

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549**

**FORM 10-Q**

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the Quarterly Period Ended September 30, 2022

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from \_\_\_\_ to \_\_\_\_

Commission File Number 1-37816

**ALCOA CORPORATION**

(Exact name of registrant as specified in its charter)

Delaware  
(State or other jurisdiction of  
incorporation or organization)

201 Isabella Street, Suite 500,  
Pittsburgh, Pennsylvania  
(Address of principal executive offices)

81-1789115  
(I.R.S. Employer  
Identification No.)

15212-5858  
(Zip Code)

412-315-2900

(Registrant's telephone number, including area code)

Not applicable

(Former name, former address and former fiscal year, if changed since last report)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value \$0.01 per share	AA	New York Stock Exchange

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☒  
Non-accelerated filer ☐  
Emerging growth company ☐

Accelerated filer ☐  
Smaller reporting company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of October 21, 2022, 176,937,165 shares of common stock, par value \$0.01 per share, of the registrant were outstanding.

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### **Forward-Looking Statements**

This report contains statements that relate to future events and expectations and as such constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include those containing such words as “aims,” “ambition,” “anticipates,” “believes,” “could,” “develop,” “endeavors,” “estimates,” “expects,” “forecasts,” “goal,” “intends,” “may,” “outlook,” “potential,” “plans,” “projects,” “reach,” “seeks,” “sees,” “should,” “strive,” “targets,” “will,” “working,” “would,” or other words of similar meaning. All statements by Alcoa Corporation that reflect expectations, assumptions or projections about the future, other than statements of historical fact, are forward-looking statements, including, without limitation, forecasts concerning global demand growth for bauxite, alumina, and aluminum, and supply/demand balances; statements, projections or forecasts of future or targeted financial results, or operating or sustainability performance (including our ability to execute on strategies related to environmental, social and governance matters); statements about strategies, outlook, and business and financial prospects; and statements about capital allocation and return of capital. These statements reflect beliefs and assumptions that are based on Alcoa Corporation’s perception of historical trends, current conditions, and expected future developments, as well as other factors that management believes are appropriate in the circumstances. Forward-looking statements are not guarantees of future performance and are subject to known and unknown risks, uncertainties, and changes in circumstances that are difficult to predict. Although Alcoa Corporation believes that the expectations reflected in any forward-looking statements are based on reasonable assumptions, it can give no assurance that these expectations will be attained and it is possible that actual results may differ materially from those indicated by these forward-looking statements due to a variety of risks and uncertainties. Such risks and uncertainties include, but are not limited to: (a) current and potential future impacts to the global economy and our industry, business and financial condition caused by various worldwide or macroeconomic events, such as the COVID-19 pandemic and the ongoing conflict between Russia and Ukraine, and related regulatory developments; (b) material adverse changes in aluminum industry conditions, including global supply and demand conditions and fluctuations in London Metal Exchange-based prices and premiums, as applicable, for primary aluminum and other products, and fluctuations in indexed-based and spot prices for alumina; (c) changes in global economic and financial market conditions generally, such as inflation, recessionary conditions, and interest rate increases, which may also affect Alcoa Corporation’s ability to obtain credit or financing upon acceptable terms or at all; (d) unfavorable changes in the markets served by Alcoa Corporation; (e) the impact of changes in foreign currency exchange and tax rates on costs and results; (f) unfavorable changes in cost, quality, or availability of key inputs, including energy and raw materials, or uncertainty of or disruption to the supply chain, including logistics; (g) the inability to execute on strategies related to or achieve improvement in profitability and margins, cost savings, cash generation, revenue growth, fiscal discipline, environmental- and social-related goals and targets (including due to delays in scientific and technological developments), or strengthening of competitiveness and operations anticipated from portfolio actions, operational and productivity improvements, technology advancements, and other initiatives; (h) the inability to realize expected benefits, in each case as planned and by targeted completion dates, from acquisitions, divestitures, restructuring activities, facility closures, curtailments, restarts, expansions, or joint ventures; (i) political, economic, trade, legal, public health and safety, and regulatory risks in the countries in which Alcoa Corporation operates or sells products; (j) labor disputes and/or work stoppages and strikes; (k) the outcome of contingencies, including legal and tax proceedings, government or regulatory investigations, and environmental remediation; (l) the impact of cyberattacks and potential information technology or data security breaches; (m) risks associated with long-term debt obligations; (n) the timing and amount of future cash dividends and share repurchases; (o) declines in the discount rates used to measure pension and other postretirement benefit liabilities or lower-than-expected investment returns on pension assets, or unfavorable changes in laws or regulations that govern pension plan funding; and (p) the other risk factors discussed in Part I Item 1A of Alcoa Corporation’s Annual Report on Form 10-K for the fiscal year ended December 31, 2021, Quarterly Report on Form 10-Q for the quarter ended March 31, 2022, and other reports filed by Alcoa Corporation with the U.S. Securities and Exchange Commission. Alcoa Corporation disclaims any obligation to update publicly any forward-looking statements, whether in response to new information, future events or otherwise, except as required by applicable law. Market projections are subject to the risks described above and other risks in the market.

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**PART I – FINANCIAL INFORMATION****Item 1. Financial Statements.****Alcoa Corporation and Subsidiaries****Statement of Consolidated Operations (unaudited)****(in millions, except per-share amounts)**

	Third quarter ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
Sales (E)	\$ 2,851	\$ 3,109	\$ 9,788	\$ 8,812
Cost of goods sold (exclusive of expenses below)	2,668	2,322	7,616	6,770
Selling, general administrative, and other expenses	44	53	140	159
Research and development expenses	7	8	23	21
Provision for depreciation, depletion, and amortization	149	156	470	499
Restructuring and other charges, net (D)	652	33	702	73
Interest expense	25	58	80	167
Other expense (income), net (Q)	35	(18)	(185)	(147)
Total costs and expenses	3,580	2,612	8,846	7,542
(Loss) income before income taxes	(729)	497	942	1,270
Provision for income taxes	40	127	484	331
Net (loss) income	(769)	370	458	939
Less: Net (loss) income attributable to noncontrolling interest	(23)	33	186	118
NET (LOSS) INCOME ATTRIBUTABLE TO ALCOA CORPORATION	\$ (746)	\$ 337	\$ 272	\$ 821
EARNINGS PER SHARE ATTRIBUTABLE TO ALCOA CORPORATION COMMON SHAREHOLDERS (F):				
Basic	\$ (4.17)	\$ 1.80	\$ 1.50	\$ 4.40
Diluted	\$ (4.17)	\$ 1.76	\$ 1.47	\$ 4.32

The accompanying notes are an integral part of the consolidated financial statements.

**Alcoa Corporation and Subsidiaries**  
**Statement of Consolidated Comprehensive Income (unaudited)**  
**(in millions)**

	Alcoa Corporation		Noncontrolling interest		Total	
	Third quarter ended September 30,		Third quarter ended September 30,		Third quarter ended September 30,	
	2022	2021	2022	2021	2022	2021
Net (loss) income	\$ (746)	\$ 337	\$ (23)	\$ 33	\$ (769)	\$ 370
Other comprehensive income (loss), net of tax (G):						
Change in unrecognized net actuarial loss and prior service cost/benefit related to pension and other postretirement benefits	656	72	6	12	662	84
Foreign currency translation adjustments	(173)	(202)	(81)	(78)	(254)	(280)
Net change in unrecognized gain (loss) on cash flow hedges	128	(111)	—	(2)	128	(113)
Total Other comprehensive income (loss), net of tax	611	(241)	(75)	(68)	536	(309)
Comprehensive (loss) income	\$ (135)	\$ 96	\$ (98)	\$ (35)	\$ (233)	\$ 61

	Alcoa Corporation		Noncontrolling interest		Total	
	Nine months ended September 30,		Nine months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021	2022	2021
Net income	\$ 272	\$ 821	\$ 186	\$ 118	\$ 458	\$ 939
Other comprehensive income (loss), net of tax (G):						
Change in unrecognized net actuarial loss and prior service cost/benefit related to pension and other postretirement benefits	730	456	7	16	737	472
Foreign currency translation adjustments	(217)	(174)	(115)	(87)	(332)	(261)
Net change in unrecognized gain (loss) on cash flow hedges	435	(581)	2	—	437	(581)
Total Other comprehensive income (loss), net of tax	948	(299)	(106)	(71)	842	(370)
Comprehensive income	\$ 1,220	\$ 522	\$ 80	\$ 47	\$ 1,300	\$ 569

The accompanying notes are an integral part of the consolidated financial statements.

**Alcoa Corporation and Subsidiaries**  
**Consolidated Balance Sheet (unaudited)**  
(in millions)

	September 30, 2022	December 31, 2021
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents (L)	\$ 1,432	\$ 1,814
Receivables from customers	749	757
Other receivables	119	127
Inventories (I)	2,400	1,956
Fair value of derivative instruments (L)	207	14
Prepaid expenses and other current assets	443	358
Total current assets	5,350	5,026
Properties, plants, and equipment	19,019	19,753
Less: accumulated depreciation, depletion, and amortization	12,765	13,130
Properties, plants, and equipment, net	6,254	6,623
Investments (H)	1,223	1,199
Deferred income taxes	417	506
Fair value of derivative instruments (L)	20	7
Other noncurrent assets	1,621	1,664
Total assets	\$ 14,885	\$ 15,025
<b>LIABILITIES</b>		
Current liabilities:		
Accounts payable, trade	\$ 1,590	\$ 1,674
Accrued compensation and retirement costs	329	383
Taxes, including income taxes	301	374
Fair value of derivative instruments (L)	167	274
Other current liabilities	566	517
Long-term debt due within one year (J & L)	1	1
Total current liabilities	2,954	3,223
Long-term debt, less amount due within one year (J & L)	1,725	1,726
Accrued pension benefits (K)	370	417
Accrued other postretirement benefits (K)	616	650
Asset retirement obligations (O)	611	622
Environmental remediation (P)	262	265
Fair value of derivative instruments (L)	812	1,048
Noncurrent income taxes	201	191
Other noncurrent liabilities and deferred credits	442	599
Total liabilities	7,993	8,741
<b>CONTINGENCIES AND COMMITMENTS (P)</b>		
<b>EQUITY</b>		
Alcoa Corporation shareholders' equity:		
Common stock	2	2
Additional capital	9,171	9,577
Accumulated deficit	(158)	(315)
Accumulated other comprehensive loss (G)	(3,644)	(4,592)
Total Alcoa Corporation shareholders' equity	5,371	4,672
Noncontrolling interest	1,521	1,612
Total equity	6,892	6,284
Total liabilities and equity	\$ 14,885	\$ 15,025

The accompanying notes are an integral part of the consolidated financial statements.

