

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 September 30, 2023, including the forward-looking statements and information related to financial measures. Effective January 1, 2023, our *Catalloy* and polybutene-1 businesses, 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 and polypropylene.

Table 1 - O&P-Americas Financial Overview

<i>Millions of U.S. dollars</i>	Three Months Ended			Nine Months Ended	
	September 30, 2023	June 30, 2023	September 30, 2022	September 30, 2023	September 30, 2022
Operating income	\$326	\$524	\$418	\$1,221	\$1,989
EBITDA	479	679	588	1,699	2,481
Identified items: Impairment	25	—	—	25	—
EBITDA excluding identified items	\$504	\$679	\$588	\$1,724	\$2,481

Three months ended September 30, 2023 versus three months ended June 30, 2023 - EBITDA decreased \$200 million versus the second quarter 2023 or \$175 million, excluding an impairment of \$25 million in the third quarter 2023 related to capital project costs. Compared to the prior period, olefins results decreased approximately \$30 million driven by lower volume due to planned maintenance. The company's ethylene crackers operated at 85% of capacity with the raw materials being 70% ethane and 25% other natural gas liquids. Combined polyolefins results decreased approximately \$115 million driven by lower integrated polyethylene margins due to higher feedstock costs and new industry capacity, partially offset by higher polyethylene export volumes.

Three months ended September 30, 2023 versus three months ended September 30, 2022 - EBITDA decreased \$109 million versus the third quarter 2022 or \$84 million, excluding an impairment of \$25 million in the third quarter 2023. Olefins results increased approximately \$135 million driven by higher margins due to lower energy and feedstock costs. Combined polyolefin results decreased approximately \$220 million due to lower polyolefins margins driven by reduced product prices as a result of soft demand and new industry capacity.

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

Table 2 - O&P-EAI Financial Overview

<i>Millions of U.S. dollars</i>	Three Months Ended			Nine Months Ended	
	September 30, 2023	June 30, 2023	September 30, 2022	September 30, 2023	September 30, 2022
Operating (loss) income	\$(95)	\$54	\$(77)	\$(20)	\$231
EBITDA	(45)	84	(74)	116	326
Identified items: Impairment	—	—	—	—	69
EBITDA excluding identified items	(45)	84	(74)	116	395

Three months ended September 30, 2023 versus three months ended June 30, 2023 - EBITDA decreased \$129 million versus the second quarter 2023. Compared to the prior period, olefins results decreased approximately \$75 million due to lower cracker margins driven by weak demand and higher naphtha costs. The company's ethylene crackers operated at approximately 80% of capacity with about 45% of the raw materials derived from non-naphtha feedstocks. Combined polyolefins results decreased approximately \$60 million compared to the prior period due to lower polyolefins margins as European markets remain challenging.

Three months ended September 30, 2023 versus three months ended September 30, 2022 - EBITDA increased \$29 million versus the third quarter 2022. Compared to the prior period, olefins results increased approximately \$25 million driven by higher volumes in the absence of planned and unplanned maintenance. Combined polyolefins results decreased \$30 million due to margin compression in polyethylene driven by lower product pricing reflecting a weak demand. Joint venture equity income increased approximately \$35 million due to higher margins at our Asia and Middle East joint ventures.

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			Nine Months Ended	
	September 30, 2023	June 30, 2023	September 30, 2022	September 30, 2023	September 30, 2022
Operating income	\$611	\$361	\$290	\$1,292	\$1,393
EBITDA	708	472	360	1,606	1,581

Three months ended September 30, 2023 versus three months ended June 30, 2023 - EBITDA increased \$236 million to a record quarter EBITDA of \$708 million compared to the second quarter 2023. Compared to the prior period, results for our Propylene Oxide & Derivatives increased approximately \$20 million due to higher export volumes to Asia. Oxyfuels & Related Products results increased approximately \$235 million due to exceptional oxyfuels margins driven by industry downtime.

Three months ended September 30, 2023 versus three months ended September 30, 2022 - EBITDA increased \$348 million versus the third quarter 2022. Compared to the prior period, Propylene Oxide & Derivatives results decreased approximately \$65 million due to lower demand for durable goods pressuring margins, partially offset by higher propylene oxide exports to Asia. Intermediate Chemicals results increased \$75 million driven by higher styrene margins due to lower feedstock costs. Oxyfuels & Related Products increased approximately \$310 million due to record margins driven by strong demand for gasoline and additional capacity.

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			Nine Months Ended	
	September 30, 2023	June 30, 2023	September 30, 2022	September 30, 2023	September 30, 2022
Operating (loss) income	\$(6)	\$9	\$2	\$(244)	\$66
EBITDA	18	34	28	(174)	141
Identified items: Goodwill impairment	—	—	—	252	—
EBITDA excluding identified items	18	34	28	78	141

Three months ended September 30, 2023 versus three months ended June 30, 2023 - Compared to the second quarter 2023, EBITDA decreased \$16 million driven by lower Compounding & Solutions margins and volumes due to product sales mix and reduced demand.

