Third Quarter 2024 Earnings

November 1, 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.

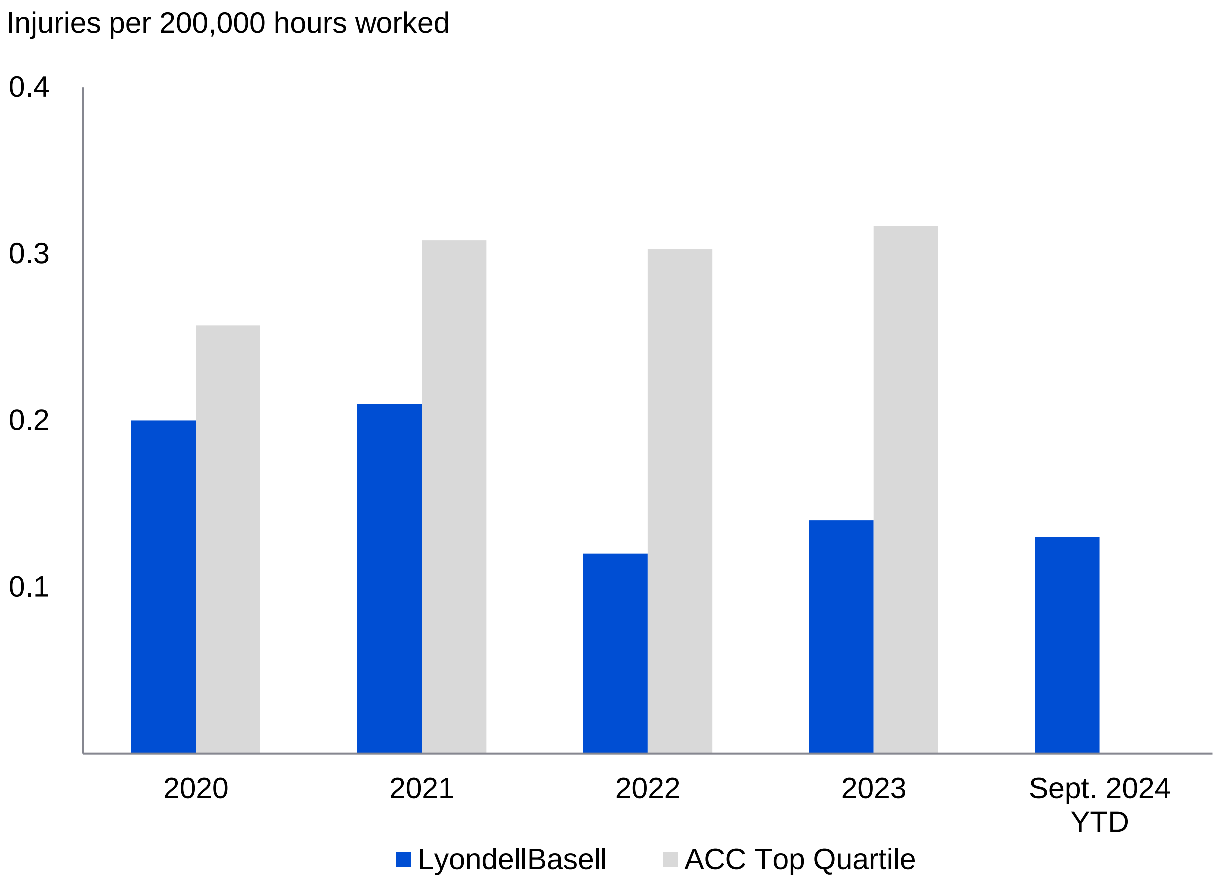
This presentation contains time sensitive information that is accurate only as of the date hereof. Information contained in this presentation is unaudited and is subject to change.

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’s operational results are rooted in our fundamental commitment to safety



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

Third quarter 2024 highlights

Significant decline in oxyfuels and refining margins partially offset by strong U.S. ethylene margins

$0.6 B Net income	**$1.75** Diluted EPS	**$1.2 B** EBITDA	**$0.7 B** Cash from operating activities
$0.6 B Net income ex. identified items	**$1.88** Diluted EPS ex. identified items	**$1.2 B** EBITDA ex. identified items	**9%** Return on Invested Capital LTM

Note: Identified items include adjustments for lower of cost or market (“LCM”), gain on sale of business, impairments in excess of $10 million in aggregate for the period 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. LTM is “last twelve months”.

Sustainable growth through our *MoReTec* technology

Construction has begun on our first commercial-scale catalytic advanced recycling plant in Germany

- *MoReTec*-1 is integral to our Cologne hub – together with upstream investments in waste sorting and our existing LYB olefins and polyolefins assets
- Proprietary advanced recycling technology to convert hard-to-recycle plastic into feedstocks for olefins crackers
- Catalytic process enables high yields (>80%[1]), with lower energy and carbon emissions intensity
- Advancing plans for additional *MoReTec* plants

Project was awarded a €40 million grant from the *EU Innovation Fund* [2]