**Alcoa Corporation and Subsidiaries**  
**Statement of Consolidated Cash Flows (unaudited)**  
**(in millions)**

	<b>Nine months ended September 30,</b>	
	<b>2022</b>	<b>2021</b>
<b>CASH FROM OPERATIONS</b>		
Net income	\$ 458	\$ 939
Adjustments to reconcile net income to cash from operations:		
Depreciation, depletion, and amortization	470	499
Deferred income taxes	93	61
Equity earnings, net of dividends	(35)	(84)
Restructuring and other charges, net (D)	702	73
Net loss (gain) from investing activities – asset sales (C)	7	(132)
Net periodic pension benefit cost (K)	39	36
Stock-based compensation	28	26
Premium paid on early redemption of debt	—	43
Gain on mark-to-market derivative financial contracts	(84)	—
Other	30	45
Changes in assets and liabilities, excluding effects of divestitures and foreign currency translation adjustments:		
Decrease (Increase) in receivables	23	(408)
Increase in inventories	(580)	(373)
(Increase) Decrease in prepaid expenses and other current assets	(10)	39
(Decrease) Increase in accounts payable, trade	(10)	153
Decrease in accrued expenses	(122)	—
(Decrease) Increase in taxes, including income taxes	(103)	143
Pension contributions (K)	(12)	(575)
Increase in noncurrent assets	(94)	(47)
Decrease in noncurrent liabilities	(96)	(83)
<b>CASH PROVIDED FROM OPERATIONS</b>	<b>704</b>	<b>355</b>
<b>FINANCING ACTIVITIES</b>		
Additions to debt (original maturities greater than three months)	—	495
Payments on debt (original maturities greater than three months)	—	(1,294)
Proceeds from the exercise of employee stock options	22	19
Repurchase of common stock	(500)	—
Dividends paid on Alcoa common stock	(55)	—
Payments related to tax withholding on stock-based compensation awards	(19)	(1)
Financial contributions for the divestiture of businesses (D)	(19)	(14)
Contributions from noncontrolling interest	150	8
Distributions to noncontrolling interest	(319)	(177)
Other	(3)	(2)
<b>CASH USED FOR FINANCING ACTIVITIES</b>	<b>(743)</b>	<b>(966)</b>
<b>INVESTING ACTIVITIES</b>		
Capital expenditures	(309)	(237)
Proceeds from the sale of assets	5	715
Additions to investments	(32)	(7)
Sale of investments	10	—
Other	2	—
<b>CASH (USED FOR) PROVIDED FROM INVESTING ACTIVITIES</b>	<b>(324)</b>	<b>471</b>
<b>EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS AND RESTRICTED CASH</b>	<b>(20)</b>	<b>(11)</b>
Net change in cash and cash equivalents and restricted cash	(383)	(151)
Cash and cash equivalents and restricted cash at beginning of year	1,924	1,610
<b>CASH AND CASH EQUIVALENTS AND RESTRICTED CASH (Q) AT END OF PERIOD</b>	<b>\$ 1,541</b>	<b>\$ 1,459</b>

The accompanying notes are an integral part of the consolidated financial statements.

**Alcoa Corporation and Subsidiaries**  
**Statement of Changes in Consolidated Equity (unaudited)**  
(in millions)

	Alcoa Corporation shareholders						Non-controlling interest	Total equity
	Common stock	Additional capital	Retained earnings (deficit)	Accumulated other comprehensive (loss) income				
<b>Balance at January 1, 2021</b>	\$ 2	\$ 9,663	\$ (725)	\$ (5,629)	\$ 1,705	\$ 5,016		
Net income	—	—	175	—	44	219		
Other comprehensive loss (G)	—	—	—	(249)	(62)	(311)		
Stock-based compensation	—	8	—	—	—	8		
Common stock issued: compensation plans	—	4	—	—	—	4		
Distributions	—	—	—	—	(62)	(62)		
Other	—	(1)	—	—	—	(1)		
<b>Balance at March 31, 2021</b>	\$ 2	\$ 9,674	\$ (550)	\$ (5,878)	\$ 1,625	\$ 4,873		
Net income	—	—	309	—	41	350		
Other comprehensive income (G)	—	—	—	191	59	250		
Stock-based compensation	—	10	—	—	—	10		
Common stock issued: compensation plans	—	10	—	—	—	10		
Distributions	—	—	—	—	(75)	(75)		
Other	—	1	—	—	(1)	—		
<b>Balance at June 30, 2021</b>	\$ 2	\$ 9,695	\$ (241)	\$ (5,687)	\$ 1,649	\$ 5,418		
Net income	—	—	337	—	33	370		
Other comprehensive loss (G)	—	—	—	(241)	(68)	(309)		
Stock-based compensation	—	8	—	—	—	8		
Common stock issued: compensation plans	—	5	—	—	—	5		
Contributions	—	—	—	—	8	8		
Distributions	—	—	—	—	(40)	(40)		
Other	—	—	—	—	1	1		
<b>Balance at September 30, 2021</b>	\$ 2	\$ 9,708	\$ 96	\$ (5,928)	\$ 1,583	\$ 5,461		
<b>Balance at January 1, 2022</b>	\$ 2	\$ 9,577	\$ (315)	\$ (4,592)	\$ 1,612	\$ 6,284		
Net income	—	—	469	—	84	553		
Other comprehensive (loss) income (G)	—	—	—	(482)	100	(382)		
Stock-based compensation	—	9	—	—	—	9		
Common stock issued: compensation plans	—	2	—	—	—	2		
Repurchase of common stock	—	(54)	(21)	—	—	(75)		
Dividends paid on Alcoa common stock (\$0.10 per share)	—	—	(19)	—	—	(19)		
Contributions	—	—	—	—	46	46		
Distributions	—	—	—	—	(162)	(162)		
Other	—	3	—	—	(2)	1		
<b>Balance at March 31, 2022</b>	\$ 2	\$ 9,537	\$ 114	\$ (5,074)	\$ 1,678	\$ 6,257		
Net income	—	—	549	—	125	674		
Other comprehensive income (loss) (G)	—	—	—	819	(131)	688		
Stock-based compensation	—	11	—	—	—	11		
Common stock issued: compensation plans	—	1	—	—	—	1		
Repurchase of common stock	—	(236)	(39)	—	—	(275)		
Dividends paid on Alcoa common stock (\$0.10 per share)	—	—	(18)	—	—	(18)		
Contributions	—	—	—	—	37	37		
Distributions	—	—	—	—	(83)	(83)		
<b>Balance at June 30, 2022</b>	\$ 2	\$ 9,313	\$ 606	\$ (4,255)	\$ 1,626	\$ 7,292		
Net loss	—	—	(746)	—	(23)	(769)		
Other comprehensive income (loss) (G)	—	—	—	611	(75)	536		
Stock-based compensation	—	8	—	—	—	8		
Repurchase of common stock	—	(150)	—	—	—	(150)		
Dividends paid on Alcoa common stock (\$0.10 per share)	—	—	(18)	—	—	(18)		
Contributions	—	—	—	—	67	67		
Distributions	—	—	—	—	(74)	(74)		
<b>Balance at September 30, 2022</b>	\$ 2	\$ 9,171	\$ (158)	\$ (3,644)	\$ 1,521	\$ 6,892		

The accompanying notes are an integral part of the consolidated financial statements.

## **Alcoa Corporation and Subsidiaries**

### **Notes to the Consolidated Financial Statements (unaudited)**

**(dollars in millions, except per-share amounts; metric tons in thousands (kmt))**

**A. Basis of Presentation** – The interim Consolidated Financial Statements of Alcoa Corporation and its subsidiaries (Alcoa Corporation, Alcoa, or the Company) are unaudited. These Consolidated Financial Statements include all adjustments, consisting only of normal recurring adjustments, considered necessary by management to fairly state the Company's results of operations, financial position, and cash flows. The results reported in these Consolidated Financial Statements are not necessarily indicative of the results that may be expected for the entire year. The 2021 year-end balance sheet data was derived from audited financial statements but does not include all disclosures required by accounting principles generally accepted in the United States of America (GAAP). This Quarterly Report on Form 10-Q should be read in conjunction with the Company's Annual Report on Form 10-K for the year ended December 31, 2021, which includes disclosures required by GAAP.

In accordance with GAAP, certain situations require management to make estimates based on judgments and assumptions, which may affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements. They also may affect the reported amounts of revenues and expenses during the reporting periods. Management uses historical experience and all available information to make these estimates. Management regularly evaluates the judgments and assumptions used in its estimates, and results could differ from those estimates upon future events and their effects or new information.

**Principles of Consolidation.** The Consolidated Financial Statements of Alcoa Corporation include the accounts of Alcoa Corporation and companies in which Alcoa Corporation has a controlling interest, including those that comprise the Alcoa World Alumina & Chemicals (AWAC) joint venture (see below). Intercompany transactions have been eliminated. The equity method of accounting is used for investments in affiliates and other joint ventures over which Alcoa Corporation has significant influence but does not have effective control. Investments in affiliates in which Alcoa Corporation cannot exercise significant influence are accounted for using the measurement alternative in accordance with GAAP. These investments are measured at cost less any impairment.

AWAC is an unincorporated global joint venture between Alcoa Corporation and Alumina Limited and consists of several affiliated operating entities, which own, or have an interest in, or operate the bauxite mines and alumina refineries within Alcoa Corporation's Bauxite and Alumina segments (except for the Poços de Caldas mine and refinery, portions of the São Luís refinery, and investment in Mineração Rio do Norte S.A (MRN) until its sale in April 2022, all in Brazil) and the Portland smelter in Australia within Alcoa Corporation's Aluminum segment. Alcoa Corporation and Alumina Limited ultimately own 60% and 40%, respectively, of the AWAC individual entities, which are consolidated by the Company for financial reporting purposes and include Alcoa of Australia Limited (AofA), Alcoa World Alumina LLC (AWA), and Alcoa World Alumina Brasil Ltda. (AWAB). Alumina Limited's interest in the equity of such entities is reflected as Noncontrolling interest on the accompanying Consolidated Balance Sheet.

### **B. Recently Adopted and Recently Issued Accounting Guidance**

#### Adopted

Management considers the applicability and impact of all Accounting Standards Updates (ASUs). Management assessed ASUs not disclosed and determined that they were either not applicable or are not expected to have a material impact on the Company's Consolidated Financial Statements.

