

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 June 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, polypropylene, *Catalloy* and polybutene-1.

Table 1 - O&P-Americas Financial Overview

<i>Millions of U.S. dollars</i>	Three Months Ended			Six Months Ended	
	June 30, 2023	March 31, 2023	June 30, 2022	June 30, 2023	June 30, 2022
Operating income	\$524	\$371	\$817	\$895	\$1,571
EBITDA	679	541	954	1,220	1,893

Three months ended June 30, 2023 versus three months ended March 31, 2023 - EBITDA increased \$138 million versus the first quarter 2023. Compared to the prior period, olefins results increased approximately \$15 million driven by higher volume absent of unplanned downtime. The company's ethylene crackers operated at 90% of capacity with the raw materials being 75% ethane and 20% other natural gas liquids. Combined polyolefins results increased approximately \$100 million driven by higher margins due to lower feedstock costs.

Three months ended June 30, 2023 versus three months ended June 30, 2022 - EBITDA decreased \$275 million versus the second quarter 2022. Olefins results decreased approximately \$25 million driven by lower margins. Combined polyolefin results decreased approximately \$305 million due to lower polyolefins margins driven by declining 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, polypropylene, *Catalloy* and polybutene-1.

Table 2 - O&P-EAI Financial Overview

<i>Millions of U.S. dollars</i>	Three Months Ended			Six Months Ended	
	June 30, 2023	March 31, 2023	June 30, 2022	June 30, 2023	June 30, 2022
Operating income	\$54	\$21	\$145	\$75	\$308
EBITDA	84	77	186	161	400
Identified items: Impairment	—	—	69	—	69
EBITDA excluding identified items	84	77	255	161	469

Three months ended June 30, 2023 versus three months ended March 31, 2023 - EBITDA increased \$7 million versus the first quarter 2023. Compared to the prior period, olefins results increased approximately \$70 million due to improved cracker margins driven by lower feedstock and energy costs. The company's ethylene crackers operated at 85% of capacity with approximately 35% of the raw materials derived from non-naphtha feedstocks. Combined polyolefins results decreased \$40 million compared to the prior period due to lower polyolefins margins as European markets remain challenging, especially for durable goods. Joint venture equity income decreased approximately \$20 million primarily due to the absence of a gain on sale of asset recognized by one of our joint ventures in Europe in the first quarter of 2023.

Three months ended June 30, 2023 versus three months ended June 30, 2022 - EBITDA decreased \$102 million versus the second quarter 2022 or \$171 million, excluding an impairment of \$69 million in the second quarter 2022 related to the exit of our Australia polypropylene business. Compared to the prior period, olefins results increased approximately \$20 million driven by higher volumes in the absence of planned maintenance. Combined polyolefins results decreased \$180 million due to margin compression driven by lower product pricing 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			Six Months Ended	
	June 30, 2023	March 31, 2023	June 30, 2022	June 30, 2023	June 30, 2022
Operating income	\$361	\$320	\$635	\$681	\$1,103
EBITDA	472	426	675	898	1,221

Three months ended June 30, 2023 versus three months ended March 31, 2023 - EBITDA increased \$46 million compared to the first quarter 2023. Compared to the prior period, results for our Propylene Oxide & Derivatives decreased approximately \$50 million due to weak demand. Oxyfuels & Related Products results increased approximately \$100 million due to higher volumes driven by strong demand, partially offset by lower margins.

Three months ended June 30, 2023 versus three months ended June 30, 2022 - EBITDA decreased \$203 million versus the second quarter 2022. Compared to the prior period, Propylene Oxide & Derivatives results decreased approximately \$135 million due to lower demand pressuring margins. Intermediate Chemicals results decreased about \$120 million driven by lower styrene prices due to well-supplied markets. Oxyfuels & Related Products decreased approximately \$25 million due to lower margins, partially offset by higher volumes supported by strong demand.

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			Six Months Ended	
	June 30, 2023	March 31, 2023	June 30, 2022	June 30, 2023	June 30, 2022
Operating income (loss)	\$9	\$(247)	\$26	\$(238)	\$64
EBITDA	34	(226)	42	(192)	113
Identified items: Goodwill impairment	—	252	—	252	—
EBITDA excluding identified items	34	26	42	60	113

Three months ended June 30, 2023 versus three months ended March 31, 2023 - Relative to the first quarter 2023, EBITDA increased \$260 million, or increased \$8 million excluding a non-cash goodwill impairment of \$252 million. Compared with the prior period, Compounding & Solutions results increased approximately \$10 million due to moderately higher margins driven by improved polypropylene compounds prices.

