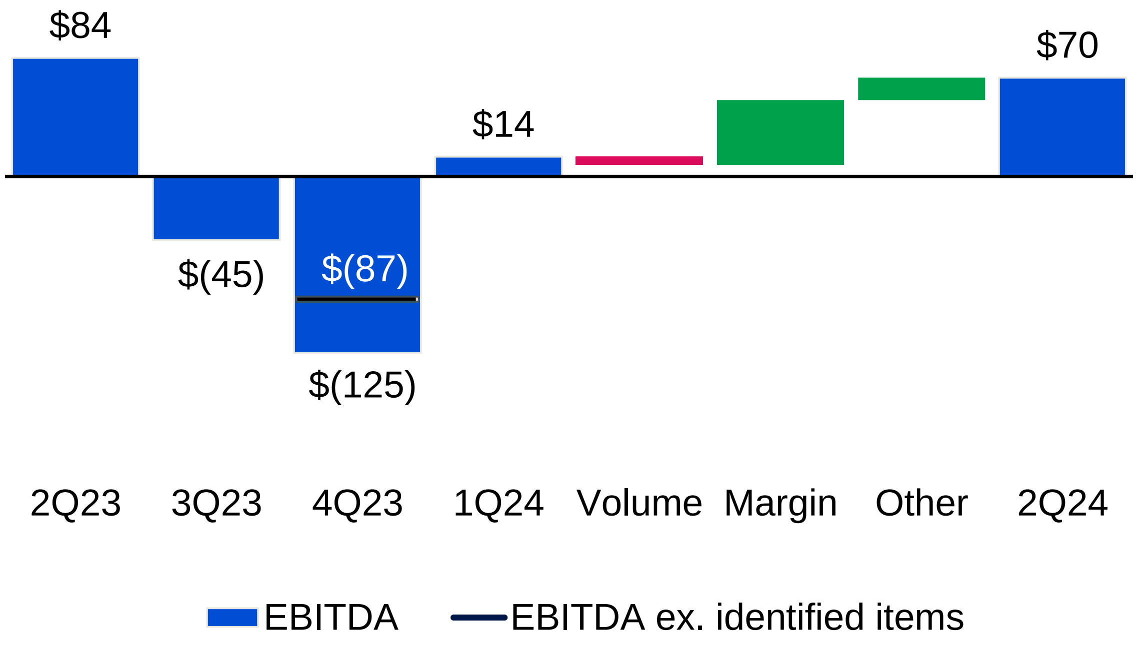
June 2024 YTD North American polypropylene sales growth[3]: 5.7%

1. Source: Chemical Market Analytics
2. CAGR: Compound Annual Growth Rate
3. Source: American Chemistry Council; Includes domestic and export sales

Olefins & Polyolefins – Europe, Asia & International

Higher integrated margins with increased utilization of LPG feedstocks

EBITDA ex. identified items
USD, millions



2Q24 market dynamics

- Higher olefins and co-product prices
- Modest seasonal demand
- High shipping costs constraining EU imports from the Middle East and Asia

Near-term outlook

- Steady olefins and polymers demand during summer season
- Planned maintenance in 2H24
- Continue to monitor Chinese demand
- Targeting ~80% operating rates in 3Q24

