LyondellBasell

Fourth Quarter 2023 Earnings

February 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; benefits and synergies of any proposed transactions; receipt of required regulatory approvals and the satisfaction of closing conditions for our proposed transactions; final investment decision and the construction and operation of any proposed facilities described; our ability to align our assets and expand our core; 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, 2022, 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.

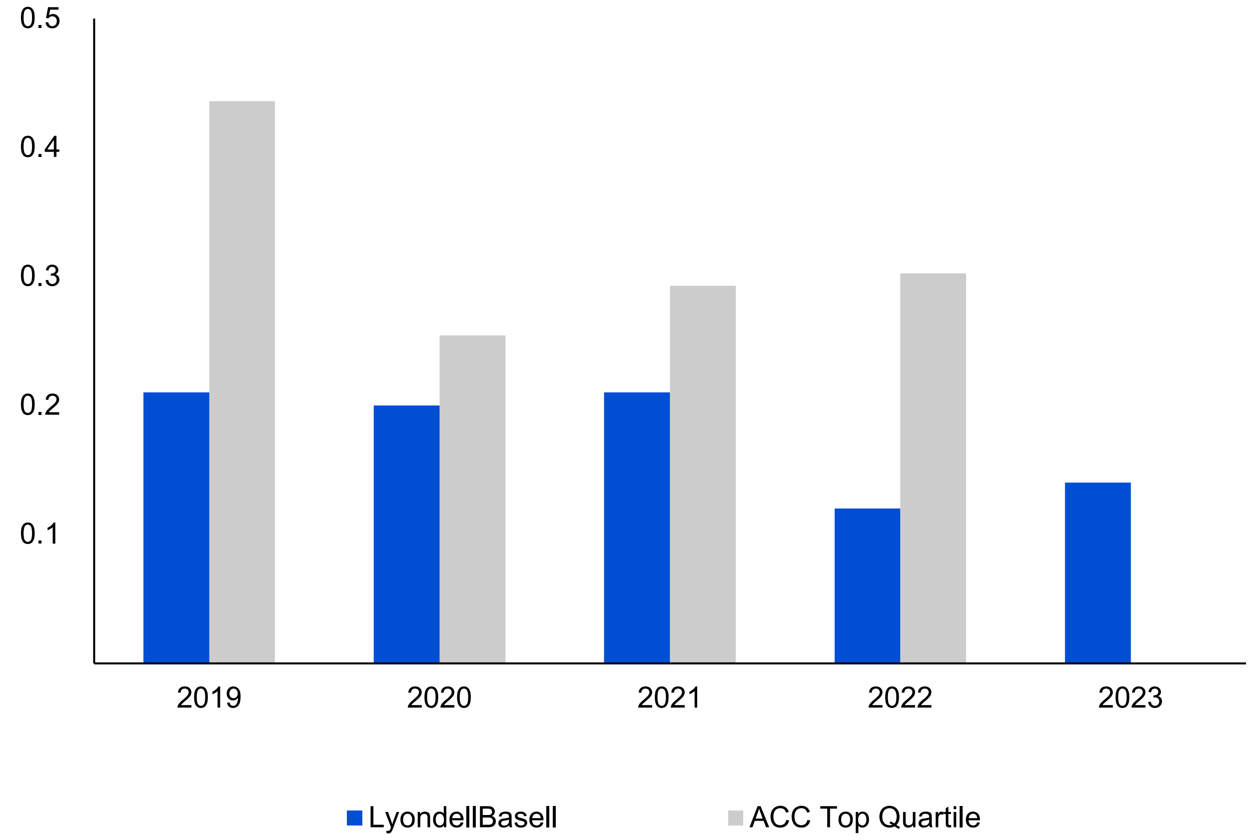
This presentation contains time sensitive information that is accurate only as of the date hereof. Information contained in this presentation is unaudited and is subject to change. We undertake no obligation to update the information presented herein except as required by law.

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

Safety performance

Continued leadership in safety and operational excellence

Injuries per 200,000 hours worked



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

2023 highlights

Resilient results and efficient cash generation amid challenging markets

$2.1 B
Net income

$6.46
Diluted EPS

$4.5 B
EBITDA

$4.9 B
Cash from operating activities

$2.8 B
Net income ex. identified items

$8.65
Diluted EPS ex. identified items

$5.2 B
EBITDA ex. identified items

11%
Return on Invested Capital

Note: Identified items include adjustments for lower of cost or market (“LCM”), 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

Driving focus, differential growth and value creation

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

Progress on our strategy

Targeting $3 B incremental Normalized EBITDA[1] by 2027

- ✓ Successful PO/TBA start-up providing ~$450MM estimated EBITDA[2]
- ✓ Unlocked $400 MM+ in recurring annual EBITDA from Value Enhancement Program (VEP)[3]
- ✓ Customer and Commercial Excellence program improving focus on customers and markets
- ✓ Polypropylene asset closure in Italy

Unlocked ~$0.9 B incremental Normalized EBITDA[1]
2023

- Sale of EO&D business
- NATPET Saudi Arabian PDH/PP JV
- CLCS Progress
  - Partnerships to source/sort plastic waste, including Source One (Germany) and Cyclyx (Houston)
- Additional VEP value
- APS transformation
- Exit of refining business, no later than 1Q25
- Organic growth, M&A and other portfolio management

