

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, 2022, including the forward-looking statements and information related to financial measures.

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, 2022	June 30, 2022	September 30, 2021	September 30, 2022	September 30, 2021
Operating income	\$391	\$768	\$1,403	\$1,887	\$3,485
EBITDA	559	905	1,568	2,375	4,011

Three months ended September 30, 2022 versus three months ended June 30, 2022 - EBITDA decreased \$346 million versus the second quarter 2022. Compared to the prior period, olefins results decreased approximately \$190 million with reduced margins driven by lower co-product prices. The company's ethylene crackers operated at 90 percent of capacity with the raw materials being 75 percent ethane and 20 percent other natural gas liquids. Combined polyolefins results decreased approximately \$175 million driven by lower polyolefins spreads with declining product prices.

Three months ended September 30, 2022 versus three months ended September 30, 2021 - EBITDA decreased \$1,009 million versus the third quarter 2021. Olefins results decreased approximately \$640 million driven by lower margins. Ethylene margins decreased driven by higher ethane and energy costs and lower co-product and ethylene sales prices. Combined polyolefin results decreased approximately \$360 million due to lower polyolefins spreads with declining product prices, partially offset by higher polyethylene volumes.

Olefins & Polyolefins - Europe, Asia, International (O&P-EAI) - Our O&P-EAI segment produces and markets Olefins and 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, 2022	June 30, 2022	September 30, 2021	September 30, 2022	September 30, 2021
Operating income (loss)	\$(86)	\$121	\$361	\$173	\$1,171
EBITDA	(83)	159	474	264	1,594
Identified items: Impairments	—	69	—	69	—
EBITDA excluding identified items	(83)	228	474	333	1,594

Three months ended September 30, 2022 versus three months ended June 30, 2022 - EBITDA decreased \$311 million versus the second quarter 2022, 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 decreased approximately \$75 million due to lower margins driven by weaker demand. The company's ethylene crackers operated at 65 percent of capacity with unplanned downtime at our ethylene cracker in France and planned maintenance at our ethylene cracker in Germany reducing utilization. Approximately 35 percent of the raw materials were derived from non-naphtha feedstocks. Combined polyolefins results decreased about \$185 million compared to the prior period due to lower margins driven by weaker demand and higher energy costs. Joint venture equity income decreased approximately \$40 million due to lower spreads and higher energy costs.

Three months ended September 30, 2022 versus three months ended September 30, 2021 - EBITDA decreased \$557 million versus the third quarter 2021. Third quarter 2022 results decreased approximately \$55 million due to a decrease in the euro versus the U.S. dollar exchange rate relative to the third quarter 2021. Olefins results decreased approximately \$120 million driven by lower margins and volumes. Ethylene margins decreased primarily due to higher feedstock and energy costs, partially offset by higher co-product and ethylene prices. Volumes decreased due to planned and unplanned downtime. Combined polyolefins results decreased about \$285 million primarily due to decreased margins driven by lower spreads over monomer and higher energy costs. Joint venture equity income decreased approximately \$105 million due to lower spreads and higher energy costs across all 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, 2022	June 30, 2022	September 30, 2021	September 30, 2022	September 30, 2021
Operating income	\$290	\$635	\$247	\$1,393	\$828
EBITDA	360	675	348	1,581	1,126

Three months ended September 30, 2022 versus three months ended June 30, 2022 - EBITDA decreased \$315 million compared to the second quarter 2022. Compared to the prior period, Propylene Oxide & Derivatives results decreased approximately \$50 million due to higher energy costs at our European assets and softening durable goods demand pressuring product pricing. Intermediate Chemicals results decreased \$205 million due to significantly lower styrene margins and higher feedstock and energy costs. Oxyfuels & Related Products results decreased approximately \$95 million due to lower margins compared to the record prior period, partially offset by increased volumes driven by tight market supply.

Three months ended September 30, 2022 versus three months ended September 30, 2021 - EBITDA increased \$12 million versus the third quarter 2021. Compared to the prior period, Propylene Oxide & Derivatives results decreased \$110 million due to higher energy costs in Europe. Intermediate Chemicals results decreased about \$85 million driven by lower styrene margins, partially offset by higher volumes. Oxyfuels & Related Products increased approximately \$185 million due to higher gasoline prices and lower costs driven by a decreasing butane to crude ratio, partially offset by increased European energy costs. Joint venture equity income decreased approximately \$15 million due to reduced margins at our Asia joint ventures.

Advanced Polymer Solutions (APS) - Our Advanced Polymer Solutions segment produces and markets in two lines of business: Compounding & Solutions and Advanced Polymers. Compounding & Solutions includes polypropylene compounds, engineered plastics, masterbatches, engineered composites, colors and powders. Advanced Polymers consists of *Catalloy* and polybutene-1.