#### Issued

In March 2020 and January 2021, the Financial Accounting Standards Board issued ASU No. 2020-04 and ASU No. 2021-01, respectively. Together, the ASUs provide temporary optional expedients and exceptions to the GAAP guidance on contract modifications and hedge accounting to ease the financial reporting burdens related to the expected market transition from the London Interbank Offered Rate (LIBOR) and other interbank offered rates to alternative reference rates. The Company is working to transition from LIBOR to alternative reference rates. Management has identified a total company inventory of affected financial instruments and contracts, has taken action to transition certain legacy contracts linked to LIBOR to alternative reference rates, and will continue utilizing alternative reference rates for new contracts throughout 2022. The transition from LIBOR is not expected to have a material impact on Alcoa. The adoption of the applicable provisions will coincide with the modifications of the affected contracts.



## C. Divestitures

### Eastalco Land Sale

In June 2021, the Company completed the sale of the previously closed Eastalco Aluminum smelter site in the state of Maryland in a transaction valued at \$100. Upon closing of the transaction, the Company received \$94 in cash and recorded a gain of \$90 in Other expense (income), net (\$90 pre- and \$89 after-tax; see Note Q) on the Statement of Consolidated Operations in the second quarter of 2021.

### Warrick Rolling Mill

On March 31, 2021, Alcoa completed the sale of its rolling mill located at Warrick Operations (Warrick Rolling Mill), an integrated aluminum manufacturing site near Evansville, Indiana (Warrick Operations), to Kaiser Aluminum Corporation (Kaiser) for total consideration of approximately \$670, which included the assumption of \$69 in other postretirement benefit liabilities. The Company recorded a net gain of \$30 in Other expense (income), net (pre- and after-tax, see Note Q) on the Statement of Consolidated Operations. Upon the closing of the transaction, the Company recorded estimated liabilities for future site separation commitments and remaining transaction costs associated with the sales agreement. The Company recorded a charge of \$5 in the nine-month period ended September 30, 2022 in Other expense (income), net related to additional costs of existing site separation commitments. In the third quarter and nine-month period of 2022, the Company spent \$13 and \$22, respectively, against the reserve. Approximately half of the remaining balance of \$57 at September 30, 2022 is expected to be paid in 2022, with the remainder to be spent through 2023.

In connection with the transaction, Alcoa and Kaiser entered into a market-based metal supply agreement and a ground lease agreement for the Warrick Rolling Mill property, which Alcoa continues to own. Alcoa continues to own and operate the site's aluminum smelter and the power plant. The remaining Warrick Operations site results are included within the Aluminum segment.

**D. Restructuring and Other Charges, Net** – Alcoa Corporation recorded a net charge of \$652 in the third quarter of 2022 and a net charge of \$702 in the nine-month period of 2022 in Restructuring and other charges, net, which were comprised of:

- A net charge of \$626 (both periods) related to the settlement of certain pension benefits (see Note K);
- A charge of \$29 (both periods) related to the closure of the previously curtailed magnesium smelter facility in Addy (Washington);
- A reversal of \$83 (nine-month period only) for the release of a valuation allowance on Brazil value added taxes (VAT) (see Note Q);
- A net reversal of \$6 (nine-month period only) for changes in estimated take-or-pay contract costs at the closed Wenatchee (Washington) smelter and the curtailed Intalco (Washington) smelter;
- A net reversal of \$3 and \$1, respectively, for site remediation at previously closed sites (see Note P);
- A charge of \$79 (nine-month period only) for the agreement reached with the workers of the divested Avilés and La Coruña facilities to settle various legal disputes related to the 2019 divestiture (see Note P);
- A charge of \$58 (nine-month period only) for an asset impairment related to the sale of the Company's interest in MRN (see Note H).

In July 2022, Alcoa made the decision to permanently close the previously curtailed magnesium smelter in Addy (Washington). The facility has been fully curtailed since 2001. The Company recorded a charge of \$29 to establish reserves for environmental and demolition obligations in Restructuring and other charges, net on the Statement of Consolidated Operations in the third quarter of 2022. Associated cash outlays are expected to be paid over the next three to five years.

In the third quarter and nine-month period of 2021, Alcoa Corporation recorded Restructuring and other charges, net, of \$33 and \$73, respectively, which were comprised of:

- A charge of \$27 (both periods) related to the closure of the previously curtailed anode facility in Lake Charles (Louisiana) (see below);
- A charge of \$8 and \$47, respectively, related to the settlement of certain pension benefits (see Note K);
- A reversal of \$6 (both periods) for a take or pay energy-related obligation at the Sao Luis smelter no longer required due to the announced restart;
- Charges of \$2 and \$11, respectively, for additional take or pay energy contract costs related to the curtailed Wenatchee (Washington) and Intalco (Washington) smelters;

- Reversals of \$22 (nine-month period only) due to lower costs for demolition and remediation related to previously established reserves (see Note P);
- A net charge of \$9 (nine-month period only) related to the settlement and curtailment of certain other postretirement benefits resulting from the sale of the Warrick Rolling Mill (see Note K);
- Net charges of \$2 and \$7, respectively, for several other insignificant items.

In July 2021, Alcoa made the decision to permanently close the previously curtailed anode facility in Lake Charles (Louisiana). The anode facility within the Lake Charles site has been fully curtailed since 2015. The Company recorded restructuring and other charges of \$27 in the third quarter of 2021, comprised of asset impairments of \$22 and cash-based charges for closure and asset retirement obligations (AROs) of \$5. The closure was completed in September 2022. The decision to permanently close the facility was made as part of the Company's on-going portfolio review. The Company's petroleum coke calciner located at the same site in Lake Charles remains in operation, unaffected by the closure of the anode facility.

Alcoa Corporation does not include Restructuring and other charges, net in the results of its reportable segments. The impact of allocating such charges to segment results would have been as follows:

	Third quarter ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
Bauxite	\$ —	\$ —	\$ 58	\$ —
Alumina	(3)	—	(86)	—
Aluminum	—	23	73	41
Segment total	(3)	23	45	41
Corporate	655	10	657	32
Total Restructuring and other charges, net	\$ 652	\$ 33	\$ 702	\$ 73

In December 2021, the Company announced the two-year curtailment of 228 kmt of smelting capacity at the San Ciprián (Spain) aluminum smelter as a result of an agreement reached with the workers at the site to suspend production due to exorbitant energy prices in Spain. As a result of the curtailment, a restructuring reserve of \$62 was established at December 31, 2021 related to certain financial employee and contractual obligations during the curtailment period. In the third quarter and nine-month period of 2022, cash payments of \$9 and \$17, respectively, were made to reduce the reserve.

Activity and reserve balances for restructuring charges were as follows:

	Severance and employee termination costs	Other costs	Total
<b>Balance at December 31, 2020</b>	\$ 6	\$ 57	\$ 63
Restructuring and other charges, net	1	80	81
Cash payments	(4)	(25)	(29)
Reversals and other	—	(22)	(22)
<b>Balance at December 31, 2021</b>	3	90	93
Restructuring and other charges, net	—	73	73
Cash payments	(1)	(27)	(28)
Reversals and other	—	(17)	(17)
<b>Balance at September 30, 2022</b>	\$ 2	\$ 119	\$ 121

The activity and reserve balances include only Restructuring and other charges, net that impact the reserves for Severance and employee termination costs and Other costs. Restructuring and other charges, net that affected other accounts such as Investments (see Note H), AROs (see Note O), Environmental obligations (see Note P), and Other noncurrent assets (see Note Q) are excluded from the above activity and balances. Reversals and other includes reversals of previously recorded liabilities and foreign currency translation impacts.

The noncurrent portion of the reserve was \$11 and \$43 at September 30, 2022 and December 31, 2021, respectively.

**E. Segment Information** – Alcoa Corporation is a producer of bauxite, alumina, and aluminum products. The Company has three operating and reportable segments, which are organized by product on a global basis: Bauxite, Alumina, and Aluminum. Segment performance under Alcoa Corporation’s management reporting system is evaluated based on a number of factors; however, the primary measure of performance is the adjusted earnings before interest, taxes, depreciation, and amortization (Adjusted EBITDA) of each segment. The Company calculates Segment Adjusted EBITDA as Total sales (third-party and intersegment) minus the following items: Cost of goods sold; Selling, general administrative, and other expenses; and Research and development expenses. Alcoa Corporation’s Adjusted EBITDA may not be comparable to similarly titled measures of other companies. The chief operating decision maker function regularly reviews the financial information, including Sales and Adjusted EBITDA, of these three operating segments to assess performance and allocate resources.

The operating results of Alcoa Corporation’s reportable segments were as follows (differences between segment totals and consolidated amounts are in Corporate):

	Bauxite	Alumina	Aluminum	Total
<b>Third quarter ended September 30, 2022</b>				
Sales:				
Third-party sales	\$ 59	\$ 832	\$ 1,976	\$ 2,867
Intersegment sales	181	418	10	609
Total sales	\$ 240	\$ 1,250	\$ 1,986	\$ 3,476
Segment Adjusted EBITDA	\$ 15	\$ 69	\$ 152	\$ 236
Supplemental information:				
Depreciation, depletion, and amortization	\$ 31	\$ 43	\$ 70	\$ 144
Equity loss	\$ —	\$ (18)	\$ (5)	\$ (23)
<b>Third quarter ended September 30, 2021</b>				
Sales:				
Third-party sales	\$ 56	\$ 756	\$ 2,295	\$ 3,107
Intersegment sales	172	349	8	529
Total sales	\$ 228	\$ 1,105	\$ 2,303	\$ 3,636
Segment Adjusted EBITDA	\$ 23	\$ 148	\$ 613	\$ 784
Supplemental information:				
Depreciation, depletion, and amortization	\$ 30	\$ 47	\$ 72	\$ 149
Equity (loss) income	\$ —	\$ (1)	\$ 38	\$ 37
	Bauxite	Alumina	Aluminum	Total
<b>Nine months ended September 30, 2022</b>				
Sales:				
Third-party sales	\$ 136	\$ 2,764	\$ 6,903	\$ 9,803
Intersegment sales	516	1,325	25	1,866
Total sales	\$ 652	\$ 4,089	\$ 6,928	\$ 11,669
Segment Adjusted EBITDA	\$ 58	\$ 674	\$ 1,461	\$ 2,193
Supplemental information:				
Depreciation, depletion, and amortization	\$ 101	\$ 142	\$ 210	\$ 453
Equity (loss) income	\$ —	\$ (22)	\$ 74	\$ 52
<b>Nine months ended September 30, 2021</b>				
Sales:				
Third-party sales	\$ 153	\$ 2,204	\$ 6,444	\$ 8,801
Intersegment sales	536	1,056	13	1,605
Total sales	\$ 689	\$ 3,260	\$ 6,457	\$ 10,406
Segment Adjusted EBITDA	\$ 123	\$ 499	\$ 1,356	\$ 1,978
Supplemental information:				
Depreciation, depletion, and amortization	\$ 119	\$ 143	\$ 218	\$ 480
Equity (loss) income	\$ —	\$ (7)	\$ 79	\$ 72