~$1.1 B incremental Normalized EBITDA[1]
2024 – 2025

- Potential NATPET JV expansion leveraging advantaged Saudi Arabian feedstock allocation[4]
- CLCS Progress
  - Startup of *MoReTec-1* in Germany
- Additional VEP value
- Further progress on APS transformation
- Organic growth, M&A and other portfolio management

~$1.0 B incremental Normalized EBITDA[1]
2026 – 2027

1. 2027 incremental Normalized EBITDA reflects expected improvement over a 2022 year-end asset portfolio with 2013-2022 historical average margins and operating rates and the benefits associated with our strategic initiatives. Please see Appendix for additional information on Normalized EBITDA.
2. Estimated PO/TBA EBITDA is nameplate capacity multiplied by 2017-2019 average cash margins.
3. Year-end EBITDA run rate for 2023 based on 2017-2019 mid-cycle margins and modest inflation relative to 2021 baseline.
4. Pending final investment decision.

LYB

Looking ahead

Delivering value and achieving our goals

Grow and upgrade the core

- Focusing on growth by leveraging advantaged feedstocks in growing markets where LYB can build or extend a leading market position
- Taking decisive action to align our business portfolio with unique LYB strengths
- Unlocking value with capacity expansions and improved reliability using the VEP

Build a profitable Circular & Low Carbon Solutions business

- Expanding CLCS capacity at scale with construction of *MoReTec-1* facility for Cologne, Germany hub and development of larger scale *MoReTec-2* for Houston, Texas hub[1]
- Expecting to capture CLCS incremental EBITDA[2] of $500 MM by 2027 and $1 B by 2030

Step up performance and culture

- Embedding VEP as a continuous improvement process to unlock value beyond 2025
- Transforming APS to improve customer-centricity and achieve focused growth

Maintain strong financial foundation

- Strong cash generation with a robust, investment grade balance sheet
- Highly focused and selective organic and inorganic growth
- Targeting ~70% of FCF[3] to shareholders through dividends and share repurchases

1. Pending final investment decision.
2. Incremental to LyondellBasell's fossil-based O&P Americas and O&P EAI annual EBITDA.
3. Free cash flow equals cash from operating activities minus capital expenditure.

Accelerating value capture

LYB Value Enhancement Program (VEP) is exceeding expectations

$150 MM
Recurring annual EBITDA by year end 2023

Original Target 2023

$400 MM+
Recurring annual EBITDA by year end 2023

Unlocked Value 2023

$600 MM
Recurring annual EBITDA by year end 2024

Target 2024

Up to $1 B
Recurring annual EBITDA by year end 2025

Target 2025

Transforming the way we work

- Instilling a culture of continuous improvement and value creation while maintaining our commitment to cost discipline
- Exceeding our original target by capitalizing on existing ideas with rapid and enthusiastic execution
- Engagement and execution remains robust with additional value extending beyond 2025
- Creating long-term value by embedding the LYB VEP in our proven operating model

Notes: 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 $200 MM in 2023 and $325 MM in 2024.

Delivering results through the Value Enhancement Program

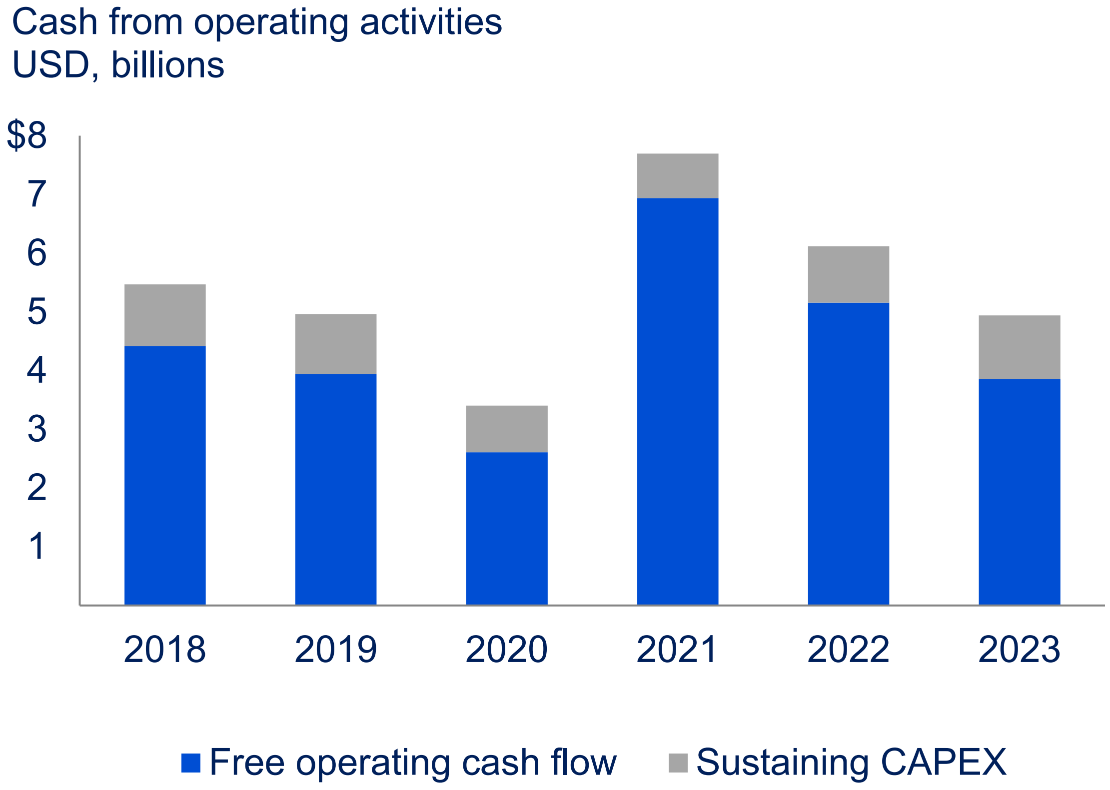
More than 450 initiatives generated value during 2023

