

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, 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		
	March 31, 2022	December 31, 2021	March 31, 2021
Operating income	\$728	\$1,067	\$687
EBITDA	911	1,262	867

Three months ended March 31, 2022 versus three months ended December 31, 2021 - EBITDA decreased \$351 million versus the fourth quarter 2021. Compared to the prior period, olefins results decreased approximately \$170 million with lower margins due to higher feedstock costs and lower co-product prices. We operated our ethylene crackers at 82 percent of capacity with the raw materials being about 70 percent ethane and 20 percent other natural gas liquids. Combined polyolefins results decreased approximately \$185 million driven by lower spreads, resulting from lower product prices and higher monomer costs.

Three months ended March 31, 2022 versus three months ended March 31, 2021 - EBITDA increased \$44 million versus the first quarter 2021. Olefins results decreased approximately \$135 million driven by lower margins partially offset by higher volumes. Margins decreased due to higher feedstock and energy costs and lower ethylene sales price. Ethylene volumes increased as driven by strong derivative demand. Combined polyolefin results increased approximately \$175 million due to higher polyolefins spreads with increasing product prices and lower monomer costs.

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		
	March 31, 2022	December 31, 2021	March 31, 2021
Operating income	\$138	\$57	\$259
EBITDA	188	155	412

Three months ended March 31, 2022 versus three months ended December 31, 2021 - EBITDA increased \$33 million versus the fourth quarter 2021. Fourth quarter 2021 results were impacted by LIFO inventory valuation charges of approximately \$30 million. Compared to the prior period, olefins results increased approximately \$25 million due to higher margins. Margins increased driven by higher monomer prices, partially offset by rising feedstock and energy costs. We operated the ethylene crackers at 74 percent of capacity, 85 percent excluding planned maintenance, driven by feedstock supply disruptions resulting from the war in Ukraine. Approximately 35 percent of the raw materials were derived from non-naphtha feedstocks. Combined polyolefins results increased about \$35 million compared to the prior period as higher spreads and volumes were partially offset by increased energy and monomer costs. Joint venture equity income decreased approximately \$50 million due to weak demand and low prices in Asia.

Three months ended March 31, 2022 versus three months ended March 31, 2021 - EBITDA decreased \$224 million versus the first quarter 2021. First quarter 2022 results decreased approximately \$15 million due to a decrease in the euro versus the U.S. dollar exchange rate relative to the first quarter 2021. Olefins results decreased approximately \$105 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. Combined polyolefins results decreased about \$5 million primarily due to lower volumes driven by the planned cracker maintenance and lower seasonal demand. Joint venture equity income decreased approximately \$95 million due to lower spreads.

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, 2022	December 31, 2021	March 31, 2021
Operating income	\$468	\$139	\$88
EBITDA	546	252	182

Three months ended March 31, 2022 versus three months ended December 31, 2021 - EBITDA increased \$294 million compared to the fourth quarter 2021 resulting in a first quarter record for the I&D segment. Fourth quarter 2021 results were impacted by LIFO inventory valuation charges of approximately \$95 million. Compared to the prior period, Propylene Oxide & Derivatives results increased \$50 million due to higher butanediol margins and solid durable goods demand. Intermediate Chemicals results increased \$30 million due to improved styrene and acetyls margins driven by tight industry supply and improved operations. Oxyfuels & Related Products results increased more than \$125 million due to margin expansion driven by high gasoline prices and improving butane to crude ratio.

Three months ended March 31, 2022 versus three months ended March 31, 2021 - EBITDA increased \$364 million versus the first quarter 2021. First quarter 2022 results decreased approximately \$10 million due to a decrease in the euro versus the U.S. dollar exchange rate relative to the first quarter 2021. Compared to the prior period, Propylene Oxide & Derivatives results increased approximately \$205 million due to solid demand and tight markets driving higher margins and volumes. Intermediate Chemicals results increased \$130 million driven by tight market supply and higher demand, partially offset by increased energy and feedstock costs. Oxyfuels & Related Products results increased \$75 million driven by higher demand and gasoline prices. Joint venture equity income decreased approximately \$20 million due to reduced margins and commissioning costs associated with the new Asia propylene oxide joint venture.