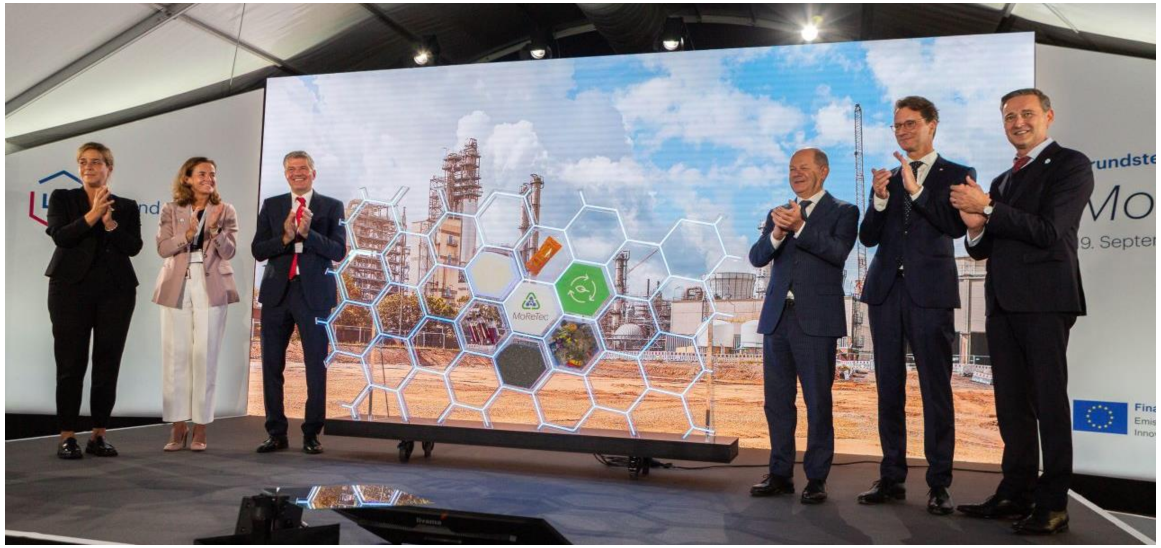


Photo from left to right: State Minister for Economic, Industry, Climate Protection and Energy of North Rhine-Westphalia Mona Neubaur, LYB EVP Yvonne van der Laan, LYB Site Manager - Wesseling Stephan Staender, Chancellor of Germany Olaf Scholz, State Minister-President of the North Rhine-Westphalia Hendrik Wuest, LYB CEO Peter Vanacker.

50 kt
annual capacity

LYB technology allows for operation with
100% renewable power

50% lower carbon footprint
than fossil-based feedstocks[3]

1. Yield depending on the quality of the waste plastic feedstock. We define yield as the percentage by weight of the waste plastic (with >85% polyolefin feed) fed to the process that is converted into liquid and gaseous products (pyrolysis oil and pyrolysis gas) that can be used to produce new polyolefins.
2. Co-funded by the European Union. Views and opinions expressed are, however, those of LYB only and do not necessarily reflect those of the European Union or the EU Innovation Fund. Neither the European Union nor the granting authority can be held responsible for them.
3. Feedstocks produced via the *MoReTec* process (pyrolysis oil and gas) displace fossil-based feedstocks in the olefins cracking process; the stated carbon footprint reduction is based on a comparison of Life Cycle Assessment (LCA) results for (1) pyrolysis oil and gas produced by the *MoReTec* technology, and (2) fossil-based naphtha feedstock. LCA for pyrolysis oil and gas based on *MoReTec* pilot plant data. LCA for fossil-based naphtha includes carbon emissions associated with the production of fossil-based naphtha feedstock, plus incineration of the equivalent amount of mixed plastic waste required to produce pyrolysis oil and gas via the *MoReTec* process

LYB

Future options for Houston Refinery

Leveraging existing assets and infrastructure to unlock sustainable value

1 Advanced recycling

MoReTec-2: Tripling our advanced recycling capacity[1] to **recycle plastic waste** into cracker feedstocks with **on-site purification utilizing existing hydrotreaters**

2 Renewable cracker feedstocks

Retrofitting existing assets for production of **renewable distillates and bio-based feedstocks** to be utilized in our olefins crackers

3 LYB-focused growth

Repurposing on-site infrastructure to support growth, including potential partnerships on low-carbon feedstocks and products

Aligned with LYB strategy

Expanding access to sustainable feedstocks

Addressing customer needs with market-leading approach for sustainable solutions and emission reductions

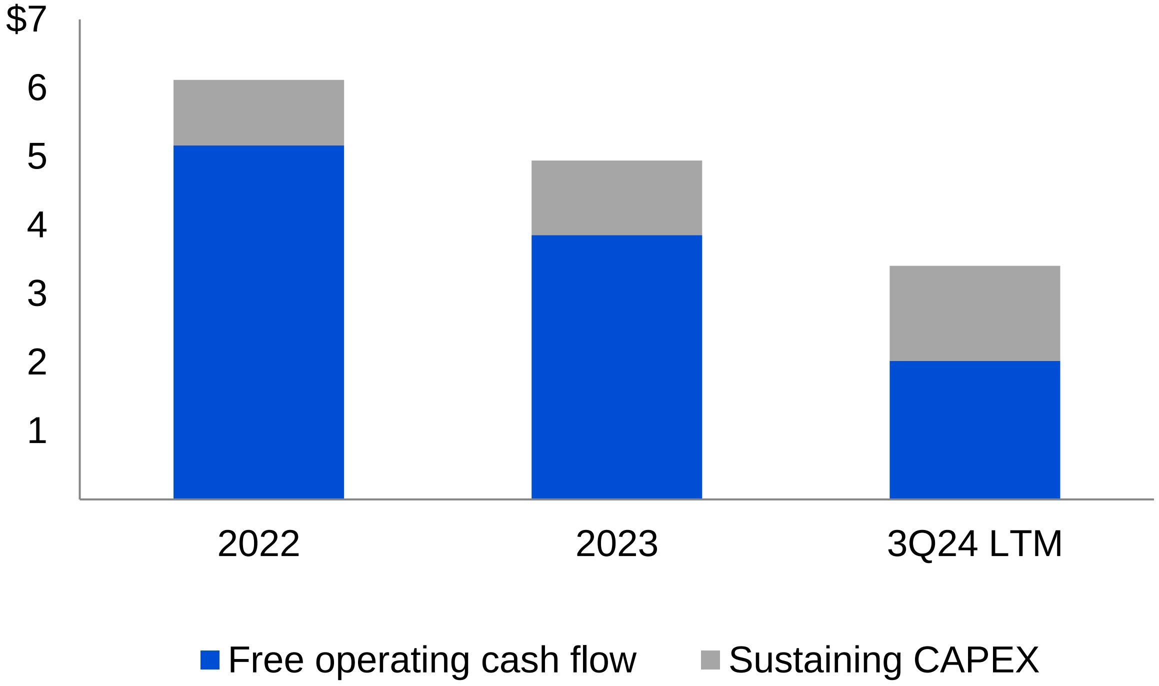
Advancing low-carbon polymer offerings through advanced recycling and pyrolysis oil hydrotreating