2023 Examples	
Manufacturing & operational excellence **~75%** 2023 unlocked value	**Automation of Lake Charles Water Treatment Unit** ✓ Improved control system to minimize manual operations and reduce water consumption ✓ Implementation cost ~$5,000 ✓ ~$0.8 MM estimated recurring annual EBITDA
Procurement & supply chain **~10%** 2023 unlocked value	**Partnered with terminal provider to improve oxyfuels vessel loading** ✓ Improved vapor recovery system to double loading rate, lower demurrage costs and reduce emissions ✓ Implementation cost ~$0 ✓ ~$1.0 MM estimated recurring annual EBITDA
Commercial excellence **~15%** 2023 unlocked value	**Capturing differential value through improved customer focus** ✓ Invested engineering, marketing and technical service resources to launch new, high-performance wire and cable sheathing polymers serving high-value subsea infrastructure markets ✓ Implementation cost ~$135,000 ✓ ~$0.3 MM estimated recurring annual EBITDA

Notes: Year-end EBITDA run rate based on 2017-2019 mid-cycle margins and modest inflation relative to 2021 baseline. Estimated 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.

Outstanding cash generation

Supporting investment-grade balance sheet and strong shareholder returns



$4.9 B Cash from operating activities 2023

$3.4 B Cash and cash equivalents December 31, 2023

1.5x Net debt to EBITDA ex. identified items December 31, 2023

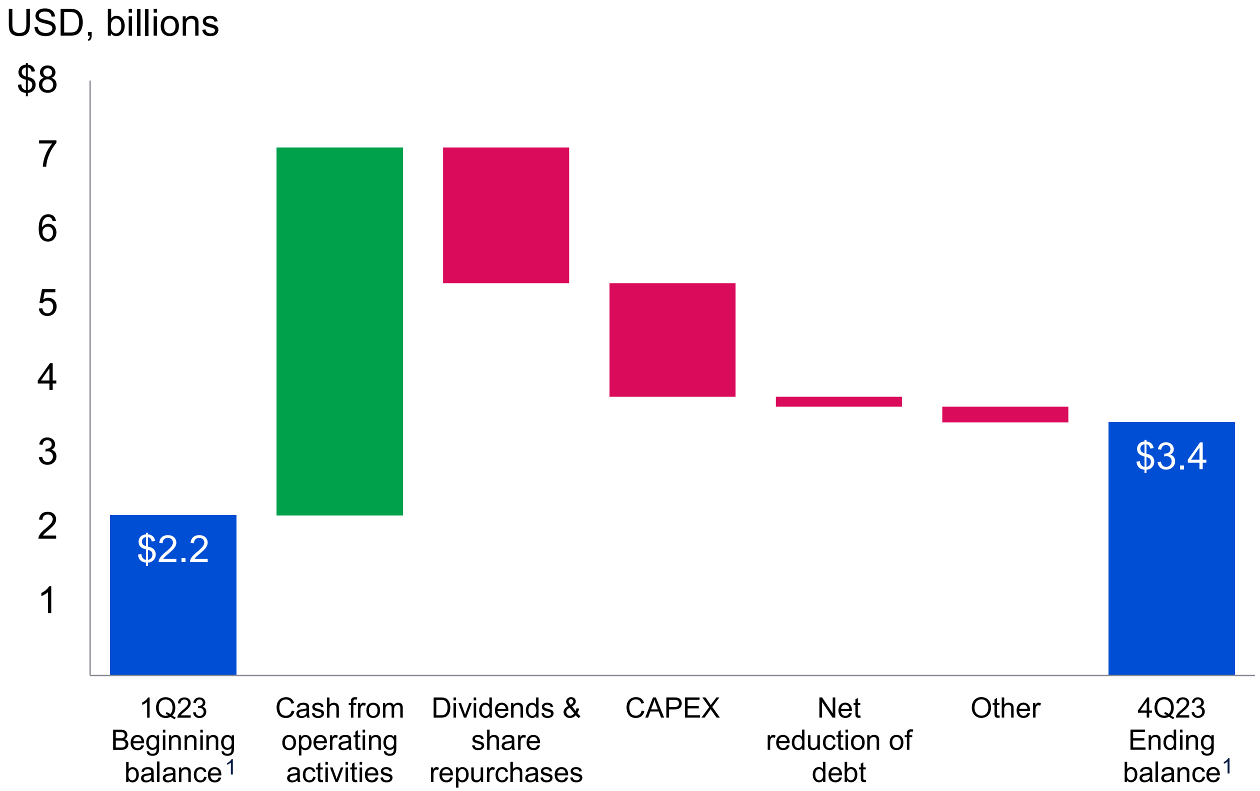
98% Cash conversion 2023

$1.8B Returned to shareholders in dividends and share repurchases 2023

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 and impairment.