Our actions

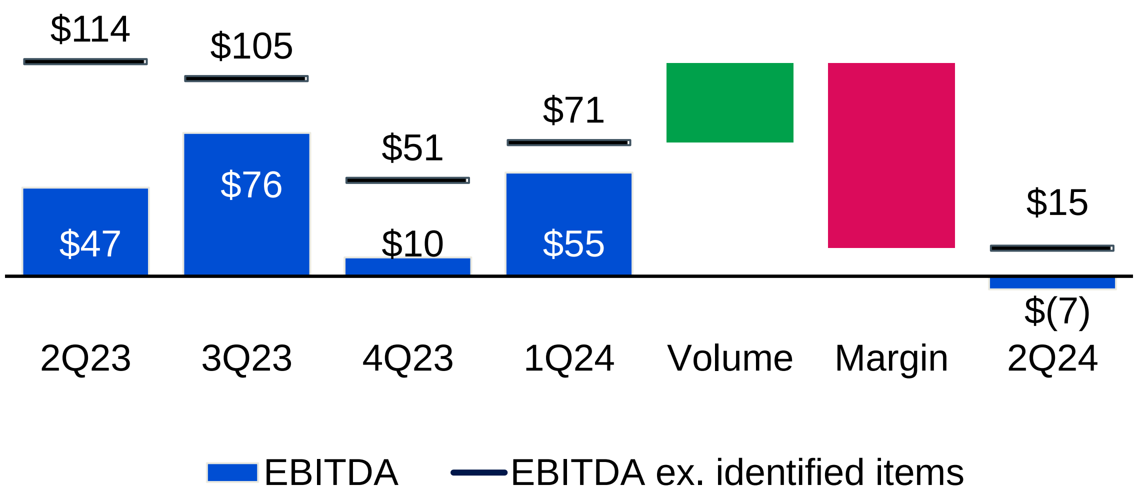
Completed acquisition of 35% share in NATPET Saudi Arabian integrated polypropylene JV

Announced strategic review of certain European assets

Refining

Higher production offset by lower Maya 2-1-1 crack spreads

EBITDA ex. identified items
USD, millions



2Q24 market dynamics

- Lower margins driven by modest seasonal demand improvements for refined product and high industry operating rates

Near-term outlook

- Stable gasoline crack spreads
- Targeting ~90% LYB refinery utilization rate in 3Q24

Our actions

Prioritizing safe and reliable operations

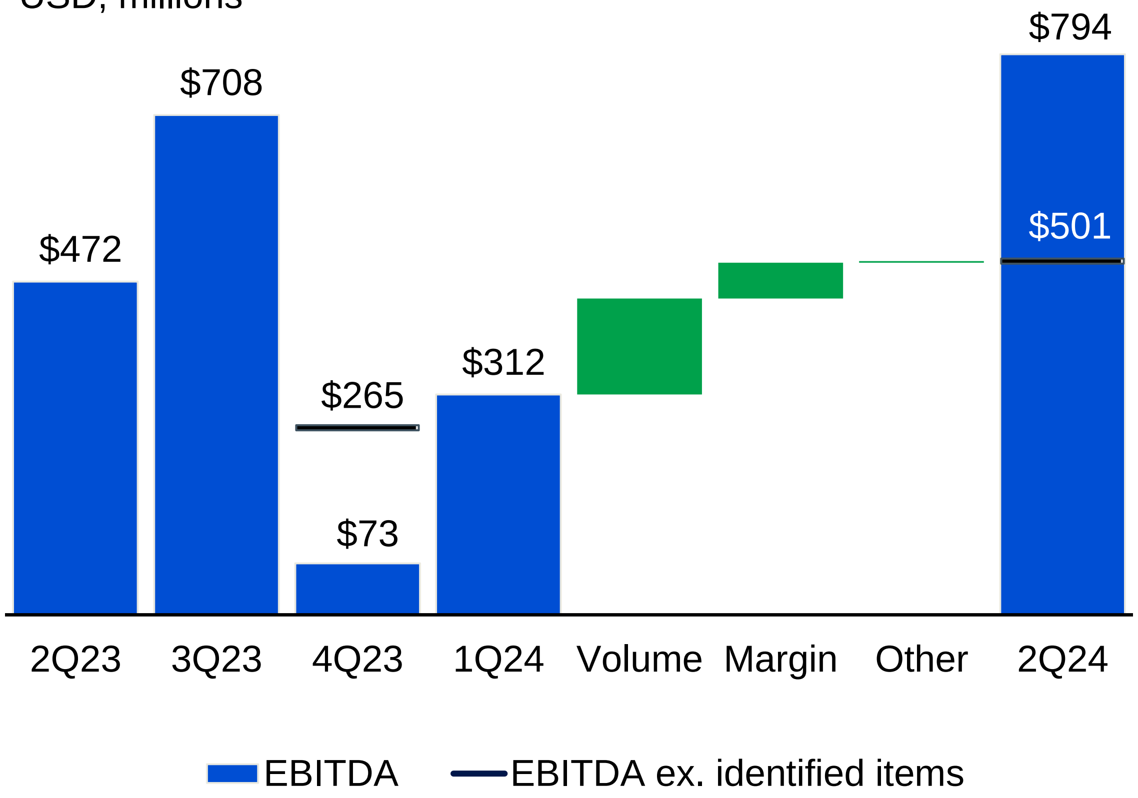
Exiting refining no later than end of 1Q25