1. Subject to final investment decision

Resilient cash generation amid difficult market conditions

Strong balance sheet supported by steady cash conversion

Cash from operating activities
USD, billions



$3.4 B Cash from operating activities 3Q24 LTM

$2.6 B Cash and cash equivalents September 30, 2024

1.9x Net debt to EBITDA ex. identified items September 30, 2024

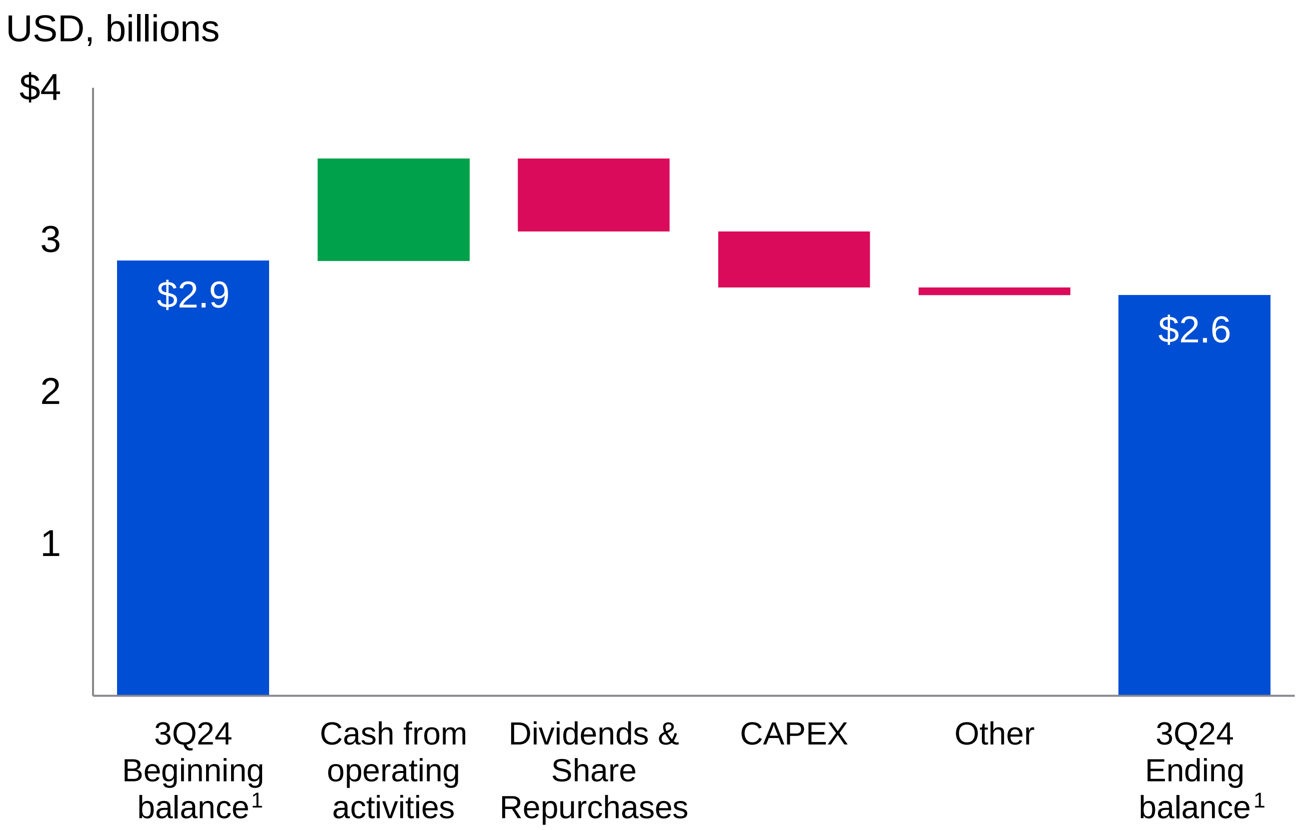
77% Cash conversion 3Q24 LTM

$1.8 B Returned to shareholders in dividends and share repurchases 3Q24 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 in excess of $10 million in aggregate for the period. LTM is "last twelve months".

Disciplined capital allocation

Committed to balanced capital allocation while moving forward on our strategy



Delivering results

- $670 MM cash from operating activities in 3Q24
- Achieved 77% cash conversion[2] over last 12 months

Generating value for shareholders

- Returned approximately $480 MM to shareholders through dividends and share repurchases in 3Q24