The following table reconciles total Segment Adjusted EBITDA to Consolidated net (loss) income attributable to Alcoa Corporation:

	Third quarter ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
Total Segment Adjusted EBITDA	\$ 236	\$ 784	\$ 2,193	\$ 1,978
Unallocated amounts:				
Transformation <sup>(1)</sup>	(19)	(10)	(44)	(34)
Intersegment eliminations	17	(8)	139	20
Corporate expenses <sup>(2)</sup>	(27)	(30)	(91)	(84)
Provision for depreciation, depletion, and amortization	(149)	(156)	(470)	(499)
Restructuring and other charges, net (D)	(652)	(33)	(702)	(73)
Interest expense	(25)	(58)	(80)	(167)
Other (income) expense, net (Q)	(35)	18	185	147
Other <sup>(3)</sup>	(75)	(10)	(188)	(18)
Consolidated (loss) income before income taxes	(729)	497	942	1,270
Provision for income taxes	(40)	(127)	(484)	(331)
Net loss (income) attributable to noncontrolling interest	23	(33)	(186)	(118)
Consolidated net (loss) income attributable to Alcoa Corporation	\$ (746)	\$ 337	\$ 272	\$ 821

(1) Transformation includes, among other items, the Adjusted EBITDA of previously closed operations.

(2) Corporate expenses are composed of general administrative and other expenses of operating the corporate headquarters and other global administrative facilities, as well as research and development expenses of the corporate technical center.

(3) Other includes certain items that are not included in the Adjusted EBITDA of the reportable segments.

The following table details Alcoa Corporation's Sales by product division:

	Third quarter ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
Primary aluminum	\$ 1,990	\$ 2,255	\$ 7,033	\$ 6,094
Alumina	821	752	2,735	2,196
Energy	74	117	155	205
Bauxite	52	52	107	138
Flat-rolled aluminum <sup>(1)</sup>	—	—	—	320
Other <sup>(2)</sup>	(86)	(67)	(242)	(141)
	\$ 2,851	\$ 3,109	\$ 9,788	\$ 8,812

(1) Flat-rolled aluminum represented sales of the Warrick Rolling Mill through the sale of the facility on March 31, 2021 (see Note C).

(2) Other includes realized gains and losses related to embedded derivative instruments designated as cash flow hedges of forward sales of aluminum.

**F. Earnings Per Share** – Basic (loss) earnings per share (EPS) amounts are computed by dividing earnings by the average number of common shares outstanding. Diluted EPS amounts assume the issuance of common stock for all potentially dilutive share equivalents outstanding.

The information used to compute basic and diluted EPS attributable to Alcoa Corporation common shareholders was as follows (shares in millions):

	Third quarter ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
Net (loss) income attributable to Alcoa Corporation	\$ (746)	\$ 337	\$ 272	\$ 821
Average shares outstanding – basic	179	187	182	187
Effect of dilutive securities:				
Stock units	—	4	4	3
Average shares outstanding – diluted	179	191	186	190

In the third quarter of 2022, basic average shares outstanding and diluted average shares outstanding were the same because the effect of potential shares of common stock was anti-dilutive. Had Alcoa generated net income in the third quarter of 2022, three million common share equivalents related to three million outstanding stock units and stock options combined would have been included in diluted average shares outstanding for the period. Options to purchase thirty thousand shares of common stock outstanding at September 30, 2022 would have also been excluded had Alcoa generated net income because they had a weighted average exercise price of \$53.30 per share which was greater than the average market price of Alcoa Corporation's common stock.

Options to purchase less than five hundred thousand shares of common stock outstanding at September 30, 2021 were excluded because they had a weighted average exercise price of \$53.30 per share which was greater than the average market price of Alcoa Corporation's common stock.

## G. Accumulated Other Comprehensive Loss

The following table details the activity of the three components that comprise Accumulated other comprehensive loss for both Alcoa Corporation's shareholders and Noncontrolling interest:

	Alcoa Corporation		Noncontrolling interest	
	Third quarter ended		Third quarter ended	
	September 30,		September 30,	
	2022	2021	2022	2021
<b>Pension and other postretirement benefits (K)</b>				
Balance at beginning of period	\$ (808)	\$ (2,152)	\$ (12)	\$ (63)
Other comprehensive income (loss):				
Unrecognized net actuarial loss and prior service cost/benefit	17	26	8	14
Tax expense <sup>(2)</sup>	(7)	(9)	(3)	(4)
Total Other comprehensive income before reclassifications, net of tax	10	17	5	10
Amortization of net actuarial loss and prior service cost/benefit <sup>(1)</sup>	645	56	1	2
Tax benefit (expense) <sup>(2)</sup>	1	(1)	—	—
Total amount reclassified from Accumulated other comprehensive loss, net of tax <sup>(6)</sup>	646	55	1	2
Total Other comprehensive income	656	72	6	12
Balance at end of period	\$ (152)	\$ (2,080)	\$ (6)	\$ (51)
<b>Foreign currency translation</b>				
Balance at beginning of period	\$ (2,658)	\$ (2,357)	\$ (971)	\$ (853)
Other comprehensive loss	(173)	(202)	(81)	(78)
Balance at end of period	\$ (2,831)	\$ (2,559)	\$ (1,052)	\$ (931)
<b>Cash flow hedges (L)</b>				
Balance at beginning of period	\$ (789)	\$ (1,178)	\$ 1	\$ 1
Other comprehensive income (loss):				
Net change from periodic revaluations	110	(222)	—	(1)
Tax (expense) benefit <sup>(2)</sup>	(6)	38	—	1
Total Other comprehensive income (loss) before reclassifications, net of tax	104	(184)	—	—
Net amount reclassified to earnings:				
Aluminum contracts <sup>(3)</sup>	35	82	—	—
Financial contracts <sup>(4)</sup>	—	(3)	—	(3)
Interest rate contracts <sup>(5)</sup>	2	3	—	—
Foreign exchange contracts <sup>(3)</sup>	—	—	—	—
Sub-total	37	82	—	(3)
Tax (expense) benefit <sup>(2)</sup>	(13)	(9)	—	1
Total amount reclassified from Accumulated other comprehensive loss, net of tax <sup>(6)</sup>	24	73	—	(2)
Total Other comprehensive income (loss)	128	(111)	—	(2)
Balance at end of period	\$ (661)	\$ (1,289)	\$ 1	\$ (1)
Total Accumulated other comprehensive loss	\$ (3,644)	\$ (5,928)	\$ (1,057)	\$ (983)

	Alcoa Corporation		Noncontrolling interest	
	Nine months ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
<b>Pension and other postretirement benefits (K)</b>				
Balance at beginning of period	\$ (882)	\$ (2,536)	\$ (13)	\$ (67)
Other comprehensive income (loss):				
Unrecognized net actuarial loss and prior service cost/benefit	40	259	9	16
Tax expense(2)	(12)	(7)	(3)	(4)
Total Other comprehensive income before reclassifications, net of tax	28	252	6	12
Amortization of net actuarial loss and prior service cost/benefit(1)	702	206	1	4
Tax expense(2)	—	(2)	—	—
Total amount reclassified from Accumulated other comprehensive loss, net of tax(6)	702	204	1	4
Total Other comprehensive income	730	456	7	16
Balance at end of period	\$ (152)	\$ (2,080)	\$ (6)	\$ (51)
<b>Foreign currency translation</b>				
Balance at beginning of period	\$ (2,614)	\$ (2,385)	\$ (937)	\$ (844)
Other comprehensive loss	(217)	(174)	(115)	(87)
Balance at end of period	\$ (2,831)	\$ (2,559)	\$ (1,052)	\$ (931)
<b>Cash flow hedges (L)</b>				
Balance at beginning of period	\$ (1,096)	\$ (708)	\$ (1)	\$ (1)
Other comprehensive (loss) income:				
Net change from periodic revaluations	231	(922)	2	(2)
Tax (expense) benefit(2)	(17)	169	—	1
Total Other comprehensive income (loss) before reclassifications, net of tax	214	(753)	2	(1)
Net amount reclassified to earnings:				
Aluminum contracts(3)	277	195	—	—
Financial contracts(4)	—	2	—	1
Interest rate contracts(5)	6	7	—	—
Foreign exchange contracts(3)	(3)	(3)	—	—
Sub-total	280	201	—	1
Tax expense(2)	(59)	(29)	—	—
Total amount reclassified from Accumulated other comprehensive loss, net of tax(6)	221	172	—	1
Total Other comprehensive income (loss)	435	(581)	2	—
Balance at end of period	\$ (661)	\$ (1,289)	\$ 1	\$ (1)
Total Accumulated other comprehensive loss	\$ (3,644)	\$ (5,928)	\$ (1,057)	\$ (983)

- (1) These amounts were included in the computation of net periodic benefit cost for pension and other postretirement benefits (see Note K).
- (2) These amounts were reported in Provision for income taxes on the accompanying Statement of Consolidated Operations.
- (3) These amounts were primarily reported in Sales on the accompanying Statement of Consolidated Operations.
- (4) These amounts were reported in Cost of goods sold on the accompanying Statement of Consolidated Operations.
- (5) These amounts were reported in Other income, net of the accompanying Statement of Consolidated Operations.
- (6) A positive amount indicates a corresponding charge to earnings and a negative amount indicates a corresponding benefit to earnings.