Evaluating options to transform site to support our growth in circular and low carbon solutions

Intermediates & Derivatives

Higher production coupled with improving seasonal demand for oxyfuels

EBITDA ex. identified items
USD, millions



2Q24 market dynamics

- Record LYB oxyfuels volumes serving strong octane demand; margins well above historical norms
- Higher acetyls volumes due to industry outages
- Modest demand for durable goods contributed to steady margins for PO and derivatives

Near-term outlook

- Continued benefits from seasonal demand for oxyfuels
- Planned maintenance at propylene oxide asset in 2H24
- Targeting 75% operating rates in 3Q24

Our actions

Completed divestment of EO&D business

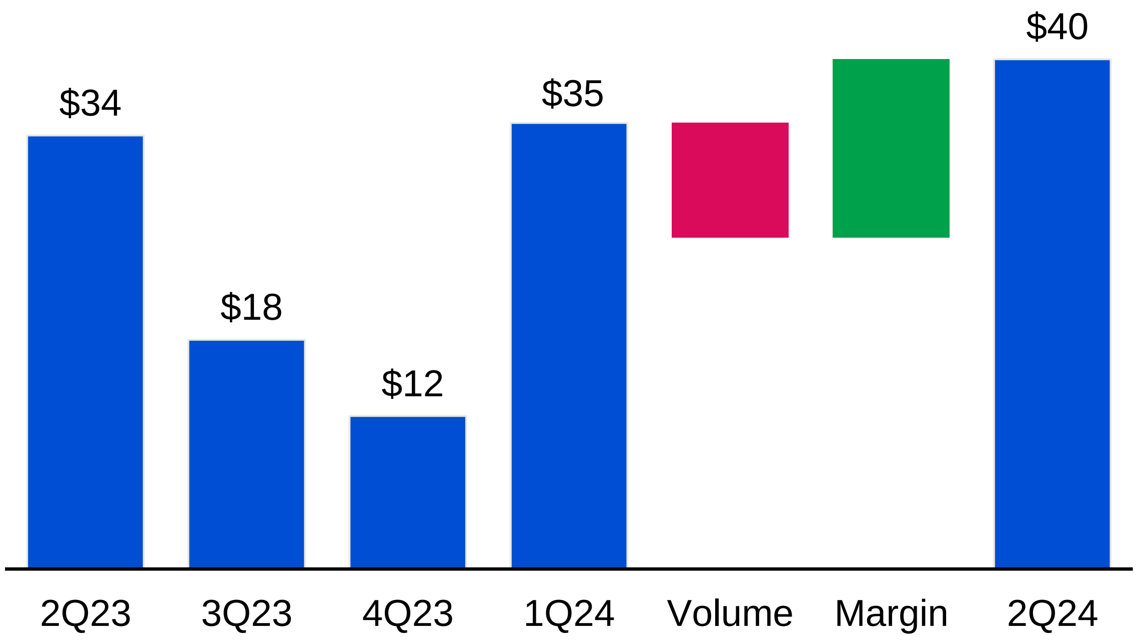
Operated our new PO/TBA asset at close to benchmark rates in 2Q