Advancing our strategy

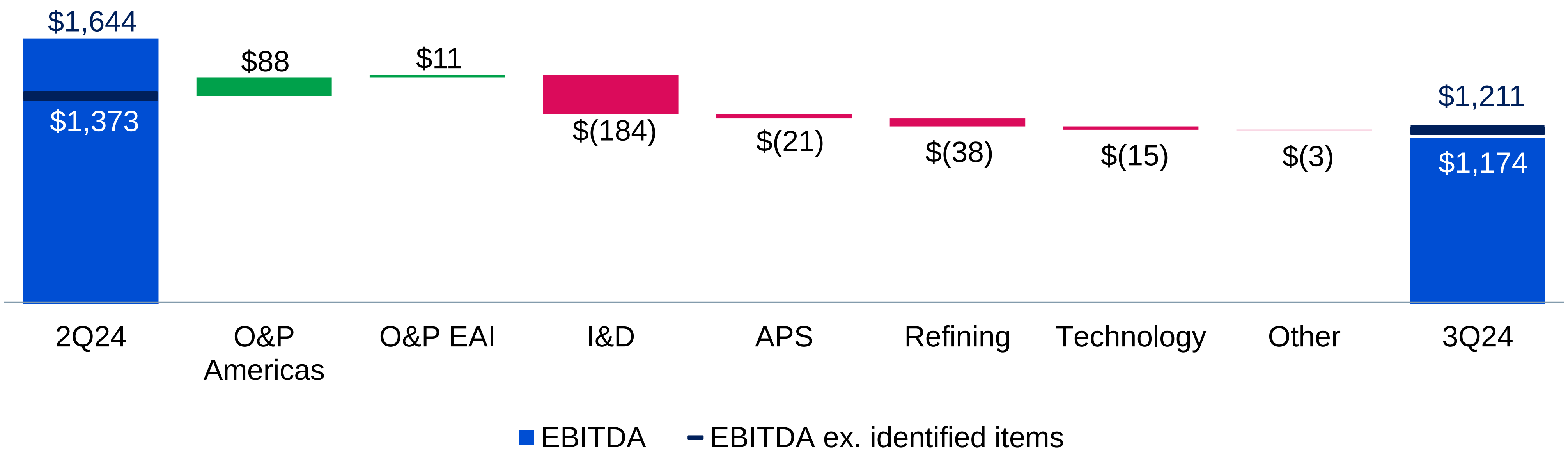
- Value Enhancement Program expected to unlock $600 MM in recurring annual EBITDA[3] by year end 2024
- Remain on track to shut down refinery operations during 1Q25
- European asset review underway; gauging market interest for the five O&P assets

1. Beginning and ending cash balances include cash and cash equivalents, restricted cash, and liquid investments.
2. Cash conversion equals cash provided by operating activities divided by EBITDA excluding LCM, gain on sale of business and impairment in excess of $10 million in aggregate for the period.
3. 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 million in 2024.

3Q24 segment highlights

Lower crude oil price and gasoline cracks impacted I&D and Refining while higher U.S. ethylene margins benefited O&P

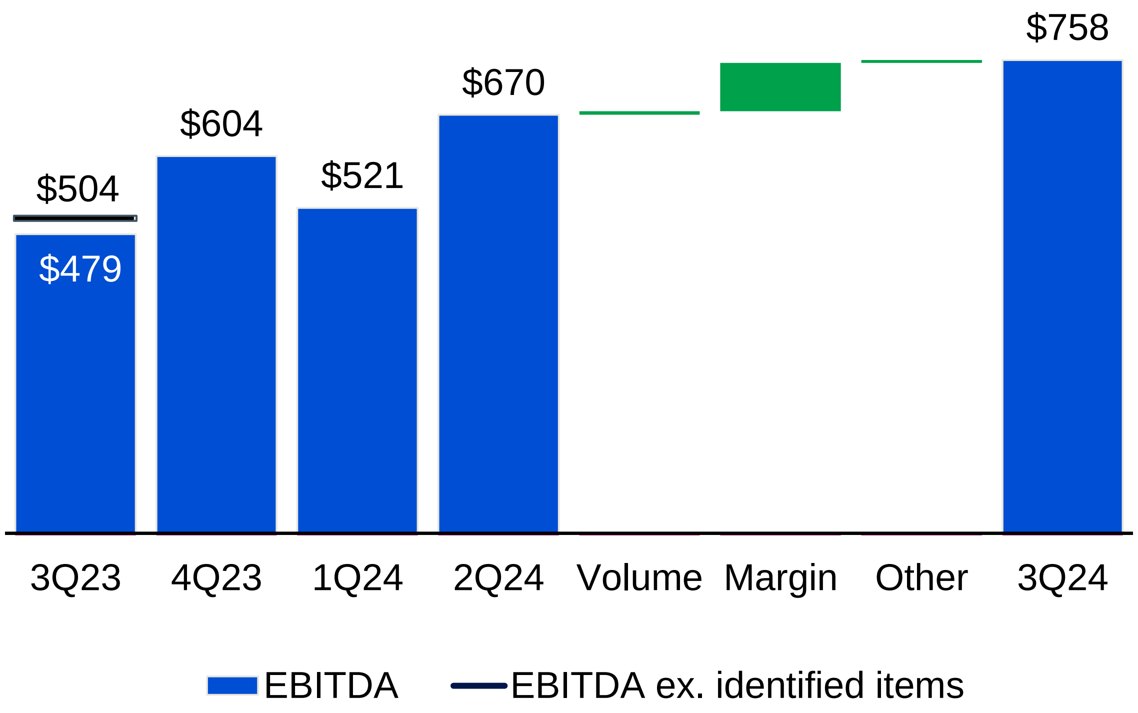
EBITDA variance by segment ex. identified items
USD, millions



Olefins & Polyolefins – Americas

Integrated polyethylene margins expanded sequentially and year-over-year

EBITDA ex. identified items
USD, millions



3Q24 market dynamics

- September 2024 YTD North American polyethylene and polypropylene industry sales increased ~7% and ~4%, respectively, over the prior year[1]
- Industry competitors experienced increased ethylene cracker downtime

Near-term outlook

- Seasonally higher ethane and natural gas costs; U.S. ethane remains highly advantaged relative to oil-based production
- Targeting ~85% operating rates in 4Q24, driven by low polypropylene rates