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		
	March 31, 2022	December 31, 2021	March 31, 2021
Operating income (loss)	\$88	\$(13)	\$104
EBITDA	125	24	135

Three months ended March 31, 2022 versus three months ended December 31, 2021 - EBITDA increased \$101 million versus the fourth quarter 2021. Fourth quarter 2021 results were impacted by LIFO inventory valuation charges of approximately \$55 million. Compared with the prior period, Compounding & Solutions results increased \$40 million due to higher volumes and margins. Volumes increased with improved demand from automotive manufacturers. Margins increased with higher product prices exceeding rising raw material and energy costs. Advanced Polymers results increased \$10 million driven by improved volumes and margins due to seasonal demand and higher product prices.

Three months ended March 31, 2022 versus three months ended March 31, 2021 - EBITDA decreased \$10 million compared to the first quarter 2021. First quarter 2022 results decreased approximately \$10 million due to a decrease in the euro versus the U.S. dollar exchange rate relative to the first quarter 2021. Compared with the prior period, Compounding & Solutions results decreased approximately \$20 million with lower volumes driven by constrained production in automotive, appliance and other end markets as a result of semiconductor shortages. Advanced Polymers results increased about \$10 million due to margin increases primarily driven by improved spreads over propylene with higher product prices.

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, 2022	December 31, 2021	March 31, 2021
Operating income (loss)	\$148	\$(496)	\$(130)
EBITDA	148	(474)	(110)
Impairments, pre-tax	—	624	—
EBITDA excluding impairment	148	150	(110)

Three months ended March 31, 2022 versus three months ended December 31, 2021 - EBITDA decreased \$2 million versus the fourth quarter 2021, excluding an impairment of \$624 million in the fourth quarter 2021. Fourth quarter 2021 results included a LIFO inventory valuation benefit of approximately \$50 million. Margin improved driven by an increase in the Maya 2-1-1 industry benchmark crack spread of \$7.24 per barrel to \$30.82 per barrel, partially offset by lower prices for by-products. The Houston Refinery operated at 255,000 barrels per day, 11,000 barrels per day lower than prior period due to unplanned maintenance.

Three months ended March 31, 2022 versus three months ended March 31, 2021 - EBITDA increased \$258 million versus the first quarter 2021. Margin increased driven by an increase in the Maya 2-1-1 industry benchmark crack spread of \$15.5 per barrel, partially offset by higher renewable identification number credits cost. Crude throughput increased by 103,000 barrels per day due to strong demand for refined products.

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, 2022	December 31, 2021	March 31, 2021
Operating income	\$93	\$163	\$82
EBITDA	103	173	94

Three months ended March 31, 2022 versus three months ended December 31, 2021 - EBITDA decreased \$70 million compared to the prior period after record fourth quarter with lower licensing revenue, partially offset by first quarter improvements in catalyst margin and volume.

Three months ended March 31, 2022 versus three months ended March 31, 2021 - EBITDA increased \$9 million, versus the first quarter 2021, driven by higher catalyst volume, partially offset by lower catalyst margin due to unfavorable euro versus the U.S. dollar exchange rate.

Capital Spending and Cash Balances

Capital expenditures, including growth projects, maintenance turnarounds, catalyst and information technology-related expenditures, were \$446 million during the first quarter 2022. Our cash and liquid investment balance was \$1.8 billion, which includes cash and cash equivalents, restricted cash and short-term investments. We repurchased 2.1 million shares during the first quarter. There were 328 million common shares outstanding as of March 31, 2022. The company paid dividends of \$371 million during the first quarter 2022.

Table 7 - Reconciliation of EBITDA to EBITDA Excluding LCM and Impairment by Segment

Millions of U.S. dollars	Three Months Ended		
	March 31, 2022	December 31, 2021	March 31, 2021
EBITDA:			
Olefins & Polyolefins - Americas	\$ 911	\$ 1,262	\$ 867
Olefins & Polyolefins - EAI	188	155	412
Intermediates & Derivatives	546	252	182
Advanced Polymer Solutions	125	24	135
Refining	148	(474)	(110)
Technology	103	173	94
Other	(1)	3	5
Continuing Operations	<u>\$ 2,020</u>	<u>\$ 1,395</u>	<u>\$ 1,585</u>
Add: Impairments, pre-tax:			
Refining	\$ —	\$ 624	\$ —
EBITDA excluding impairment:			
Olefins & Polyolefins - Americas	\$ 911	\$ 1,262	\$ 867
Olefins & Polyolefins - EAI	188	155	412
Intermediates & Derivatives	546	252	182
Advanced Polymer Solutions	125	24	135
Refining	148	150	(110)
Technology	103	173	94
Other	(1)	3	5
Continuing Operations	<u>\$ 2,020</u>	<u>\$ 2,019</u>	<u>\$ 1,585</u>