Announced strategic review of certain European assets including Maasvlakte PO/SM

Advanced Polymer Solutions

Improved margins across most APS businesses

EBITDA
USD, millions



2Q24 market dynamics

- Improved margins driven by modestly higher pricing
- Slow demand recovery impacted by modest market growth

Near-term outlook

- Increased customer focus helping to restore LYB market share

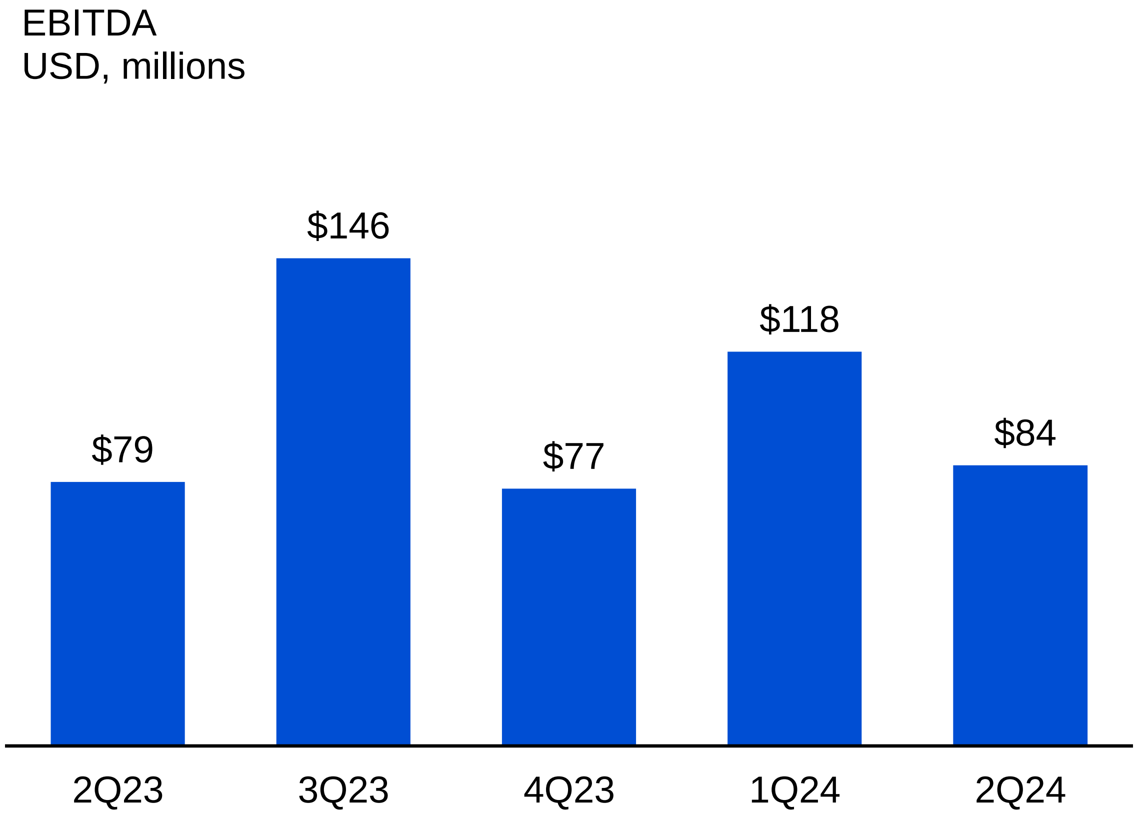
Our actions

Expanding LYB's APS growth funnel and improving win rate for new projects with customers