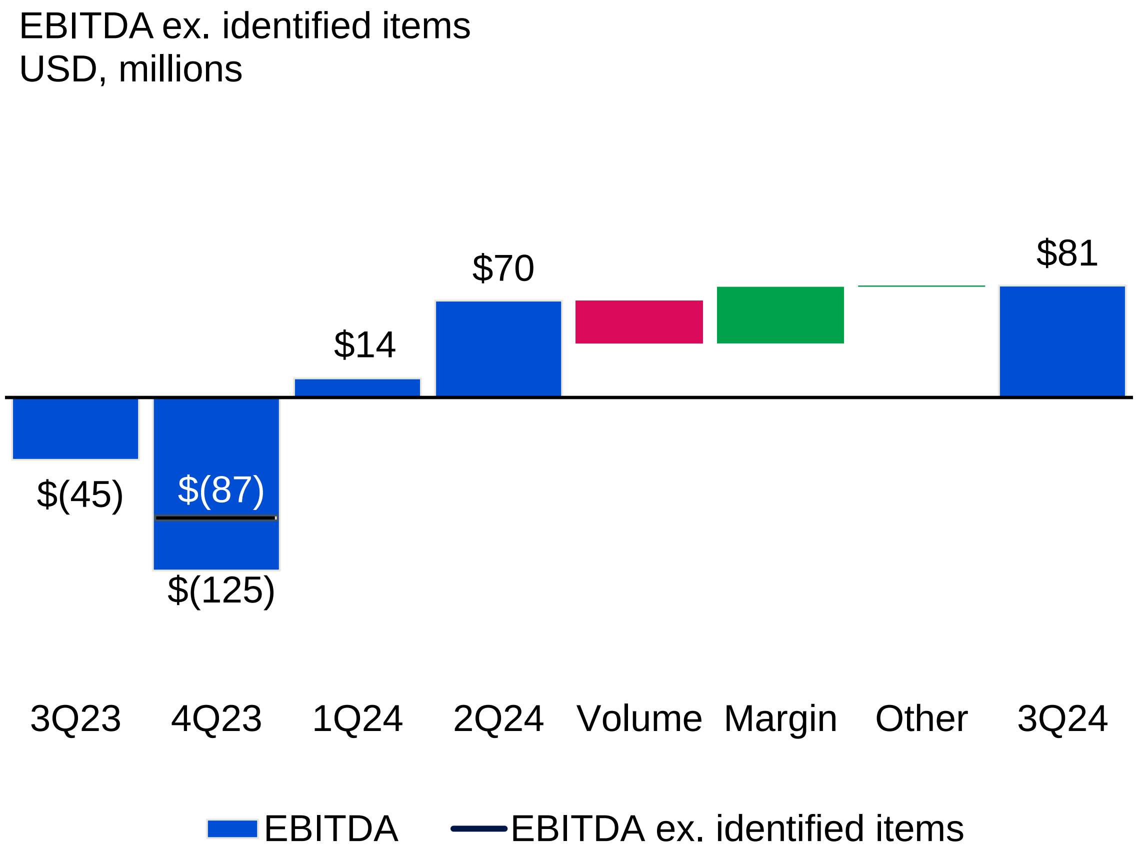
Our actions

Operated LYB olefins crackers at ~95% rates in 3Q24 capturing favorable ethylene margins

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

Olefins & Polyolefins – Europe, Asia & International

Lower feedstock costs partially offset by planned downtime



3Q24 market dynamics

- Higher integrated polyethylene margins
- Modest seasonal demand

Near-term outlook

- Slower seasonal olefins and polymers demand
- Monitoring Chinese demand and stimulus impact
- Continued planned maintenance in 4Q24
- Targeting ~60% operating rates in 4Q24

Our actions

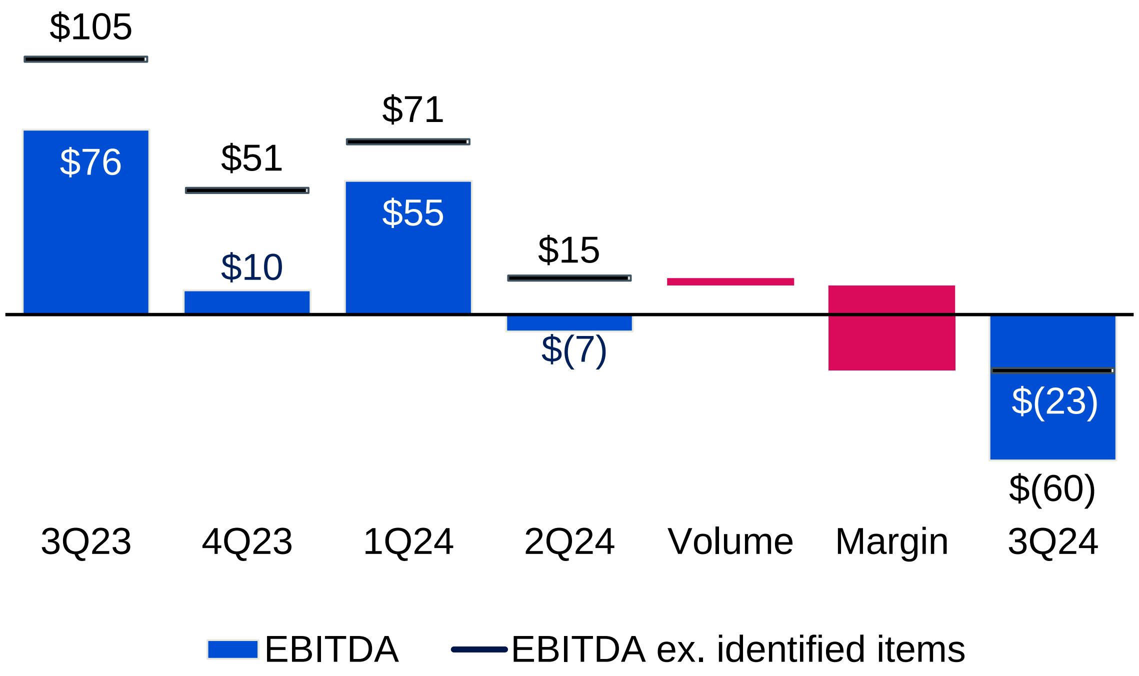
Started construction of *MoReTec*-1 advanced recycling site in Germany