**H. Investments** – A summary of unaudited financial information for Alcoa Corporation’s equity investments is as follows (amounts represent 100% of investee financial information):

<b>Third quarter ended September 30, 2022</b>	<b>Saudi Arabia Joint Venture</b>	<b>Mining</b>	<b>Energy</b>	<b>Other</b>
Sales	\$ 773	\$ 167	\$ 66	\$ 121
Cost of goods sold	692	101	38	110
Net (loss) income	(94)	14	28	(19)
Equity in net (loss) income of affiliated companies, before reconciling adjustments	(24)	7	11	(9)
Other	(1)	—	(3)	1
Alcoa Corporation’s equity in net (loss) income of affiliated companies	(25)	7	8	(8)

**Third quarter ended September 30, 2021**

Sales	\$ 776	\$ 198	\$ 73	\$ 100
Cost of goods sold	479	145	51	90
Net income (loss)	152	11	22	(12)
Equity in net income (loss) of affiliated companies, before reconciling adjustments	38	6	8	(5)
Other	(3)	(1)	—	4
Alcoa Corporation’s equity in net income (loss) of affiliated companies	35	5	8	(1)

**Nine months ended September 30, 2022**

Sales	\$ 2,686	\$ 589	\$ 193	\$ 363
Cost of goods sold	2,020	370	91	332
Net income (loss)	217	95	80	(77)
Equity in net income (loss) of affiliated companies, before reconciling adjustments	54	33	32	(37)
Other	(5)	(2)	(4)	16
Alcoa Corporation’s equity in net income (loss) of affiliated companies	49	31	28	(21)

**Nine months ended September 30, 2021**

Sales	\$ 2,199	\$ 568	\$ 188	\$ 291
Cost of goods sold	1,490	414	108	261
Net income (loss)	299	31	74	(18)
Equity in net income (loss) of affiliated companies, before reconciling adjustments	75	16	29	(8)
Other	(7)	(2)	—	15
Alcoa Corporation’s equity in net income of affiliated companies	68	14	29	7

The Saudi Arabia joint venture consisting of the bauxite mine and alumina refinery (MBAC) and the smelter (MAC) is owned 74.9% by the Saudi Arabian Mining Company (Ma’aden) and 25.1% by Alcoa. In accordance with the June 2019 amended joint venture agreement, Ma’aden’s put option and Alcoa Corporation’s call option, relating to additional interests in the joint venture, were exercisable for a period of six months after October 1, 2021. On March 31, 2022, Ma’aden’s and Alcoa’s put and call options, respectively, expired with neither party exercising their options.

The Company’s basis in the ELYSISTM Limited Partnership as of September 30, 2022 and 2021, included in Other in the table above, has been reduced to zero for its share of losses incurred to date. As a result, the Company has \$69 in unrecognized losses as of September 30, 2022 that will be recognized upon additional contributions into the partnership.



On February 15, 2022, the Company signed an agreement to sell its share of its investment in MRN in Brazil for \$10 to South32 Minerals S.A. Related to this transaction, the Company recorded an asset impairment of \$58 in the first quarter of 2022 in Restructuring and other charges, net on the Statement of Consolidated Operations. On April 30, 2022, Alcoa completed the sale of its investment in MRN. An additional \$30 in cash could be paid to the Company in the future if certain post-closing conditions related to future MRN mine development are satisfied.

## I. Inventories

	September 30, 2022	December 31, 2021
Finished goods	\$ 490	\$ 529
Work-in-process	324	257
Bauxite and alumina	571	376
Purchased raw materials	843	619
Operating supplies	172	175
	\$ 2,400	\$ 1,956

The Finished goods, Work-in-process and Bauxite and alumina balances as of December 31, 2021 reported above reflect an adjustment related to a misclassification of an intercompany profit reserve previously presented in Work-in-process. This resulted in an increase in Work-in-process of \$172 and reductions of \$9 and \$163 in Finished goods and Bauxite and alumina, respectively. This adjustment had no impact on the total Inventories balance as of December 31, 2021.

## J. Debt

### Credit Facilities

#### *Revolving Credit Facility*

On June 27, 2022, Alcoa Corporation and Alcoa Nederland Holding B.V. (ANHBV), a wholly owned subsidiary of Alcoa Corporation and the borrower, entered into an amendment and restatement agreement (the Third Amendment and Restatement) (as amended and restated, the Revolving Credit Facility) that provides additional flexibility to the Company and ANHBV by (i) extending the maturity date of the Revolving Credit Facility from November 2023 to June 2027, (ii) reducing the aggregate commitments under the facility from \$1,500 to \$1,250, (iii) releasing the collateral package that had previously secured the Revolving Credit Facility, which will continue so long as certain credit ratings are maintained, (iv) increasing the maximum leverage ratio from 2.75 to 1.00 to 3.25 to 1.00, which increases following material acquisitions for four consecutive fiscal quarters following an acquisition, (v) providing a debt to capitalization ratio not to exceed .60 to 1.00 to replace the maximum leverage ratio upon a ratings upgrade to investment grade by Moody's Investor Service (Moody's) or Standard and Poor's Global Ratings (S&P), and (vi) providing flexibility for dividends and other restricted payments, to make investments, and to incur additional indebtedness. The Revolving Credit Facility implements a sustainability adjustment to the applicable margin and commitment fee that may result in a positive or negative adjustment based on two of the Company's existing sustainability metrics.

If Alcoa Corporation or ANHBV, as applicable, fails to have a rating of at least Ba1 from Moody's and BB+ from S&P, then the Company would be required to execute all security documents to re-secure collateral under the Revolving Credit Facility.

On July 26, 2022, Moody's upgraded the rating of ANHBV's senior unsecured notes to Baa3 (investment grade) from Ba1 and set the current outlook to stable.

As of September 30, 2022, the Company was in compliance with all covenants. The Company may access the entire amount of commitments under the Revolving Credit Facility. There were no borrowings outstanding at September 30, 2022 and December 31, 2021, and no amounts were borrowed during the third quarter and nine-months ended 2022 and 2021 related to this facility.

## K. Pension and Other Postretirement Benefits

The components of net periodic benefit cost were as follows:

	Third quarter ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
<b>Pension benefits</b>				
Service cost	\$ 3	\$ 6	\$ 10	\$ 16
Interest cost <sup>(1)</sup>	24	30	78	88
Expected return on plan assets <sup>(1)</sup>	(35)	(71)	(123)	(217)
Recognized net actuarial loss <sup>(1)</sup>	19	48	74	149
Settlements <sup>(2)</sup>	626	8	626	47
Net periodic benefit cost	\$ 637	\$ 21	\$ 665	\$ 83
	Third quarter ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
<b>Other postretirement benefits</b>				
Service cost	\$ 1	—	\$ 3	\$ 3
Interest cost <sup>(1)</sup>	4	4	12	12
Recognized net actuarial loss <sup>(1)</sup>	5	5	14	16
Amortization of prior service benefit <sup>(1)</sup>	(4)	(3)	(11)	(11)
Settlements <sup>(2)</sup>	—	—	—	26
Curtailments <sup>(2)</sup>	—	—	—	(17)
Net periodic benefit cost	\$ 6	\$ 6	\$ 18	\$ 29

(1) These amounts were reported in Other expense (income), net on the accompanying Statement of Consolidated Operations (see Note Q).

(2) These amounts were reported in Restructuring and other charges, net on the accompanying Statements of Consolidated Operations (see Note D) and Cash Flows.

**Plan Actions.** In 2022, management initiated the following actions to certain pension plans:

**Action #1** – In the third quarter of 2022, settlement accounting and related plan remeasurements were triggered within Alcoa’s U.S. pension plans as a result of the Company’s purchase of group annuity contracts to transfer the obligation to pay the remaining retirement benefits of approximately 4,400 retirees and beneficiaries from its U.S. defined benefit pension plans. The transfer of approximately \$1,000 in both plan obligations and plan assets was completed on August 11, 2022. As a result, Alcoa recorded a \$5 increase to Accrued pension benefits and a \$27 increase to Other noncurrent assets and recognized a non-cash settlement loss of \$617 (pre- and after-tax) in Restructuring and other charges, net on the Statement of Consolidated Operations.

**Action #2** – In the third quarter of 2022, settlement accounting and related plan remeasurements were triggered within Alcoa’s U.S. pension plans as a result of participants electing lump sum payments. Alcoa recognized a non-cash settlement loss of \$11 (pre- and after-tax) in Restructuring and other charges, net on the Statement of Consolidated Operations.

**Action #3** – In the third quarter of 2022, settlement accounting and a related plan remeasurement was triggered within Alcoa’s U.S. salaried pension plan as a result of participants electing lump sum payments. Alcoa recorded a \$23 increase to Accrued pension benefits and a \$12 decrease to Other noncurrent assets and recognized a non-cash settlement loss of \$1 (pre- and after-tax) in Restructuring and other charges, net on the Statement of Consolidated Operations.

**Action #4** – In the third quarter of 2022, settlement accounting and a related plan remeasurement was triggered within Alcoa’s Australian pension plan as a result of participants electing lump sum payments. Alcoa recorded a \$21 increase to Other noncurrent assets and recognized a non-cash settlement gain of \$3 (pre- and after-tax) in Restructuring and other charges, net on the Statement of Consolidated Operations.

The following table presents certain information and the financial impacts of these actions on the accompanying Consolidated Financial Statements:

Action #	Number of affected plan participants	Weighted average discount rate as of prior plan remeasurement date	Plan remeasurement date	Weighted average discount rate as of plan remeasurement date	Increase to accrued pension benefits liability	Increase (decrease) to other noncurrent assets	Settlement loss (gain) (1)
1	~4,400	2.90%	July 31, 2022	4.63%	\$ 5	\$ 27	\$ 617
2	~45	2.90%	July 31, 2022	4.63%	\$ —	\$ —	\$ 11
3	~5	4.57%	September 30, 2022	5.71%	\$ 23	\$ (12)	\$ 1
4	~25	2.46%	September 30, 2022	4.99%	\$ —	\$ 21	\$ (3)

(1) These amounts represent the net actuarial loss (gain) and were reclassified from Accumulated other comprehensive loss to Restructuring and other charges, net (see Note D) on the accompanying Statement of Consolidated Operations.

**Funding and Cash Flows.** It is Alcoa's policy to fund amounts for defined benefit pension plans sufficient to meet the minimum requirements set forth in each applicable country's benefits laws and tax laws, including the Employee Retirement Income Security Act of 1974 (ERISA) for U.S. plans. From time to time, the Company contributes additional amounts as deemed appropriate.

Under ERISA regulations, a plan sponsor that establishes a pre-funding balance by making discretionary contributions to a U.S. defined benefit pension plan may elect to apply all or a portion of this balance toward its minimum required contribution obligations to the related plan in future years.

In the first, second and third quarters of 2022, management made such elections related to the Company's U.S. plans and intends to do so for the remainder of 2022. As a result, Alcoa's minimum required contribution to defined benefit pension plans in 2022 is estimated to be approximately \$15, of which approximately \$3 was contributed to non-U.S. plans during the third quarter of 2022. In the nine-month period of 2022, \$12 was contributed to non-U.S. plans.

