

LYONDELLBASELL BUSINESS RESULTS DISCUSSION BY REPORTING SEGMENT

LyondellBasell manages operations through six operating segments: 1) Olefins and Polyolefins-Americas; 2) Olefins and Polyolefins-Europe, Asia and International; 3) Intermediates and Derivatives; 4) Advanced Polymer Solutions; 5) Refining; and 6) Technology.

This information should be read in conjunction with our Earnings Release for the period ended March 31, 2023, including the forward-looking statements and information related to financial measures. Effective January 1, 2023, our *Catalloy* and polybutene-1 products, previously reported in our Advanced Polymer Solutions segment, will be reflected in our Olefins and Polyolefins-Americas and Olefins and Polyolefins-Europe, Asia and International segments.

Olefins & Polyolefins-Americas (O&P-Americas) - Our O&P-Americas segment produces and markets olefins & co-products, polyethylene, polypropylene, *Catalloy* and polybutene-1.

Table 1 - O&P-Americas Financial Overview

<i>Millions of U.S. dollars</i>	Three Months Ended		
	March 31, 2023	December 31, 2022	March 31, 2022
Operating income	\$371	\$217	\$754
EBITDA	541	384	939

Three months ended March 31, 2023 versus three months ended December 31, 2022 - EBITDA increased \$157 million versus the fourth quarter 2022. Fourth quarter 2022 results were impacted by last-in, first-out (LIFO) inventory valuation charges of approximately \$15 million. Compared to the prior period, olefins results increased approximately \$145 million due to moderately higher margins driven by lower feedstock and energy costs. The company's ethylene crackers operated at about 85% of capacity with the raw materials being 65% ethane and 30% other natural gas liquids. Combined polyolefins results decreased approximately \$15 million driven by lower polypropylene margins impacted by increased supply and weak demand for durable goods, partially offset by higher polyethylene margins due to improving U.S. sales prices.

Three months ended March 31, 2023 versus three months ended March 31, 2022 - EBITDA decreased \$398 million versus the first quarter 2022. Olefins results decreased approximately \$130 million driven by lower margins. Ethylene margins decreased due to lower ethylene sales prices, partially offset by lower feedstock costs and higher co-product prices. Combined polyolefin results decreased approximately \$260 million due to lower polyolefins margins driven by declining product prices as a result of soft demand and new industry supply.

Olefins & Polyolefins-Europe, Asia, International (O&P-EAI) - Our O&P-EAI segment produces and markets olefins & co-products, polyethylene, polypropylene, *Catalloy* and polybutene-1.

Table 2 - O&P-EAI Financial Overview

<i>Millions of U.S. dollars</i>	Three Months Ended		
	March 31, 2023	December 31, 2022	March 31, 2022
Operating income (loss)	\$21	\$(156)	\$163
EBITDA	77	(148)	214

Three months ended March 31, 2023 versus three months ended December 31, 2022 - EBITDA increased \$225 million versus the fourth quarter 2022. Fourth quarter 2022 results were impacted by LIFO inventory valuation charges of approximately \$55 million. Compared to the prior period, olefins results increased \$90 million due to improved cracker margins driven by lower energy costs. The company's ethylene crackers operated at 85% of capacity with approximately 30% of the raw materials derived from non-naphtha feedstocks. Combined polyolefins results increased about \$40 million compared to the prior period due to higher volumes, partially offset by lower margins. Polyolefins volumes increased from slightly better demand following significant destocking in the prior quarter. Polyolefins margins decreased as European markets remain challenging, especially for durable goods. Joint venture equity income increased approximately \$30 million primarily due to a gain on sale of asset.

Three months ended March 31, 2023 versus three months ended March 31, 2022 - EBITDA decreased \$137 million versus the first quarter 2022. Olefins results increased \$45 million driven by higher margins due to lower feedstock costs, partially offset by lower ethylene prices. Combined polyolefins results decreased about \$185 million due to margin compression driven by lower polyolefins spreads reflecting a weak demand.

Intermediates & Derivatives (I&D) - Our I&D segment produces and markets Propylene Oxide & Derivatives, Oxyfuels & Related Products and Intermediate Chemicals, such as styrene monomer, acetyls, ethylene oxide and ethylene glycol.

Table 3 - I&D Financial Overview

<i>Millions of U.S. dollars</i>	Three Months Ended		
	March 31, 2023	December 31, 2022	March 31, 2022
Operating income	\$320	\$211	\$468
EBITDA	426	291	546

Three months ended March 31, 2023 versus three months ended December 31, 2022 - EBITDA increased \$135 million compared to the fourth quarter 2022. Fourth quarter 2022 results were impacted by LIFO inventory valuation charges of approximately \$25 million. Compared to the prior period, results for our Propylene Oxide & Derivatives and Intermediate Chemicals businesses remained relatively unchanged. Oxyfuels & Related Products results increased approximately \$70 million due to higher margins driven by higher blend premiums and a tight gasoline market.

Three months ended March 31, 2023 versus three months ended March 31, 2022 - EBITDA decreased \$120 million versus the first quarter 2022. Compared to the prior period, Propylene Oxide & Derivatives results decreased \$170 million due to lower demand pressuring margins. Intermediate Chemicals results decreased about \$110 million driven by lower product prices due to well-supplied markets and slowed demand. Oxyfuels & Related Products increased approximately \$140 million due to higher blend premiums and strong gasoline crack spreads.

Advanced Polymer Solutions (APS) - Our Advanced Polymer Solutions segment produces and markets Compounding & Solutions, such as polypropylene compounds, engineered plastics, masterbatches, engineered composites, colors and powders.