In October, acquired full ownership of APK, a solvent-based LDPE recycling technology in Germany

Refining

Lower Maya 2-1-1 spreads driven by declining gasoline margins coupled with unplanned downtime

EBITDA ex. identified items
USD, millions



3Q24 market dynamics

- Lower margins driven by compressed gasoline and distillate crack spreads and high refining industry operating rates

Near-term outlook

- Declining Maya 2-1-1 spreads
- Targeting ~90% LYB refinery utilization rate in 4Q24 with the FCC returning to full operations

Our actions

Prioritizing safe and reliable operations

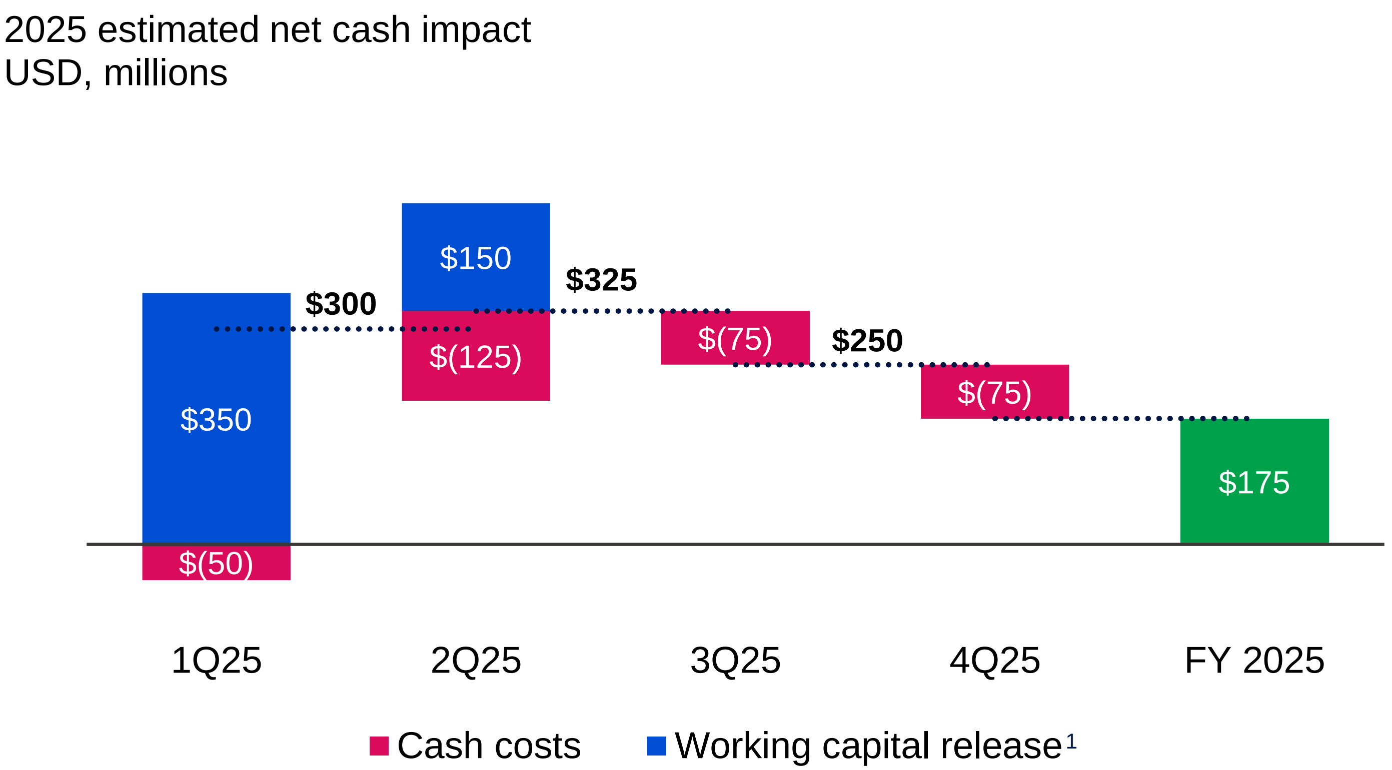
Benefitting from distillate hedging program

Exiting refining by the end of 1Q25

Evaluating options to transform site to support our growth in Circular and Low Carbon Solutions