In the third quarter of 2021, \$6 was contributed to non-U.S. plans. In the nine-month period of 2021, \$49 and \$26 were contributed to U.S. and non-U.S. plans, respectively.

## L. Derivatives and Other Financial Instruments

### Fair Value

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value hierarchy distinguishes between (i) market participant assumptions developed based on market data obtained from independent sources (observable inputs) and (ii) an entity's own assumptions about market participant assumptions developed based on the best information available in the circumstances (unobservable inputs). The fair value hierarchy consists of three broad levels, which gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy are described below:

- Level 1 - Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities.
- Level 2 - Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly, including quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active; inputs other than quoted prices that are observable for the asset or liability (e.g., interest rates); and inputs that are derived principally from or corroborated by observable market data by correlation or other means.
- Level 3 - Inputs that are both significant to the fair value measurement and unobservable.

## Derivatives

Alcoa Corporation is exposed to certain risks relating to its ongoing business operations, including the risks of changing commodity prices, foreign currency exchange rates and interest rates. Alcoa Corporation's commodity and derivative activities include aluminum, energy, foreign exchange, and interest rate contracts which are held for purposes other than trading. They are used primarily to mitigate uncertainty and volatility, and to cover underlying exposures. While Alcoa does not generally enter into derivative contracts to mitigate the risk associated with changes in aluminum price, the Company may do so in isolated cases to address discrete commercial or operational conditions. Alcoa is not involved in trading activities for energy, weather derivatives, or other nonexchange commodity trading activities.

Alcoa Corporation's aluminum, energy, and foreign exchange contracts are predominantly classified as Level 1 under the fair value hierarchy. All of the Level 1 contracts are designated as either fair value or cash flow hedging instruments (except as described below). Alcoa Corporation also has several derivative instruments classified as Level 3 under the fair value hierarchy, which are either designated as cash flow hedges or undesignated. Alcoa includes the changes in its equity method investee's Level 2 derivatives in Accumulated other comprehensive loss in the accompanying Consolidated Balance Sheet.

The following tables present the detail for Level 1 and 3 derivatives (see additional Level 3 information in further tables below):

	September 30, 2022				December 31, 2021			
	Assets		Liabilities		Assets		Liabilities	
Level 1 derivative instruments	\$	164	\$	35	\$	19	\$	29
Level 3 derivative instruments		63		944		2		1,293
Total	\$	227	\$	979	\$	21	\$	1,322
Less: Current		207		167		14		274
Noncurrent	\$	20	\$	812	\$	7	\$	1,048

	2022				2021			
	Unrealized gain recognized in Other comprehensive loss		Realized (loss) gain reclassified from Other comprehensive loss to earnings		Unrealized (loss) gain recognized in Other comprehensive loss		Realized loss reclassified from Other comprehensive loss to earnings	
Third quarter ended September 30,								
Level 1 derivative instruments	\$	59	\$	32	\$	(9)	\$	(4)
Level 3 derivative instruments		49		(67)		(214)		(73)
Noncontrolling and equity interest (Level 2)		2		(2)		1		(5)
Total	\$	110	\$	(37)	\$	(222)	\$	(82)

For the quarter ended September 30, 2022, the realized gain of \$32 on Level 1 cash flow hedges was comprised of a \$34 gain recognized in Sales and a \$2 loss recognized in Cost of goods sold. For the quarter ended September 30, 2021, the realized loss of \$4 on Level 1 cash flow hedges was recognized in Sales.

	2022				2021			
	Unrealized gain recognized in Other comprehensive loss		Realized (loss) gain reclassified from Other comprehensive loss to earnings		Unrealized (loss) gain recognized in Other comprehensive loss		Realized loss reclassified from Other comprehensive loss to earnings	
Nine months ended September 30,								
Level 1 derivative instruments	\$	158	\$	12	\$	(17)	\$	(7)
Level 3 derivative instruments		62		(286)		(908)		(188)
Noncontrolling and equity interest (Level 2)		11		(6)		3		(6)
Total	\$	231	\$	(280)	\$	(922)	\$	(201)

For the nine months ended September 30, 2022, the realized gain of \$12 on Level 1 cash flow hedges was comprised of a \$16 gain recognized in Sales and a \$4 loss recognized in Cost of goods sold. For the nine months ended September 30, 2021, the realized loss of \$7 on Level 1 cash flow hedges was comprised of a \$6 loss recognized in Sales and a \$1 loss recognized in Cost of goods sold.

The following table presents the outstanding quantities of derivative instruments classified as Level 1:

	Classification	September 30, 2022	September 30, 2021
Aluminum (in kmt)	Commodity buy forwards	178	221
Aluminum (in kmt)	Commodity sell forwards	398	263
Foreign currency (in millions of euro)	Foreign exchange buy forwards	67	103
Foreign currency (in millions of Norwegian krone)	Foreign exchange buy forwards	87	—
Foreign currency (in millions of Brazilian real)	Foreign exchange buy forwards	1,216	836
Foreign currency (in millions of Brazilian real)	Foreign exchange sell forwards	17	—

Alcoa routinely uses Level 1 aluminum derivative instruments to manage exposures to changes in the fair value of firm customer commitments for the purchases or sales of aluminum. Additionally, Alcoa uses Level 1 aluminum derivative instruments to manage exposures to changes in the LME associated with the Alumar (Brazil) restart (April 2022 through December 2023) and the San Ciprián (Spain) strike (expires October 2022). As a result of a delay with the Alumar restart, in which the majority of the capacity (approximately 75%) is expected to be operational by the end of the first quarter of 2023, it became probable that certain of the original forecasted transactions would not occur by the end of the originally specified time period and Alcoa dedesignated certain aluminum sell forwards. The Company reclassified the related unrealized gain of \$18 included in Accumulated other comprehensive loss to Sales during the quarter ended September 30, 2022. In conjunction with the dedesignation, the Company entered into aluminum buy forwards for the same volume and periods which were also not designated. The unrealized and realized gains and losses on the aluminum buy and sell forwards that are not designated will offset resulting in no impact to Alcoa's earnings.

Alcoa Corporation uses Level 1 foreign exchange forward contracts to mitigate the risk of foreign exchange exposure related to euro power purchases in Norway (expires December 2026), krone capital expenditures in Norway (expires June 2025), and U.S. dollar alumina sales in Brazil (expires December 2024).

In March 2021, Alcoa entered into four financial contracts (Financial contracts (undesigned), below) with three counterparties to hedge the anticipated power requirements at one of its smelters for the period from August 1, 2021 through June 30, 2026. A fifth financial contract (undesigned) was entered into in November 2021 with an effective date of September 30, 2022 through June 30, 2026. Two of these financial contracts include LME-linked pricing components and do not qualify for hedge accounting treatment. Management elected not to apply hedge accounting treatment for the other three financial contracts as the value of these contracts is not significant. Unrealized and realized gains and losses on these financial contracts are included in Other income, net on the accompanying Statement of Consolidated Operations.

### Additional Level 3 Disclosures

The following table presents quantitative information related to the significant unobservable inputs described above for Level 3 derivative instruments (megawatt hours in MWh):

	September 30, 2022	Unobservable Input	Unobservable Input Range	
Asset Derivatives				
Financial contract (undesignated)	\$ 61	Interrelationship of forward energy price, LME forward price and the Consumer Price Index	Electricity (per MWh)	2022: \$88.79 2023: \$94.90
			LME (per mt)	2022: \$2,164 2023: \$2,184
Power contract	2	MWh of energy needed to produce the forecasted mt of aluminum	LME (per mt)	2022: \$2,164 2022: \$2,161
			Midwest premium (per pound)	2022: \$0.2320 2022: \$0.2220
			Electricity	Rate of 2 million MWh per year
Total Asset Derivatives	\$ 63			
Liability Derivatives				
Power contract	\$ 213	MWh of energy needed to produce the forecasted mt of aluminum	LME (per mt)	2022: \$2,164 2027: \$2,716
			Electricity	Rate of 4 million MWh per year
Power contracts	731	MWh of energy needed to produce the forecasted mt of aluminum	LME (per mt)	2022: \$2,164 2029: \$2,813 2036: \$3,109
			Midwest premium (per pound)	2022: \$0.2320 2029: \$0.2020 2036: \$0.2020
			Electricity	Rate of 18 million MWh per year
Total Liability Derivatives	\$ 944			

The fair values of Level 3 derivative instruments recorded in the accompanying Consolidated Balance Sheet were as follows:

Asset Derivatives	September 30, 2022	December 31, 2021
Derivatives designated as hedging instruments:		
Current—power contracts	\$ 2	\$ —
Total derivatives designated as hedging instruments	\$ 2	\$ —
Derivatives not designated as hedging instruments:		
Current—financial contract	\$ 61	\$ 2
Total derivatives not designated as hedging instruments	\$ 61	\$ 2
Total Asset Derivatives	\$ 63	\$ 2
Liability Derivatives		
Derivatives designated as hedging instruments:		
Current—power contracts	\$ 148	\$ 262
Noncurrent—power contracts	796	1,028
Total derivatives designated as hedging instruments	\$ 944	\$ 1,290
Derivatives not designated as hedging instruments:		
Current—embedded credit derivative	\$ —	\$ 1
Noncurrent—embedded credit derivative	—	2
Total derivatives not designated as hedging instruments	\$ —	\$ 3
Total Liability Derivatives	\$ 944	\$ 1,293

Assuming market rates remain constant with the rates at September 30, 2022, a realized loss of \$148 related to power contracts is expected to be recognized in Sales over the next 12 months.

At September 30, 2022 and December 31, 2021, the power contracts with embedded derivatives designated as cash flow hedges hedge forecasted aluminum sales of 1,740 kmt and 1,905 kmt, respectively.