Expanded polypropylene compounding capacity in China

Technology

Moderating licensing and catalyst revenue



2Q24 market dynamics

- Licensing revenue normalized after strong 1Q24

Near-term outlook

- Increasing licensing revenue
- Modestly improving catalyst sales

Our actions

- Utilizing LYB's ***Spheripol*** polypropylene technology through recent NATPET Saudi Arabian JV
- Broke ground on our first commercial advanced recycling plant employing proprietary ***MoReTec*** technology

Delivering results and advancing our strategy

Second half 2024 outlook

- Global markets continue to slowly recover
- Expecting slightly higher 2H 2024 results compared to 1H 2024
  - LYB's U.S. and Middle East production continue to benefit from advantaged natural gas-based feedstock and energy costs relative to global oil-based competition
  - Laser-focused on disciplined capital allocation and working capital management
  - Estimating VEP program contribution of $400 MM[1] to EBITDA in 2024

Growing and upgrading our core

- Clear criteria and focused strategy to drive profitable growth of LYB's core businesses
- Reshaping our company around industry-leading technologies to strengthen our advantage, extend our reach and upgrade our core businesses
  - Strengthening global capabilities through disciplined investments
  - Aligning LYB's European footprint for future success
- LYB is well-positioned in North America
  - Minimal polyolefin capacity additions expected over coming years
  - Demand growth for North American polyolefins during 1H 2024 aligning with long-term trends

1. Based on estimated 2024 margins, estimated 2024 volume changes relative to 2021 volumes and cost reduction initiatives relative to 2021 cost.

Appendix

LyondellBasell 2024 modeling information Update

Major Planned Maintenance Estimated EBITDA Impact

(USD, millions)	1Q	2Q	3Q	4Q	2024
O&P Americas	~$55	~$20	--	--	~$75
O&P EAI	--	--	~$25	~$50	~$75
Intermediates & Derivatives	--	~$30	~$35	~$40	~$105
Refining	~$50	--	--	--	~$50

Planned Refining Exit Costs

(USD, millions)	1Q	2Q	3Q	4Q	2024
Estimated EBITDA impact	$16	$22	~$30	~$30	~$98
Additional estimated depreciation impact	$20	$20	~$20	~$20	~$80

Capital Expenditures

Total CAPEX

~$2.1 B

Sustaining | Profit Generating CAPEX

~$1.3 B | ~$0.8 B

Financial Metrics

Net Interest Expense

~$350 MM

Depreciation & Amortization

~$1.6 B

Pension Contribution | Expense

~$95 MM | ~$125 MM

Effective Tax Rate

~20%

Note: Major planned maintenance estimated EBITDA impact is the estimated lost production multiplied by forecast margins.
Depreciation & Amortization includes estimated depreciation impact of ~$80 million related to the planned refining exit costs.
Blue indicates updated guidance.

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. We report our financial results in accordance with U.S. generally accepted accounting principles, but believe that certain non-GAAP financial measures provide useful supplemental information to investors. 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. Our non-GAAP measures are as follows:

Cash conversion - Net cash provided by operating activities divided by EBITDA excluding LCM, gain on sale of business and impairment. This measure is commonly used by investors to evaluate liquidity. We believe cash conversion is an important financial metric as it helps the Company determine how efficiently it is converting its earnings into cash.

EBITDA - Income from continuing operations plus interest expense (net), provision for (benefit from) income taxes, and depreciation and amortization. This measure provides useful supplemental information to investors regarding the underlying business trends and performance of our ongoing operations and is useful for period-over-period comparisons of such operations. 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.

EBITDA margin - EBITDA excluding identified items divided by revenues. This measure provides useful supplemental information to investors regarding the underlying business trends and performance of our ongoing operations and is useful for period-over-period comparisons of such operations.

Free cash flow - Net cash provided by operating activities minus capital expenditures. This measure is commonly used by investors to evaluate liquidity. We believe that free cash flow provides useful information to management and other parties with an important perspective on the cash available for shareholders, debt repayment and acquisitions after making capital investments.