Modeling guidance for refining exit

Expecting a net cash benefit during 2025

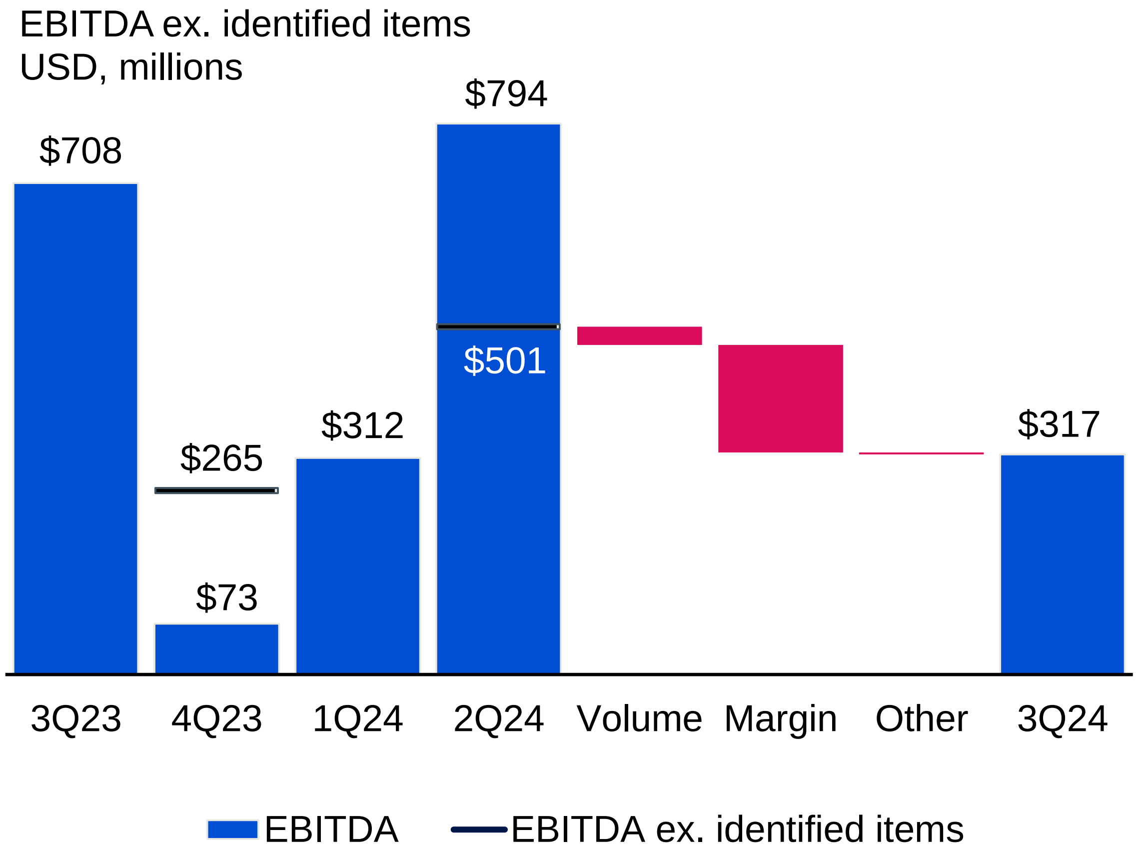


- First crude and coker units shutting down during January 2025
- Second crude and coker units and FCC and ancillary units shutting down during February 2025
- Anticipate Refining segment will move to discontinued operations starting in 1Q25

1. Assumes Brent crude price of ~$80/bbl

Intermediates & Derivatives

Lower oxyfuels margins as gasoline cracks declined



3Q24 market dynamics

- Seasonally lower gasoline crack spreads impacting oxyfuels margins and volumes
- Lower styrene margins due to ample market supply

Near-term outlook

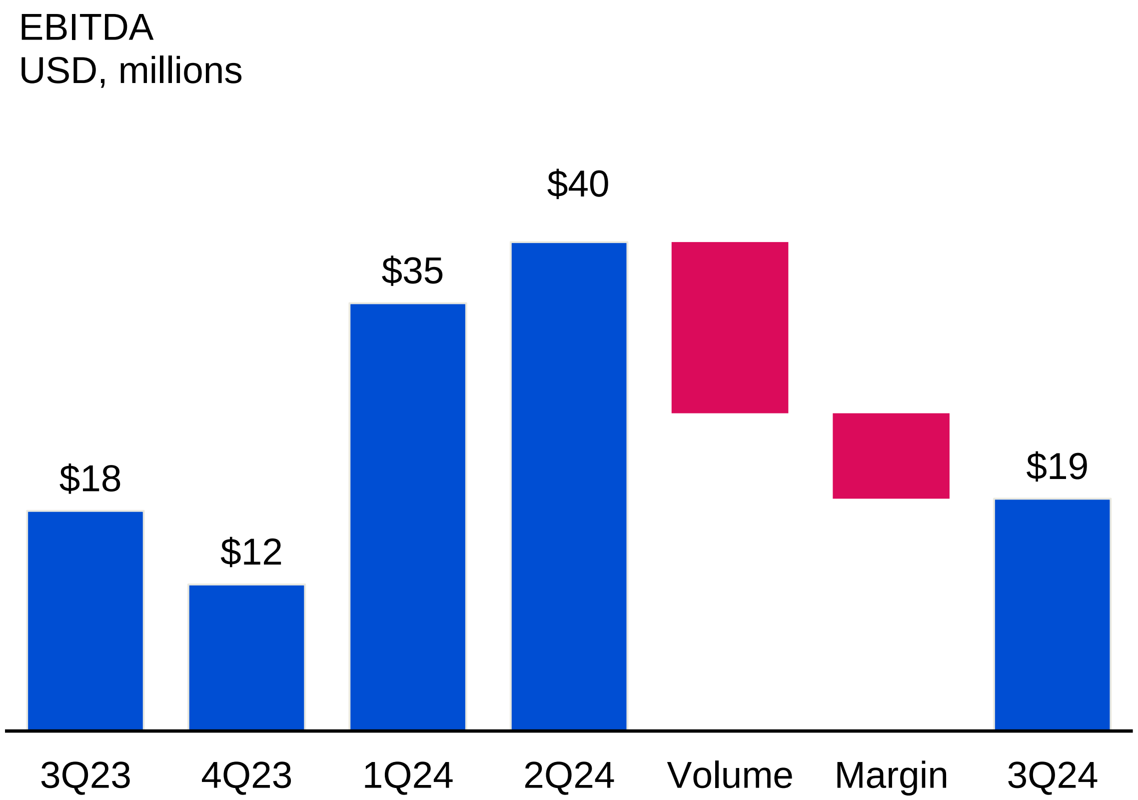
- Modest demand across most businesses
- Oxyfuels margins in line with seasonal norms
- Continued planned maintenance at propylene oxide asset in 4Q24
- Targeting ~75% operating rates in 4Q24