The following tables present the reconciliation of activity for Level 3 derivative instruments:

	Assets		Liabilities	
	Power contracts	Financial contract	Power contracts	Embedded credit derivative
<b>Third quarter ended September 30, 2022</b>				
July 1, 2022	\$ —	\$ 118	\$ 1,058	\$ 1
Total gains or losses included in:				
Sales (realized)	(3)	—	(70)	—
Other income, net (unrealized)	—	7	—	(1)
Other comprehensive loss (unrealized)	5	—	(44)	—
Settlements and other	—	(64)	—	—
September 30, 2022	\$ 2	\$ 61	\$ 944	\$ —
Change in unrealized gains or losses included in earnings for derivative instruments held at September 30, 2022:				
Other income, net	\$ —	\$ 7	\$ —	\$ (1)

	Assets		Liabilities	
	Power contracts	Financial contract	Power contracts	Embedded credit derivative
<b>Nine months ended September 30, 2022</b>				
January 1, 2022	\$ —	\$ 2	\$ 1,290	\$ 3
Total gains or losses included in:				
Sales (realized)	(3)	—	(289)	—
Other income, net (unrealized)	—	196	—	(3)
Other comprehensive loss (unrealized)	5	—	(57)	—
Settlements and other	—	(137)	—	—
September 30, 2022	\$ 2	\$ 61	\$ 944	\$ —
Change in unrealized gains or losses included in earnings for derivative instruments held at September 30, 2022:				
Other income, net	\$ —	\$ 196	\$ —	\$ (3)

There were no purchases, sales, or settlements of Level 3 derivative instruments in the periods presented.

### **Other Financial Instruments**

The carrying values and fair values of Alcoa Corporation's other financial instruments were as follows:

	September 30, 2022		December 31, 2021	
	Carrying value	Fair value	Carrying value	Fair value
Cash and cash equivalents	\$ 1,432	\$ 1,432	\$ 1,814	\$ 1,814
Restricted cash	109	109	110	110
Short-term borrowings	75	75	75	75
Long-term debt due within one year	1	1	1	1
Long-term debt, less amount due within one year	1,725	1,598	1,726	1,865

The following methods were used to estimate the fair values of other financial instruments:

**Cash and cash equivalents and Restricted cash.** The carrying amounts approximate fair value because of the short maturity of the instruments. The fair value amounts for Cash and cash equivalents and Restricted cash were classified in Level 1 of the fair value hierarchy.

**Short-term borrowings and Long-term debt, including amounts due within one year.** The fair value was based on quoted market prices for public debt and on interest rates that are currently available to Alcoa Corporation for issuance of debt with similar terms and maturities for non-public debt. The fair value amounts for all Long-term debt were classified in Level 2 of the fair value hierarchy.

**M. Income Taxes** – Alcoa Corporation’s estimated annualized effective tax rate (AETR) for 2022 as of September 30, 2022 differs from the U.S. federal statutory rate of 21% primarily due to foreign jurisdictions with higher statutory tax rates and from losses in certain jurisdictions that provide no tax benefit due to full valuation allowances being recorded.

	Nine months ended September 30,			
	2022		2021	
Income before income taxes	\$	942	\$	1,270
Estimated annualized effective tax rate		54.0 %		26.7 %
Income tax expense	\$	509	\$	339
Favorable tax impact related to losses in jurisdictions with no tax benefit		(27)		(7)
Discrete tax expense (benefit)		2		(1)
Provision for income taxes	\$	484	\$	331

The Company’s subsidiaries in Iceland have a full valuation allowance recorded against deferred tax assets, which was established in 2015 and 2017, as the Company believed it was more likely than not that these tax benefits would not be realized. Strong market conditions in the first half of 2022 prompted management to reevaluate the realizability of the deferred tax asset and assess the possibility of a reversal of the valuation allowance. However, after weighing all available positive and negative evidence as of September 30, 2022, management’s position continues to be that it is more likely than not that Alcoa Corporation would not realize the benefit of these deferred tax assets and continues to have a full valuation allowance recorded against Iceland deferred tax assets.

Iceland’s net deferred tax assets, excluding the valuation allowance, were \$106 as of September 30, 2022.

On August 16, 2022, the U.S. enacted the Inflation Reduction Act of 2022, which includes a 15% minimum tax on book income of certain large corporations, a 1% excise tax on net stock repurchases after December 31, 2022, and several tax incentives to promote clean energy. Based on the Company’s current analysis of the provisions, the Company does not believe this legislation will have a material impact on the Company’s Consolidated Financial Statements.

## N. Leasing

Alcoa records a right-of-use asset and lease liability for several types of operating leases, including land and buildings, plant equipment, vehicles, and computer equipment. The leases have remaining terms of less than one to 35 years. The discount rate applied to these leases is the Company’s incremental borrowing rate based on the information available at the commencement date in determining the present value of lease payments, unless there is a rate implicit in the lease agreement. The Company does not have material financing leases.

Lease expense and operating cash flows include:

	Third quarter ended September 30,				Nine months ended September 30,			
	2022		2021		2022		2021	
Fixed lease cost	\$	16	\$	16	\$	39	\$	54
Variable lease cost		3		4		13		9
Short-term lease cost		—		1		1		2

The weighted average lease term and weighted average discount rate as of September 30, 2022 and December 31, 2021 were as follows:

	September 30, 2022	December 31, 2021
Weighted average lease term for operating leases (years)	5.1	4.9
Weighted average discount rate for operating leases	5.3%	5.2%

The following represents the aggregate right-of use assets and related lease obligations recognized in the Consolidated Balance Sheet at:

	September 30, 2022		December 31, 2021	
Properties, plants and equipment, net	\$	85	\$	97
Other current liabilities	\$	30	\$	35
Other noncurrent liabilities and deferred credits		55		64
Total operating lease liabilities	\$	85	\$	99



New leases of \$9 and \$18 were added during the third quarter and nine-month period of 2022, respectively.

The future cash flows related to the operating lease obligations as of September 30, 2022 were as follows:

2022 (excluding the nine months ended September 30, 2022)	\$	10
2023		31
2024		19
2025		13
2026		10
Thereafter		22
Total lease payments (undiscounted)		105
Less: discount to net present value		(20)
Total	\$	85

#### **O. Asset Retirement Obligations**

Alcoa records AROs related to legal obligations associated with the standard operation of bauxite mines, alumina refineries, and aluminum smelters. These AROs consist primarily of costs associated with mine reclamation, closure of bauxite residue areas, spent pot lining disposal, and landfill closures. The Company also recognizes AROs for the disposal of regulated waste materials related to the demolition of facilities and for any significant lease restoration obligations, if required by a lease agreement.

The Company recorded a liability of \$15 in the third quarter of 2022 related to the closure of the previously curtailed magnesium smelter in Addy (Washington). The facility has been fully curtailed since 2001. The additional accrual was recorded in Restructuring and other charges, net on the Statement of Consolidated Operations.

The Company recorded a liability of \$47 in the second quarter of 2022 when an initial estimate became available for improvements required on both operating and closed bauxite residue areas at the Poços de Caldas (Brazil) refinery to comply with updated impoundment regulations in the region. The additional accruals were recorded with a charge to Cost of goods sold of \$39 and a corresponding capitalized asset retirement cost of \$8 in the second quarter of 2022. In the third quarter of 2022, the Company updated its initial estimate and recorded an additional liability of \$9. The additional accruals were recorded with a charge to Cost of goods sold of \$8 and a corresponding capitalized asset retirement cost of \$1.

#### **P. Contingencies**

##### Environmental Remediation Matters

Alcoa Corporation participates in environmental assessments and cleanups at several locations. These include currently or previously owned or operated facilities and adjoining properties, and waste sites, including Superfund (Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)) sites.

A liability is recorded for environmental remediation when a cleanup program becomes probable and the costs can be reasonably estimated. As assessments and cleanups proceed, the liability is adjusted based on progress made in determining the extent of remedial actions and related costs. The liability can change substantially due to factors such as, among others, the nature and extent of contamination, changes in remedial requirements, and technology advancements.

Alcoa Corporation's environmental remediation reserve balance reflects the most probable costs to remediate identified environmental conditions for which costs can be reasonably estimated. The following table details the changes in the carrying value of recorded environmental remediation reserves:

<b>Balance at December 31, 2020</b>	\$	322
Liabilities incurred		21
Cash payments		(23)
Reversals of previously recorded liabilities		(17)
Foreign currency translation and other		6
<b>Balance at December 31, 2021</b>		<b>309</b>
Liabilities incurred		23
Cash payments		(17)
Reversals of previously recorded liabilities		(3)
Foreign currency translation and other		(2)
<b>Balance at September 30, 2022</b>	\$	<b>310</b>

At September 30, 2022 and December 31, 2021, the current portion of Alcoa Corporation's environmental remediation reserve balance was \$48 and \$44, respectively.

During the third quarter and nine-month period of 2022, the Company incurred liabilities of \$18 and \$23, respectively, primarily related to \$14 (both periods) for the closure of the previously curtailed magnesium smelter in Addy (Washington), which was recorded in Restructuring and other charges, net, \$5 (nine-month period only) related to a new phase of work at the former East St. Louis site and \$4 (both periods) for environmental activities at various sites, which were recorded in Cost of goods sold on the accompanying Statement of Consolidated Operations. Payments related to remediation expenses applied against the reserve were \$7 and \$17 in the third quarter and nine-month period of 2022, respectively. These amounts include mandated expenditures as well as those not required by any regulatory authority or third party. Further, the Company recorded a reversal of a reserve of \$3 during the nine-month period of 2022, due to the determination that certain remaining site remediation is no longer required.

During the nine-month period of 2021, the Company incurred liabilities of \$8 primarily related to environmental activities at the Point Comfort site in Texas, closure of the anode plant at the Lake Charles site in Louisiana, and wetlands mitigation at the Longview site in Washington, as well as other increases for ongoing monitoring and maintenance at various sites. These charges are primarily recorded in Restructuring and other charges, net and Cost of goods sold on the accompanying Statement of Consolidated Operations. These amounts include mandated expenditures as well as those not required by any regulatory authority or third party. Further, the Company recorded reversals of reserves of \$17 during the nine-month period of 2021, related to:

- \$5 (nine-month period only) due to lower costs for waste treatment at a previously closed Suriname site;
- \$5 (nine-month period only) due to lower costs for site remediation related to a previously closed site in Brazil; and
- \$7 (nine-month period only) due to the determination that previously estimated site remediation is not required at the previously closed Tennessee site.

The estimated timing of cash outflows on the environmental remediation reserve at September 30, 2022 is as follows:

2022 (excluding the nine months ended September 30, 2022)	\$	12
2023 – 2027		220
Thereafter		78
<b>Total</b>	<b>\$</b>	<b>310</b>

Reserve balances at September 30, 2022 and December 31, 2021, associated with significant sites with active remediation underway or for future remediation, were \$267 and \$247, respectively. In management's judgment, the Company's reserves are sufficient to satisfy the provisions of the respective action plans. Upon changes in facts or circumstances, a change to the reserve may be required. The Company's significant sites include:

**Poços de Caldas, Brazil**—The reserve associated with the 2015 closure of the Alcoa Alumínio S.A. smelter in Poços de Caldas, Brazil, is for remediation of historic spent potlining storage and disposal areas. The final remediation plan is currently under review; such review could require the reserve balance to be adjusted.