Capital allocation

Investment-grade balance sheet underpins our disciplined capital allocation and strategy



Delivering resilient results

- Generated $4.9 B in cash from operating activities
- Achieved 98% cash conversion

Generating value for shareholders

- Increased quarterly dividend by 5%; 13th annual increase
- Returned $1.8 B to shareholders

Maintaining robust balance sheet

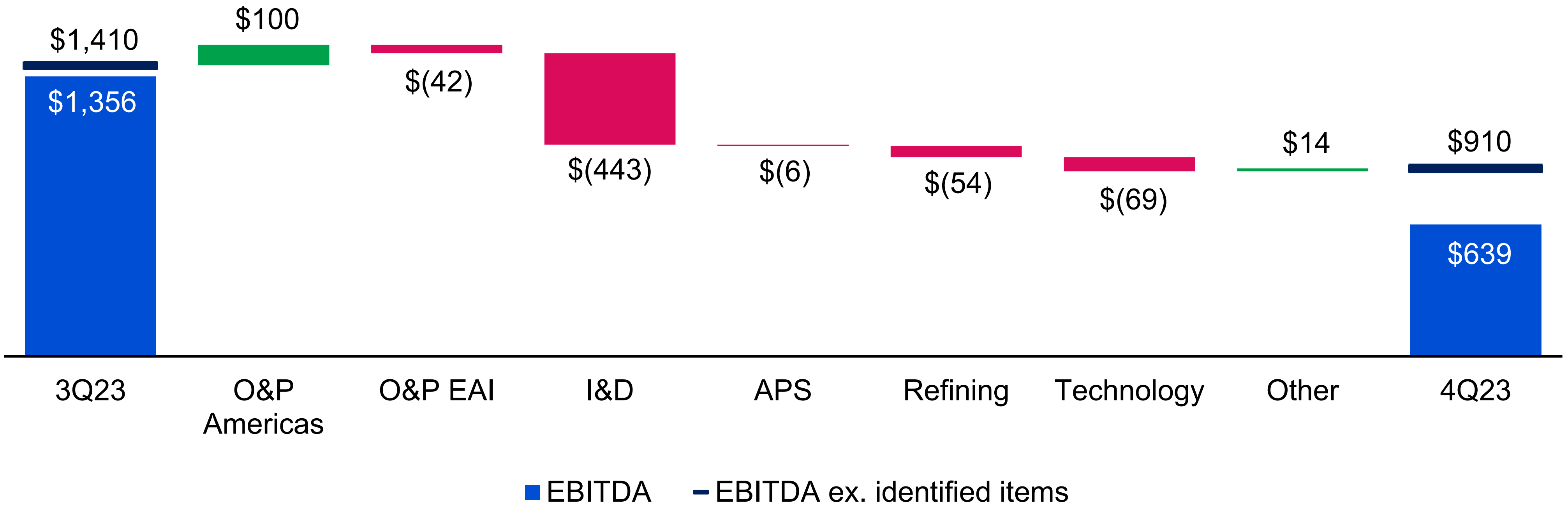
- Weighted average cost of debt of 4% and average debt maturity of ~17 years
- Issued inaugural green bond for $500 MM
- $7.6 B of available liquidity