Free operating cash flow - Net cash provided by operating activities minus sustaining (maintenance and health, safety and environment) capital expenditures. This measure is commonly used by investors to evaluate liquidity. We believe that free operating cash flow provides useful information to management and other parties with an important perspective on the cash available for shareholders, debt repayment and acquisitions after making the capital investments required to support ongoing business operations or sustaining capital expenditures.

Maintenance estimated EBITDA impact - EBITDA impact based on estimated lost production multiplied by estimated margins. This measure cannot be reconciled to net income due to the inherent difficulty in quantifying certain amounts that are necessary for such reconciliation including adjustments that could be made for interest expense (net), provision for (benefit from) income taxes and depreciation & amortization, the amounts of which, based on historical experience, could be significant.

Net debt to EBITDA excluding identified items - Total debt minus cash and cash equivalents, restricted cash and short-term investments divided by EBITDA excluding identified items. This measure is commonly used by investors to evaluate liquidity. We believe that net debt to EBITDA excluding identified items provides useful information to management and other parties in evaluating changes to the Company’s capital structure and credit quality.

Information related to financial measures (continued)

Normalized EBITDA - Assumes 2013-2022 historical average margins and operating rates and reflects the benefits associated with the following strategic initiatives: Grow & Upgrade the Core, Building a Profitable CLCS Business and Step Up Performance & Culture. Incremental Normalized EBITDA cannot be reconciled to net income due to the inherent difficulty in quantifying certain amounts that are necessary for such reconciliation at the strategic initiative level, including adjustments that could be made for interest expense (net), provision for (benefit from) income taxes and depreciation & amortization, the amounts of which, based on historical experience, could be significant.

Recurring annual EBITDA for the Value Enhancement Program (VEP) – Year-end EBITDA run-rate based on 2017-2019 mid-cycle margins and modest inflation relative to a 2021 baseline. Recurring annual EBITDA for individual projects cannot be reconciled to net income due to the inherent difficulty in quantifying certain amounts that are necessary for such reconciliation at the project level, including adjustments that could be made for provision for (benefit from) income taxes and depreciation & amortization, the amounts of which, based on historical experience, could be significant. We believe recurring annual EBITDA is useful to investors because it represents a key measure used by management to assess progress towards our strategy of value creation.

Return on invested capital - Income from continuing operations, adjusted for interest expense, net of tax and items affecting comparability between periods divided by a two-year average of invested capital adjusted for items affecting comparability.

We also present EBITDA, net income and diluted EPS exclusive of identified items. Identified items include adjustments for “lower of cost or market" (“LCM”), gain on sale of business, impairments and refinery exit costs. 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. Fluctuation in the prices of crude oil, natural gas and correlated products from period to period may result in the recognition of charges to adjust the value of inventory to the lower of cost or market in periods of falling prices and the reversal of those charges in subsequent interim periods, within the same fiscal year as the charge, as market prices recover. A gain or loss on sale of a business is calculated as the consideration received from the sale less its carrying value. Property, plant and equipment are recorded at historical costs. If it is determined that an asset or asset group’s undiscounted future cash flows will not be sufficient to recover the carrying amount, an impairment charge is recognized to write the asset down to its estimated fair value. Goodwill is tested for impairment annually in the fourth quarter or whenever events or changes in circumstances indicate that the fair value of a reporting unit with goodwill is below its carrying amount. If it is determined that the carrying value of the reporting unit including goodwill exceeds its fair value, an impairment charge is recognized. We assess our equity investments for impairment whenever events or changes in circumstances indicate that the carrying amount of the investment may not be recoverable. If the decline in value is considered to be other-than-temporary, the investment is written down to its estimated fair value. In April 2022 we announced our decision to cease operation of our Houston Refinery. In connection with exiting the refinery business, we began to incur costs primarily consisting of accelerated lease amortization costs, personnel related costs, accretion of asset retirement obligations and depreciation of asset retirement cost.

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