Table 4 - Advanced Polymer Solutions Financial Overview

<i>Millions of U.S. dollars</i>	Three Months Ended			Nine Months Ended	
	September 30, 2022	June 30, 2022	September 30, 2021	September 30, 2022	September 30, 2021
Operating income	\$38	\$100	\$94	\$226	\$299
EBITDA	66	118	121	309	385

Three months ended September 30, 2022 versus three months ended June 30, 2022 - EBITDA decreased \$52 million versus the second quarter 2022. Compared with the prior period, Compounding & Solutions results decreased approximately \$25 million due to lower margins driven by higher raw material and energy costs at our European assets. Advanced Polymers results decreased about \$35 million driven by lower margins due to higher feedstock costs and product mix.

Three months ended September 30, 2022 versus three months ended September 30, 2021 - EBITDA decreased \$55 million compared to the third quarter 2021. Compared with the prior period, Compounding & Solutions results decreased approximately \$40 million due to lower product prices and higher feedstock 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			Nine Months Ended	
	September 30, 2022	June 30, 2022	September 30, 2021	September 30, 2022	September 30, 2021
Operating income (loss)	\$98	\$422	\$25	\$668	\$(200)
EBITDA	106	418	41	672	(150)
Identified items: Refinery exit costs	84	—	—	84	—
EBITDA excluding identified items	190	418	41	756	(150)

Three months ended September 30, 2022 versus three months ended June 30, 2022 - EBITDA decreased \$228 million versus the second quarter 2022, excluding exit costs of \$84 million. Margins decreased driven by a decline in the Maya 2-1-1 industry crack spread of about \$10 per barrel to \$47 per barrel. The Houston Refinery operated at 215,000 barrels per day, 37,000 barrels per day lower than the prior period due to planned maintenance.

Three months ended September 30, 2022 versus three months ended September 30, 2021 - EBITDA increased \$149 million versus the third quarter 2021, excluding exit costs of \$84 million. Margins improved driven by an increase in the Maya 2-1-1 industry crack spread of about \$23 per barrel. Crude throughput decreased by 45,000 barrels per day due to planned and unplanned 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, 2022	June 30, 2022	September 30, 2021	September 30, 2022	September 30, 2021
Operating income	\$82	\$106	\$144	\$281	\$308
EBITDA	92	112	155	307	341

Three months ended September 30, 2022 versus three months ended June 30, 2022 - EBITDA decreased \$20 million compared to the prior period due to lower catalyst demand.

Three months ended September 30, 2022 versus three months ended September 30, 2021 - EBITDA decreased \$63 million relative to the third quarter 2021 driven by lower licensing revenue.

Capital Spending and Cash Balances

Capital expenditures, including growth projects, maintenance turnarounds, catalyst and information technology-related expenditures, were \$439 million during the third quarter 2022. Our cash and liquid investment balance was \$1.5 billion, which includes cash and cash equivalents, restricted cash and short-term investments. There were 326 million common shares outstanding as of September 30, 2022. The company paid dividends of \$395 million during the third quarter 2022.

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, 2022	June 30, 2022	September 30, 2021	September 30, 2022	September 30, 2021
EBITDA:					
Olefins & Polyolefins - Americas	\$ 559	\$ 905	\$ 1,568	\$ 2,375	\$ 4,011
Olefins & Polyolefins - EAI	(83)	159	474	264	1,594
Intermediates & Derivatives	360	675	348	1,581	1,126
Advanced Polymer Solutions	66	118	121	309	385
Refining	106	418	41	672	(150)
Technology	92	112	155	307	341
Other	8	(6)	(16)	1	(13)
Continuing Operations	<u>\$ 1,108</u>	<u>\$ 2,381</u>	<u>\$ 2,691</u>	<u>\$ 5,509</u>	<u>\$ 7,294</u>
Add: Identified items:					
Impairments:					
Olefins & Polyolefins - EAI	\$ —	\$ 69	\$ —	\$ 69	\$ —
Refinery exit costs:					
Refining	84	—	—	84	—
Total identified items:	<u>\$ 84</u>	<u>\$ 69</u>	<u>\$ —</u>	<u>\$ 153</u>	<u>\$ —</u>
EBITDA excluding identified items:					
Olefins & Polyolefins - Americas	\$ 559	\$ 905	\$ 1,568	\$ 2,375	\$ 4,011
Olefins & Polyolefins - EAI	(83)	228	474	333	1,594
Intermediates & Derivatives	360	675	348	1,581	1,126
Advanced Polymer Solutions	66	118	121	309	385
Refining	190	418	41	756	(150)
Technology	92	112	155	307	341
Other	8	(6)	(16)	1	(13)
Continuing Operations	<u>\$ 1,192</u>	<u>\$ 2,450</u>	<u>\$ 2,691</u>	<u>\$ 5,662</u>	<u>\$ 7,294</u>