Three months ended September 30, 2023 versus three months ended September 30, 2022 - Compared to the third quarter 2022, EBITDA decreased \$10 million driven by lower Compounding & Solutions volumes reflecting a soft demand.

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			Nine Months Ended	
	September 30, 2023	June 30, 2023	September 30, 2022	September 30, 2023	September 30, 2022
Operating income (loss)	\$51	\$(3)	\$98	\$234	\$668
EBITDA	76	47	106	369	672
Identified items: Refinery exit costs	29	67	84	165	84
EBITDA excluding identified items	105	114	190	534	756

Three months ended September 30, 2023 versus three months ended June 30, 2023 - Relative to the second quarter 2023, EBITDA increased \$29 million, or decreased \$9 million, excluding exit costs. Compared to the prior period, improvement in refining margins driven by a slightly higher Maya 2-1-1 industry crack spread was more than offset by hedging impact. The Houston Refinery operated at an average crude throughput of 248,000 barrels per day or about 93% utilization rate.

Three months ended September 30, 2023 versus three months ended September 30, 2022 - Relative to the third quarter 2022, EBITDA decreased \$30 million, or \$85 million, excluding exit costs. Compared to the prior period, margins decreased with the Maya 2-1-1 industry crack spread decreasing approximately \$6 per barrel due to tightened crude supply and lower distillate demand. Crude throughput increased by approximately 32,000 barrels per day absent of planned maintenance.

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			Nine Months Ended	
	September 30, 2023	June 30, 2023	September 30, 2022	September 30, 2023	September 30, 2022
Operating income	\$134	\$70	\$82	\$265	\$281
EBITDA	146	79	92	298	307

Three months ended September 30, 2023 versus three months ended June 30, 2023 - EBITDA increased \$67 million compared to the prior period driven by higher licensing revenue due to contract revenue milestones and improved catalyst results.

Three months ended September 30, 2023 versus three months ended September 30, 2022 - EBITDA increased \$54 million relative to the third quarter 2022. Compared to the prior period, licensing revenue increased due to contract revenue milestones. Catalyst margins increased driven by product mix and lower energy costs.

Capital Spending and Cash Balances

Capital expenditures, including growth projects, maintenance turnarounds, catalyst and information technology-related expenditures, were \$394 million during the third quarter 2023. Our cash and liquid investment balance was \$2.8 billion, which includes cash and cash equivalents, restricted cash and short-term investments. There were 324 million common shares outstanding as of September 30, 2023. The company paid dividends of \$407 million and repurchased approximately 0.4 million shares during the third quarter 2023.

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

Millions of U.S. dollars	Three Months Ended			Nine Months Ended	
	September 30, 2023	June 30, 2023	September 30, 2022	September 30, 2023	September 30, 2022
EBITDA:					
Olefins & Polyolefins - Americas	\$ 479	\$ 679	\$ 588	\$ 1,699	\$ 2,481
Olefins & Polyolefins - EAI	(45)	84	(74)	116	326
Intermediates & Derivatives	708	472	360	1,606	1,581
Advanced Polymer Solutions	18	34	28	(174)	141
Refining	76	47	106	369	672
Technology	146	79	92	298	307
Other	(26)	(12)	8	(44)	1
EBITDA	<u>\$ 1,356</u>	<u>\$ 1,383</u>	<u>\$ 1,108</u>	<u>\$ 3,870</u>	<u>\$ 5,509</u>
Add: Identified items:					
Impairments:					
Olefins & Polyolefins - Americas	\$ 25	\$ —	\$ —	\$ 25	\$ —
Olefins & Polyolefins - EAI	—	—	—	—	69
Advanced Polymer Solutions	—	—	—	252	—
Refinery exit costs:					
Refining	29	67	84	165	84
Total Identified items:	<u>\$ 54</u>	<u>\$ 67</u>	<u>\$ 84</u>	<u>\$ 442</u>	<u>\$ 153</u>
EBITDA excluding identified items:					
Olefins & Polyolefins - Americas	\$ 504	\$ 679	\$ 588	\$ 1,724	\$ 2,481
Olefins & Polyolefins - EAI	(45)	84	(74)	116	395
Intermediates & Derivatives	708	472	360	1,606	1,581
Advanced Polymer Solutions	18	34	28	78	141
Refining	105	114	190	534	756
Technology	146	79	92	298	307
Other	(26)	(12)	8	(44)	1
EBITDA excluding Identified items	<u>\$ 1,410</u>	<u>\$ 1,450</u>	<u>\$ 1,192</u>	<u>\$ 4,312</u>	<u>\$ 5,662</u>

Note: Effective January 1, 2023, our *Catalloy* and polybutene-1 businesses 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.