Our actions

Our newest PO/TBA asset is running well and is expected to benefit from favorable long-term fundamentals for oxyfuels: strong octane premiums and low butane to crude costs

Advanced Polymer Solutions

Softer seasonal demand compounded by rising automotive OEM inventories



3Q24 market dynamics

- Substantially lower automotive demand drove price and volume headwinds
- Resilient demand in packaging supported masterbatch business

Near-term outlook

- Ongoing customer focus is rebuilding LYB market share
- Continued optimization of working capital to improve cash flow

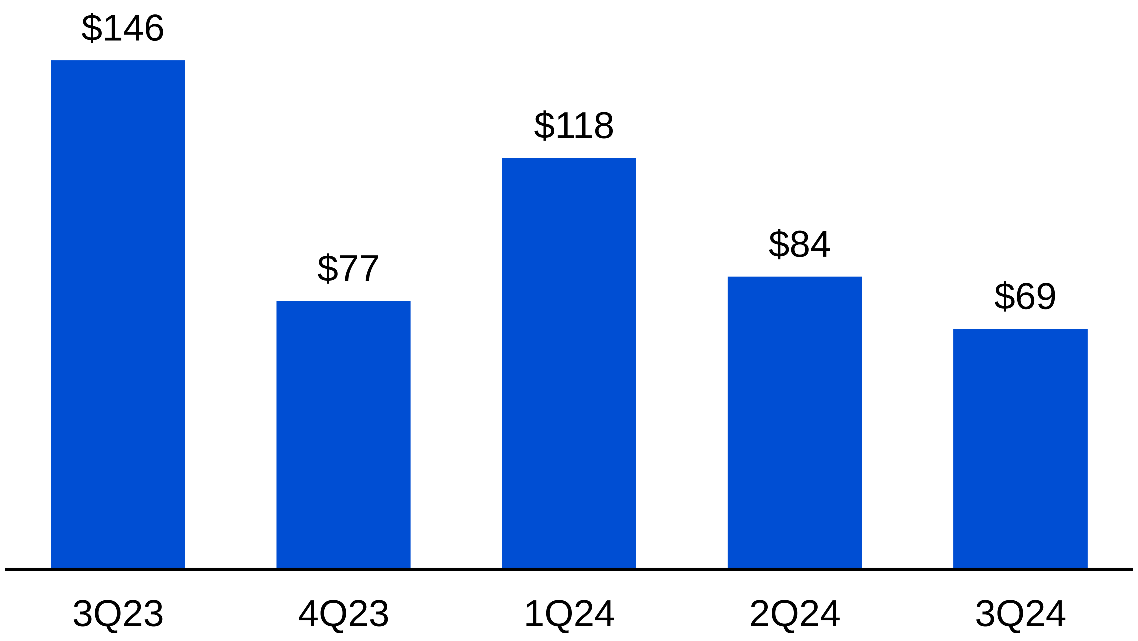
Our actions

Expanding our APS growth funnel and improving win rate for new projects with customers

Technology

Steady catalyst results with additional licensing milestones expected in 4Q24

EBITDA
USD, millions



3Q24 market dynamics

- Licensing revenue moderated

Near-term outlook

- Increased licensing revenue
- Improving catalyst sales and product mix

Our actions

Broke ground on our first commercial advanced recycling plant employing LYB proprietary ***MoReTec*** technology

Near-term market outlook

Benefits from lower interest rates largely deferred to 2025

North America	• Slower seasonal demand in 4Q24 • Relatively low ethane costs continuing to support advantaged integrated PE margins
Europe	• Slower seasonal demand in 4Q24 • Steady, but trough conditions driven by weak consumer demand and lack of recovery in markets for durable goods • Ongoing rationalization in the European petrochemicals market
Asia	• Slow and modest improvements in volumes and margin • Chinese stimulus programs generating optimism, but not yet driving market improvements

Packaging	• Steady global demand as consumers remain sensitive to higher costs
Building & Construction	• U.S. infrastructure stimulus supporting industrial activity • Lower interest rates likely supportive of demand improvement over coming year
Automotive	• Seasonally slow 3Q production compounded by rising inventories and expected to continue into 4Q24
Fuels	• Sharp decline in gasoline crack spreads and seasonally slower demand expected to continue to impact oxyfuels and refining margins

Advancing our strategy despite challenging markets

4Q 2024 outlook

- 2H 2024 results expected to be lower than 1H 2024
  - Seasonally lower 4Q demand and slow economic growth
  - Favorable oil to gas ratio continues to provide advantage for U.S. and Middle East production
- Continued focus on disciplined capital allocation and working capital management

Progressing our strategy

- Clear criteria and focused strategy to drive profitable growth in the company's core businesses
- European strategic review underway
- Exiting refining business during 1Q25
- Growing our Circular & Low Carbon Solutions business with recent groundbreaking of *MoReTec*-1 in Germany and progress toward developing *MoReTec*-2 in Houston[1]
- Value Enhancement Program is on track to unlock $600 MM recurring annual EBITDA[2] by year end 2024

1. Subject to final investment decision
2. Year-end EBITDA run rate based on 2017-2019 mid-cycle margins and modest inflation relative to a 2021 baseline.

Appendix

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.

Circular & Low Carbon Solutions (“CLCS”) incremental EBITDA – Estimated EBITDA which is incremental to LyondellBasell’s fossil-based O&P Americas and O&P EAI annual EBITDA. CLCS incremental EBITDA cannot be reconciled to net income due to the inherent difficulty in quantifying certain amounts that are necessary for such reconciliation at the business unit 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.

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.

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.

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.

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.

LYB

Information related to financial measures (continued)

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 in excess of $10 million in aggregate for the period 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.

Additionally, any estimated EBITDA impact is based on estimated lost production multiplied by estimated margins.