1. Beginning and ending cash balances include cash and cash equivalents, restricted cash, and liquid investments.

4Q23 segment highlights

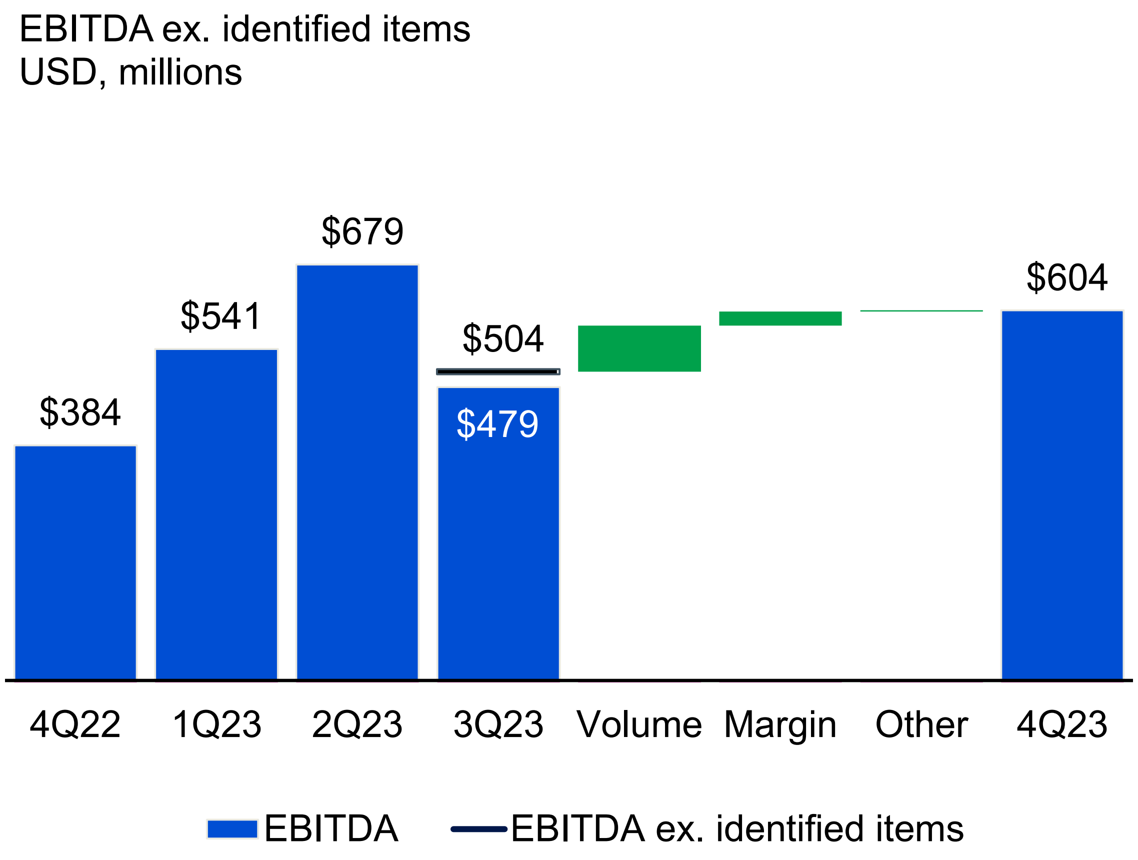
Significantly lower gasoline cracks and seasonally lower demand impacting several businesses

EBITDA Variance by Segment ex. identified items
USD, millions



Olefins & Polyolefins – Americas

Strong polyethylene export volumes partially offset by lower integrated polyethylene margins



Inventory valuation

- LIFO benefits of ~$75 MM

4Q23 market dynamics

- Lower olefin C4+ co-product value
- Increased North American polyethylene export volumes

Near-term outlook

- Stable polyethylene pricing with moderately improving domestic demand and continued strength in export volumes
- Continued advantaged oil to gas ratio

Our actions

Balancing domestic demand with disciplined capacity utilization and increased export volumes

New solar energy power purchase agreements in Texas

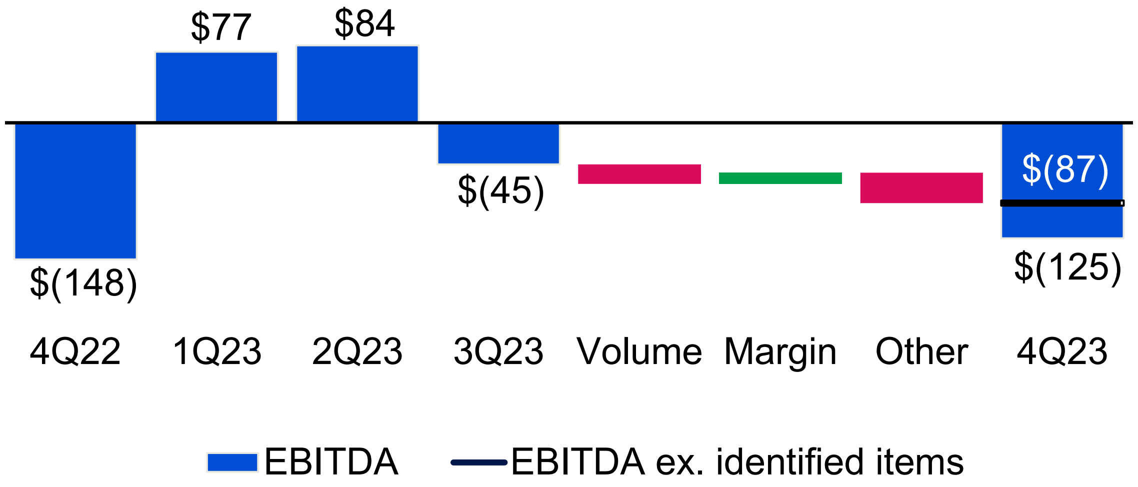
LYB joins Cyclyx plastic waste joint venture

Cyclyx FID for plastic waste circularity center in Houston

Olefins & Polyolefins – Europe, Asia & International

Lower utilization due to persistent weak demand

EBITDA ex. identified items
USD, millions



4Q23 market dynamics

- Modestly higher polymer prices
- Stable naphtha feedstock costs

Near-term outlook

- Low European demand expected to persist into 2024
- Slow return of Chinese demand

Our actions

NATPET Saudi Arabian PDH/PP JV

PP asset closure in Italy

Took final investment decision to build our first commercial advanced recycling plant utilizing our proprietary ***MoReTec*** technology

Source One plastic waste joint venture in Cologne

NATPET joint venture

Growing and upgrading a core LYB business: aligned with our strategy

New capacity for our core Olefins & Polyolefins business

- LYB to acquire 35% of NATPET from Alujain for $500 MM[1]
- LYB to market majority of PP production on behalf of the NATPET JV

Leading assets with cost-advantaged feedstocks

- First-quartile assets with access to cost-advantaged propane feedstock
- Leveraging LYB's polypropylene technologies and global market reach
- Existing assets that mitigate capital risk and create immediate value

Attractive returns and a platform for future growth

- 2022 Saudi feedstock allocation provides potential for additional PDH/PP capacity[2] at NATPET
- Meaningful synergies by potentially locating new assets within existing facility

400 KTA	**~$155 MM**	**>12%**
PDH/PP capacity	Average EBITDA 2018-2022[3]	LYB IRR expected

1. Closing of the transaction is subject to regulatory and customary closing conditions.
2. Pending final investment decision.
3. EBITDA for NATPET was calculated based on financial information provided by Alujain Corporation and prepared in accordance with International Financial Reporting Standards (IFRS).