Table 4 - Advanced Polymer Solutions Financial Overview

<i>Millions of U.S. dollars</i>	Three Months Ended		
	March 31, 2023	December 31, 2022	March 31, 2022
Operating (loss) income	\$(247)	\$(50)	\$38
EBITDA	(226)	(26)	71
Identified items: Goodwill impairment	252	—	—
EBITDA excluding identified items	26	(26)	71

Three months ended March 31, 2023 versus three months ended December 31, 2022 - Relative to the fourth quarter 2022, EBITDA decreased \$200 million, or increased \$52 million excluding a non-cash goodwill impairment of \$252 million. Fourth quarter 2022 results were impacted by LIFO inventory valuation charges of approximately \$20 million. Compared with the prior period, Compounding & Solutions results increased approximately \$35 million due to moderately higher margins driven by improved polypropylene compounds prices.

Three months ended March 31, 2023 versus three months ended March 31, 2022 - Relative to the first quarter 2022, EBITDA decreased \$297 million, or \$45 million excluding a non-cash goodwill impairment of \$252 million. Volumes decreased due to weak demand and margins declined driven by higher production and raw material costs.

Refining - Our Refining segment produces and markets gasoline and distillates, including diesel fuel, heating oil and jet fuel.

Table 5 - Refining Financial Overview

<i>Millions of U.S. dollars</i>	Three Months Ended		
	March 31, 2023	December 31, 2022	March 31, 2022
Operating income	\$186	\$221	\$148
EBITDA	246	249	148
Identified items: Refinery exit costs	69	73	—
EBITDA excluding identified items	315	322	148

Three months ended March 31, 2023 versus three months ended December 31, 2022 - Relative to the fourth quarter 2022, EBITDA decreased \$3 million, or \$7 million, excluding exit costs of \$69 million in the first quarter 2023 and \$73 million in the fourth quarter 2022. Fourth quarter 2022 results included LIFO inventory valuation benefits of approximately \$40 million. Compared to the prior period, margins increased with higher by-product crack spreads and slightly higher Maya 2-1-1 industry crack spread at about \$49 per barrel. The Houston Refinery operated at an average crude throughput of 226,000 barrels per day or about 85% utilization rate.

Three months ended March 31, 2023 versus three months ended March 31, 2022 - Relative to the first quarter 2022, EBITDA increased \$98 million, or \$167 million, excluding exit costs of \$69 million in the first quarter of 2023. Compared to the prior period, margins improved driven by an increase in the Maya 2-1-1 industry crack spread of about \$18 per barrel. Crude throughput decreased by approximately 29,000 barrels per day due to unplanned downtime.

Technology - Our Technology segment develops and licenses chemical and polyolefin process technologies and manufactures and sells polyolefin catalysts.

Table 6 - Technology Financial Overview

<i>Millions of U.S. dollars</i>	Three Months Ended		
	March 31, 2023	December 31, 2022	March 31, 2022
Operating income	\$61	\$50	\$93
EBITDA	73	59	103

Three months ended March 31, 2023 versus three months ended December 31, 2022 - EBITDA increased \$14 million compared to the prior period. Fourth quarter 2022 results were impacted by LIFO inventory valuation charges of approximately \$15 million. Stable catalyst volumes were offset by lower licensing revenue.

Three months ended March 31, 2023 versus three months ended March 31, 2022 - EBITDA decreased \$30 million relative to the first quarter 2022 due to lower catalyst volumes driven by reduced polymers demand.

Capital Spending and Cash Balances

Capital expenditures, including growth projects, maintenance turnarounds, catalyst and information technology-related expenditures, were \$352 million during the first quarter 2023. Our cash and liquid investment balance was \$1.8 billion, which includes cash and cash equivalents, restricted cash and short-term investments. There were 325 million common shares outstanding as of March 31, 2023. The company paid dividends of \$389 million and repurchased approximately 0.8 million shares during the first quarter 2023.

Table 7 - Reconciliation of EBITDA to EBITDA Excluding Identified Items by Segment

Millions of U.S. dollars	Three Months Ended		
	March 31, 2023	December 31, 2022	March 31, 2022
EBITDA:			
Olefins & Polyolefins - Americas	\$ 541	\$ 384	\$ 939
Olefins & Polyolefins - EAI	77	(148)	214
Intermediates & Derivatives	426	291	546
Advanced Polymer Solutions	(226)	(26)	71
Refining	246	249	148
Technology	73	59	103
Other	(6)	(17)	(1)
EBITDA	<u>\$ 1,131</u>	<u>\$ 792</u>	<u>\$ 2,020</u>
Add: Identified items:			
Impairments:			
Advanced Polymer Solutions	\$ 252	\$ —	\$ —
Refinery exit costs:			
Refining	69	73	—
Total identified items:	<u>\$ 321</u>	<u>\$ 73</u>	<u>\$ —</u>
EBITDA excluding identified items:			
Olefins & Polyolefins - Americas	\$ 541	\$ 384	\$ 939
Olefins & Polyolefins - EAI	77	(148)	214
Intermediates & Derivatives	426	291	546
Advanced Polymer Solutions	26	(26)	71
Refining	315	322	148
Technology	73	59	103
Other	(6)	(17)	(1)
EBITDA excluding Identified items	<u>\$ 1,452</u>	<u>\$ 865</u>	<u>\$ 2,020</u>

Note: Effective January 1, 2023, our *Catalloy* and polybutene-1 products were moved from the Advanced Polymer Solutions segment and reintegrated into the Olefins and Polyolefins-Americas and Olefins and Polyolefins-Europe, Asia, International segments. The segment information presented above gives effect to this change for all periods presented.