Three months ended June 30, 2023 versus three months ended June 30, 2022 - Relative to the second quarter 2022, EBITDA decreased \$8 million driven by lower Compounding & Solutions volumes reflecting a weak 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			Six Months Ended	
	June 30, 2023	March 31, 2023	June 30, 2022	June 30, 2023	June 30, 2022
Operating (loss) income	\$(3)	\$186	\$422	\$183	\$570
EBITDA	47	246	418	293	566
Identified items: Refinery exit costs	67	69	—	136	—
EBITDA excluding identified items	114	315	418	429	566

Three months ended June 30, 2023 versus three months ended March 31, 2023 - Relative to the first quarter 2023, EBITDA decreased \$199 million, or \$201 million excluding exit costs. Refinery exit costs were \$67 million in the second quarter 2023 and \$69 million in the first quarter 2023. Compared to the prior period, refining margins decreased as the Maya 2-1-1 industry crack spread declined approximately \$9 per barrel to \$39 per barrel in the second quarter with heavy crude supply tightening leading to lower Maya and WCS crude discounts. The Houston Refinery operated at an average crude throughput of 245,000 barrels per day or about 91% utilization rate.

Three months ended June 30, 2023 versus three months ended June 30, 2022 - Relative to the second quarter 2022, EBITDA decreased \$371 million, or \$304 million, excluding exit costs of \$67 million in the second quarter of 2023. Compared to the prior period, margins decreased with the Maya 2-1-1 industry crack spread decreasing approximately \$16 per barrel due to lower demand and lower by-product margins. Crude throughput decreased by approximately 7,000 barrels per day.

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			Six Months Ended	
	June 30, 2023	March 31, 2023	June 30, 2022	June 30, 2023	June 30, 2022
Operating income	\$70	\$61	\$106	\$131	\$199
EBITDA	79	73	112	152	215

Three months ended June 30, 2023 versus three months ended March 31, 2023 - EBITDA increased \$6 million compared to the prior period with higher licensing revenue, partially offset by lower catalyst volume and margin.

Three months ended June 30, 2023 versus three months ended June 30, 2022 - EBITDA decreased \$33 million relative to the second quarter 2022. Compared to the prior period, licensing revenue decreased as a lower number of contracts attained revenue milestones. Catalyst volume decreased driven by reduced polymers demand.

Capital Spending and Cash Balances

Capital expenditures, including growth projects, maintenance turnarounds, catalyst and information technology-related expenditures, were \$301 million during the second quarter 2023. Our cash and liquid investment balance was \$2.5 billion, which includes cash and cash equivalents, restricted cash and short-term investments. There were 325 million common shares outstanding as of June 30, 2023. The company paid dividends of \$408 million and repurchased approximately 1.1 million shares during the second quarter 2023.

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

Millions of U.S. dollars	Three Months Ended			Six Months Ended	
	June 30, 2023	March 31, 2023	June 30, 2022	June 30, 2023	June 30, 2022
EBITDA:					
Olefins & Polyolefins - Americas	\$ 679	\$ 541	\$ 954	\$ 1,220	\$ 1,893
Olefins & Polyolefins - EAI	84	77	186	161	400
Intermediates & Derivatives	472	426	675	898	1,221
Advanced Polymer Solutions	34	(226)	42	(192)	113
Refining	47	246	418	293	566
Technology	79	73	112	152	215
Other	(12)	(6)	(6)	(18)	(7)
EBITDA	<u>\$ 1,383</u>	<u>\$ 1,131</u>	<u>\$ 2,381</u>	<u>\$ 2,514</u>	<u>\$ 4,401</u>
Add: Identified items:					
Impairments:					
Olefins & Polyolefins - EAI	\$ —	\$ —	\$ 69	\$ —	\$ 69
Advanced Polymer Solutions	—	252	—	252	—
Refinery exit costs:					
Refining	67	69	—	136	—
Total identified items:	<u>\$ 67</u>	<u>\$ 321</u>	<u>\$ 69</u>	<u>\$ 388</u>	<u>\$ 69</u>
EBITDA excluding identified items:					
Olefins & Polyolefins - Americas	\$ 679	\$ 541	\$ 954	\$ 1,220	\$ 1,893
Olefins & Polyolefins - EAI	84	77	255	161	469
Intermediates & Derivatives	472	426	675	898	1,221
Advanced Polymer Solutions	34	26	42	60	113
Refining	114	315	418	429	566
Technology	79	73	112	152	215
Other	(12)	(6)	(6)	(18)	(7)
EBITDA excluding Identified items	<u>\$ 1,450</u>	<u>\$ 1,452</u>	<u>\$ 2,450</u>	<u>\$ 2,902</u>	<u>\$ 4,470</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.