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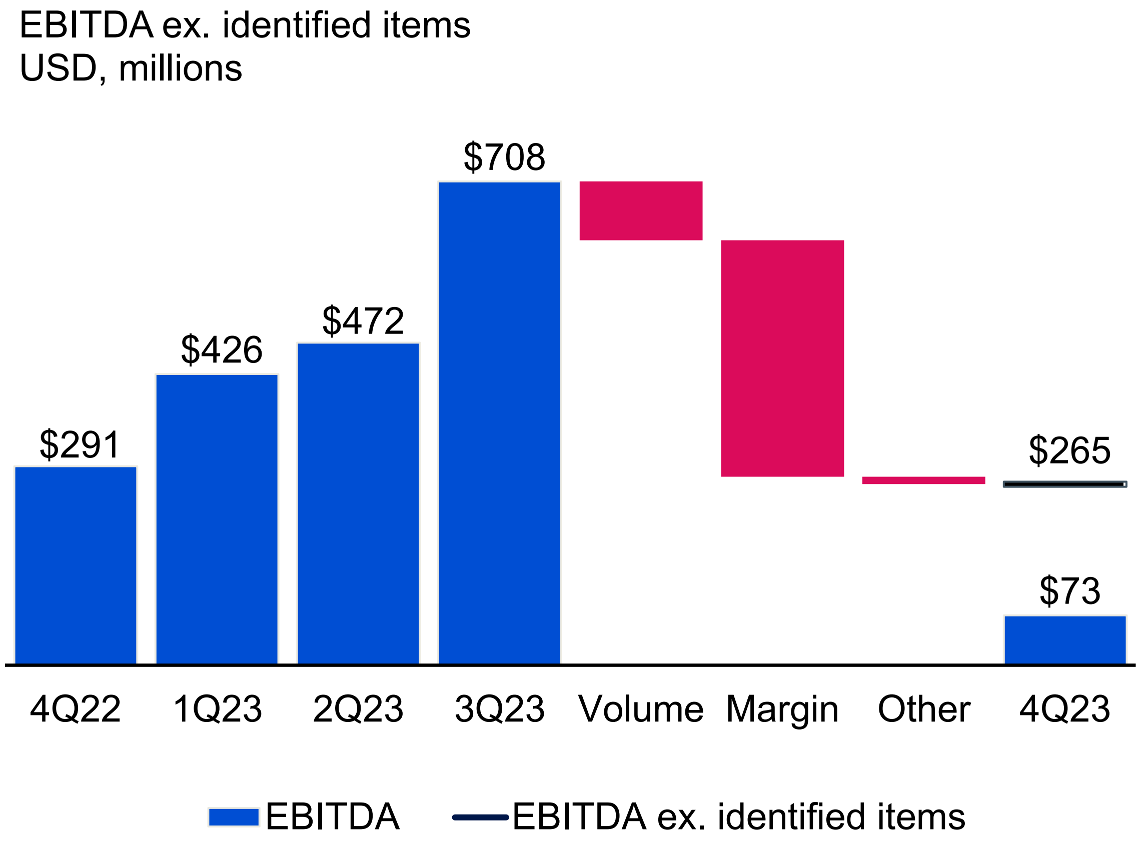
Intermediates & Derivatives

Oxyfuels margins compressed from 3Q23 highs as gasoline crack spreads declined



Inventory valuation

- LIFO charges of ~$95 MM

4Q23 market dynamics

- Oxyfuels margins decreased with increased supply following industry downtime in 3Q23
- Lower styrene margins with higher feedstock cost
- Planned and unplanned outages across most businesses

Near-term outlook

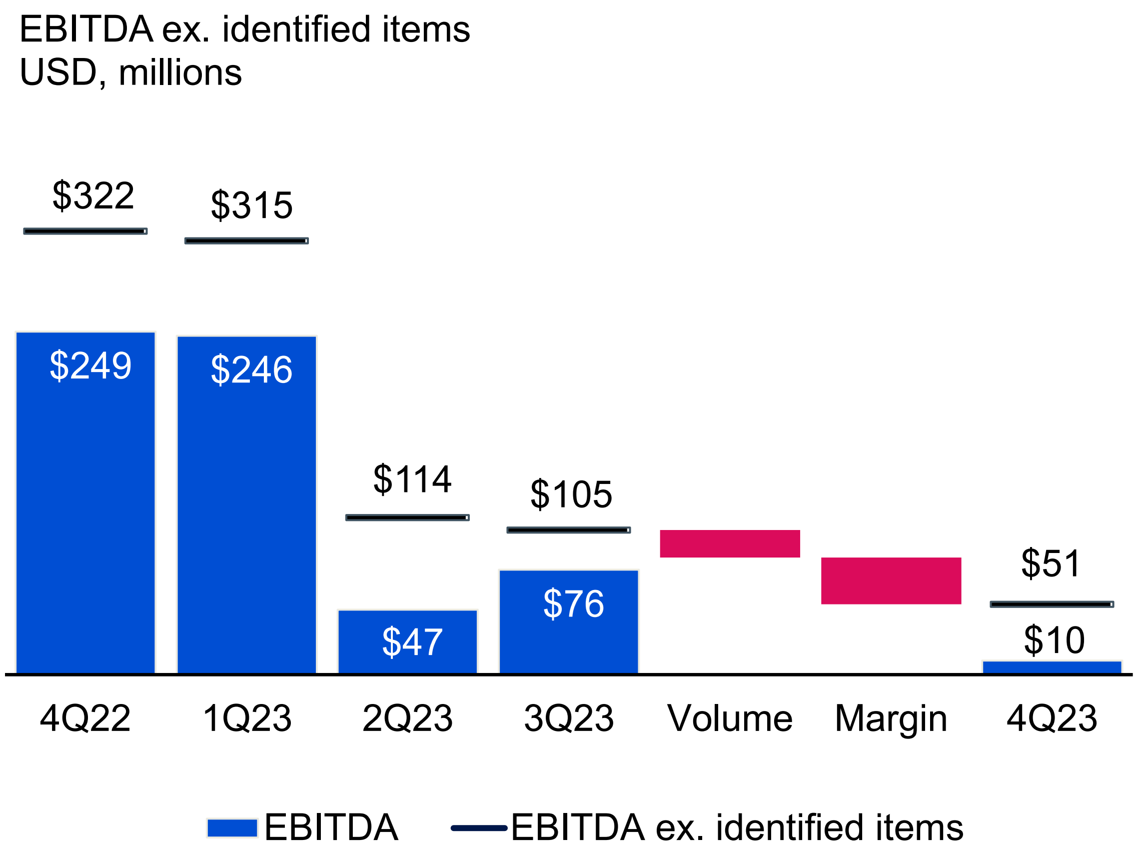
- Oxyfuels margins expected to remain low during winter
- Higher volumes following 4Q23 downtime

Our actions

Announced sale of EO&D business

Refining

Lower gasoline crack spreads coupled with asset downtime



Inventory valuation

- LIFO charges of ~$40 MM

4Q23 market dynamics

- Gasoline crack spreads declined driven by seasonal changes and lower demand

Near-term outlook

- Improving gasoline cracks offset by lower distillate cracks
- Targeting ~80% LYB refinery utilization rate in 1Q24

Our actions

Prioritizing safe and reliable operations

Performing coker maintenance in 1Q24

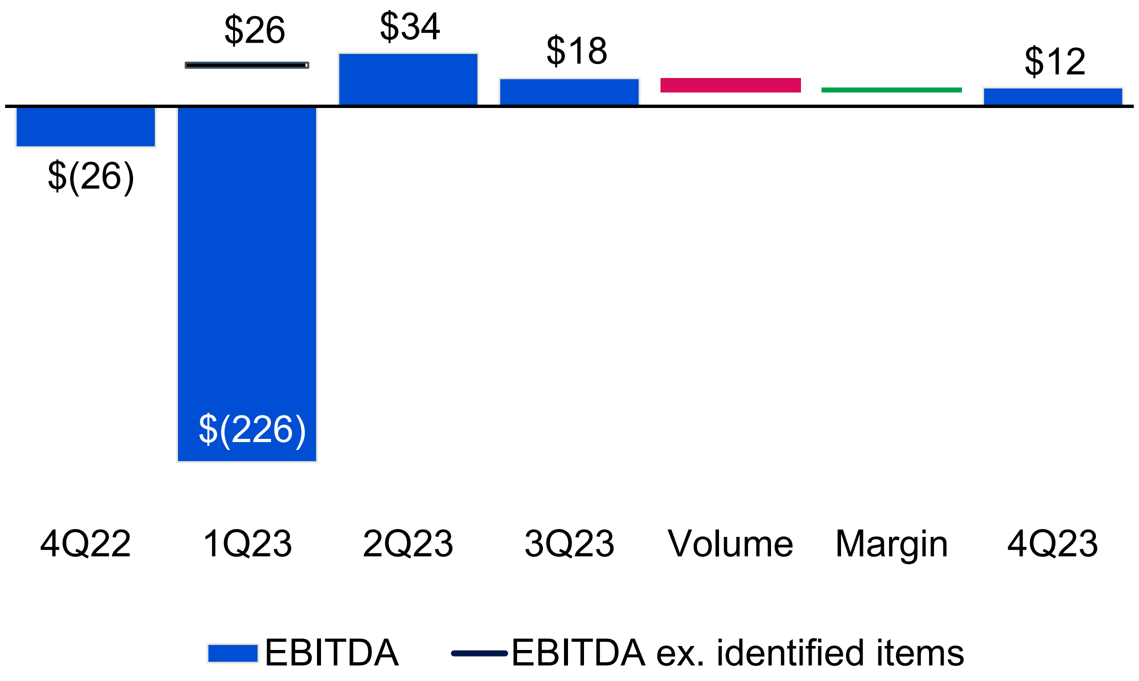
Extended operations to no later than the end of 1Q25

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

Advanced Polymer Solutions

Lower margins and volumes due to reduced demand

EBITDA ex. identified items
USD, millions



Inventory valuation

- LIFO benefits of ~$10 MM

4Q23 market dynamics

- Higher raw material costs
- Lower demand from automotive market during 4Q23

Near-term outlook

- Modest improvement in demand with signs of market recovery

Our actions

Record 2023 safety performance

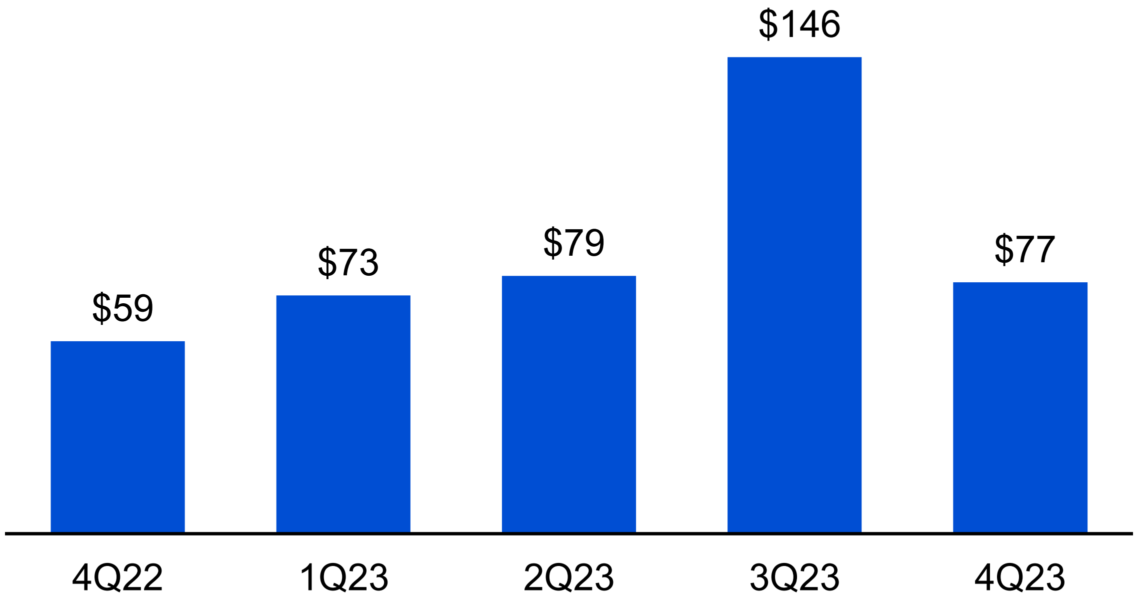
Restored customer service levels leading to improved customer satisfaction results

Steady progress refilling and expanding growth funnel

Technology

Licensing revenue normalized while catalyst volumes increased

EBITDA
USD, millions



4Q23 market dynamics

- Licensing revenue moderated after strong 3Q23
- 4Q23 catalyst volumes exceeded prior four quarters

Near-term outlook

- Increased licensing revenue
- Further improvement in catalyst volumes

Our actions

Took final investment decision to build our first commercial advanced recycling plant utilizing our proprietary ***MoReTec*** technology

Delivering results and advancing our strategy

2024 outlook

- Modest improvement across most businesses in 2H2024
- Benefiting from new PO/TBA capacity
- Continue to navigate bottoming market conditions and deliver results

Progressing our long-term strategy

- Growing and upgrading our core to drive higher returns
- Building a profitable Circular & Low Carbon Solutions business
- Transforming from a singular focus on costs to a comprehensive approach to value creation
- VEP Accelerated Value Enhancement Program with up to $1 B recurring annual EBITDA[1] run-rate by year end 2025

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

Appendix

LyondellBasell 2024 modeling information

	(USD, millions)	1Q	2Q	3Q	4Q	2024
Major Planned Maintenance Estimated EBITDA Impact	O&P Americas	~$55	--	--	--	~$55
	O&P EAI	--	--	--	~$50	~$50
	Intermediates & Derivatives	--	~$30	~$35	~$40	~$105
	Refining	~$50	--	--	--	~$50
Planned Refining Exit Costs	Estimated EBITDA impact	~$25	~$25	~$25	~$25	~$100
	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

~$400 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.

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 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.

Estimated PO/TBA EBITDA - EBITDA estimated based on nameplate capacity multiplied by 2017-2019 average cash margins. Estimated PO/TBA EBITDA cannot be reconciled to net income due to the inherent difficulty in quantifying certain amounts that are necessary for such reconciliation at the plant 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.

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.

Major planned maintenance estimated EBITDA - EBITDA based on estimated lost production multiplied by forecast margins.

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 EBTIDA 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.

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.

VEP EBITDA - Reflects net improvements compared to 2021 stemming from our VEP program based on incremental volumes, improvements in product mix and reductions in cost based on applicable margins.

We also present EBITDA, net income and diluted EPS exclusive of identified items. Identified items include adjustments for “lower of cost or market" (“LCM”), 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. 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.