**Fusina and Portovesme, Italy**—Alcoa Corporation’s subsidiary Alcoa Trasformazioni S.r.l. has remediation projects underway for its closed smelter sites at Fusina and Portovesme which have been approved by the Italian Ministry for Ecologic Transition (MET). Work is ongoing for soil remediation at the Fusina site with expected completion in 2024. Soil remediation at the Portovesme site was completed in the first half of 2022. The final remedial design for the groundwater remediation project at Portovesme was completed in 2020 and is awaiting approval from the MET.

**Suriname**—The reserve associated with the 2017 closure of the Suralco refinery and bauxite mine is for treatment and disposal of refinery waste and soil remediation. The work began in 2017 and is expected to be completed at the end of 2025.

**Hurricane Creek, Arkansas**—The reserve associated with the 1990 closure of two mining areas and refineries near Hurricane Creek, Arkansas is for ongoing monitoring and maintenance for water quality surrounding the mine areas and residue disposal areas.

**Massena, New York**—The reserve associated with the 2015 closure of the Massena East smelter by the Company’s subsidiary, Reynolds Metals Company, is for subsurface soil remediation to be performed after demolition of the structures. Remediation work commenced in 2021 and will take four to eight years to complete. The final remediation plan is currently under review, which may result in a change to the existing reserve.

**Point Comfort, Texas**—The reserve associated with the 2019 closure of the Point Comfort alumina refinery is for disposal of industrial wastes contained at the site, subsurface remediation, and post-closure monitoring and maintenance. The final remediation plan is currently under review, which may result in a change to the existing reserve.

**Sherwin, Texas**—In connection with the 2018 settlement of a dispute related to the previously-owned Sherwin alumina refinery, the Company’s subsidiary, Copano Enterprises LLC, accepted responsibility for the final closure of four bauxite residue waste disposal areas (known as the Copano facility). Work commenced on the first residue disposal area in 2018 and will take up to four additional years to complete, depending on the nature of its potential re-use. Other than ongoing maintenance and repair activities, work on the next three areas has not commenced but is expected to be completed by 2048, depending on its potential re-use.

**Longview, Washington**—In connection with a 2018 Consent Decree and Cleanup Action Plan with the State of Washington Department of Ecology, the Company’s subsidiary, Northwest Alloys as landowner, accepted certain responsibilities for future remediation of contaminated soil and sediments at the site located near Longview, Washington. In December 2020, the lessee of the land, who was a partner in the remediation of the site, filed for bankruptcy and exited the site in January 2021. Remediation design changes for consolidation and remediation of the onsite industrial waste landfills, groundwater remediation, and post-closure monitoring and maintenance at the site was completed in 2021.

**Addy, Washington**—The reserve associated with the 2022 closure of the Addy magnesium smelter facility is for site-wide remediation and investigation and post-closure monitoring and maintenance. Remediation work is not expected to begin until 2023 and will take three to five years to complete. The final remediation plan is currently being developed, which may result in a change to the existing reserve.

**Other Sites**—The Company is in the process of decommissioning various other plants and remediating sites in several countries for potential redevelopment or to return the land to a natural state. In aggregate, there are approximately 35 remediation projects at these other sites that are planned or underway. These activities will be completed at various times in the future with the latest expected to be in 2026, after which ongoing monitoring and other activities may be required. At September 30, 2022 and December 31, 2021, the reserve balance associated with these activities was \$43 and \$63, respectively.

## Tax

**Brazil (AWAB)**—In March 2013, AWAB was notified by the Brazilian Federal Revenue Office (RFB) that approximately \$110 (R\$220) of value added tax credits previously claimed were being disallowed and a penalty of 50% was assessed. Of this amount, AWAB received \$41 (R\$82) in cash in May 2012. The value added tax credits were claimed by AWAB for both fixed assets and export sales related to the Juruti bauxite mine and São Luís refinery expansion for tax years 2009 through 2011. The RFB has disallowed credits they allege belong to the consortium in which AWAB owns an interest and should not have been claimed by AWAB. Credits have also been disallowed as a result of challenges to apportionment methods used, questions about the use of the credits, and an alleged lack of documented proof. AWAB presented defense of its claim to the RFB on April 8, 2013. In February 2022, the RFB notified AWAB that it had inspected the value added tax credits claimed for 2012 and disallowed \$4 (R\$19). In its decision, the RFB allowed credits of \$14 (R\$65) that were similar to those previously disallowed for 2009 through 2011. In July 2022, the RFB notified AWAB that it had inspected the value added tax credits claimed for 2013 and disallowed \$13 (R\$70). In its decision, the RFB allowed credits of \$16 (R\$84) that were similar to those previously disallowed for 2009 through 2011. The decisions on the 2012 and 2013 credits provide positive evidence to support management’s opinion that there is no basis for these credits to be disallowed. AWAB received the 2012 allowed credits with interest of \$9 (R\$44) in March 2022 and the 2013 allowed credits with interest of \$6 (R\$31) in August 2022. AWAB will continue to dispute the credits that were disallowed for 2012 and 2013. If AWAB is successful in this administrative process, the RFB would have no further recourse. If unsuccessful in this process, AWAB has the option to litigate at a judicial level. Separately from AWAB’s administrative appeal, in June 2015, a new tax law was enacted

repealing the provisions in the tax code that were the basis for the RFB assessing a 50% penalty in this matter. As such, the estimated range of reasonably possible loss for these matters is \$0 to \$44 (R\$239). It is management's opinion that the allegations have no basis; however, at this time, the Company is unable to reasonably predict an outcome for this matter.

**Australia (AofA)**—In December 2019, AofA received a statement of audit position (SOAP) from the Australian Taxation Office (ATO) related to the pricing of certain historic third-party alumina sales. The SOAP proposed adjustments that would result in additional income tax payable by AofA. During 2020, the SOAP was the subject of an independent review process within the ATO. At the conclusion of this process, the ATO determined to continue with the proposed adjustments and issued Notices of Assessment (the Notices) that were received by AofA on July 7, 2020. The Notices asserted claims for income tax payable by AofA of approximately \$139 (A\$214). The Notices also included claims for compounded interest on the tax amount totaling approximately \$460 (A\$707).

On September 17, 2020, the ATO issued a position paper with its preliminary view on the imposition of administrative penalties related to the tax assessment issued to AofA. This paper proposed penalties of approximately \$83 (A\$128).

AofA disagreed with the Notices and with the ATO's proposed position on penalties. In September 2020, AofA lodged formal objections to the Notices. In the fourth quarter of 2020, AofA provided a submission on the ATO's imposition of interest and also submitted a response to the ATO's position paper on penalties. After the ATO completes its review of AofA's response to the penalties position paper, the ATO could issue a penalty assessment.

To date, AofA has not received a response to its submission on the ATO's imposition of interest or its response to the ATO's position paper on penalties.

Through February 1, 2022, AofA did not receive a response from the ATO on AofA's formal objections to the Notices and, on that date, AofA submitted statutory notices to the ATO requiring the ATO to make decisions on AofA's objections within a 60-day period. On April 1, 2022, the ATO issued its decision disallowing the Company's objections related to the income tax assessment, while the position on penalties and interest remains outstanding.

On April 29, 2022, AofA filed proceedings in the Australian Administrative Appeals Tribunal (AAT) against the ATO to contest the Notices, a process which could last several years. The AAT held the first directions hearing on July 25, 2022 ordering AofA to file its evidence and related materials by November 4, 2022, ATO to file its materials by April 14, 2023 and AofA to file reply materials by May 26, 2023. The Company maintains that the sales subject to the ATO's review, which were ultimately sold to Aluminium Bahrain B.S.C., were the result of arm's length transactions by AofA over two decades and were made at arm's length prices consistent with the prices paid by other third-party alumina customers.

In accordance with the ATO's dispute resolution practices, AofA paid 50% of the assessed income tax amount exclusive of interest and any penalties, or approximately \$74 (A\$107), during the third quarter 2020, and the ATO is not expected to seek further payment prior to final resolution of the matter. If AofA is ultimately successful, any amounts paid to the ATO as part of the 50% payment would be refunded. AofA funded the payment with cash on hand and recorded the payment within Other noncurrent assets as a noncurrent prepaid tax asset; the related September 30, 2022 balance is \$69 (A\$107).

Further interest on the unpaid tax will continue to accrue during the dispute. The initial interest assessment and the additional interest accrued are deductible against taxable income by AofA but would be taxable as income in the year the dispute is resolved if AofA is ultimately successful. AofA applied this deduction beginning in the third quarter of 2020 which reduced cash tax payments by approximately \$169 (A\$219) in 2020, \$14 (A\$19) in 2021, and \$10 (A\$16) in the nine-month period of 2022. This amount has been reflected within Other noncurrent liabilities and deferred credits as a noncurrent accrued tax liability; the related September 30, 2022 balance is \$165 (A\$254).

The Company continues to believe it is more likely than not that AofA's tax position will be sustained and therefore is not recognizing any tax expense in relation to this matter. However, because the ultimate resolution of this matter is uncertain at this time, the Company cannot predict the potential loss or range of loss associated with the outcome, which may materially affect its results of operations and financial condition. References to any assessed U.S. dollar amounts presented in connection with this matter have been converted into U.S. dollars from Australian dollars based on the exchange rate in the respective period.

AofA is part of the Company's joint venture with Alumina Limited, an Australian public company listed on the Australian Securities Exchange. The Company and Alumina Limited own 60% and 40%, respectively, of the joint venture entities, including AofA.

#### Other

**Spain**—In July 2019, the Company completed the divestiture of the Avilés and La Coruña (Spain) aluminum facilities to PARTER Capital Group AG (PARTER) in a sale process endorsed by the Spanish government and supported by the workers' representatives following a collective dismissal process.

In early 2020, PARTER sold a majority stake in the facilities to an unrelated party. Alcoa had no knowledge of the subsequent transaction prior to its announcement and on August 28, 2020, Alcoa filed a lawsuit with the Court of First Instance in Madrid, Spain asserting that the sale was in breach of the sale agreement between Alcoa and PARTER.

Related to this subsequent sale transaction, certain proceedings and investigations have been initiated by or at the request of the employees of the facilities against their current employers, the new owners of the current employers, and Alcoa, alleging that certain agreements from the 2019 collective dismissal process remain in force and that, under such agreements, Alcoa remains liable for certain related employment benefits. One such proceeding is a collective case before the Spanish National Court, filed on November 10, 2020, wherein the workers' representatives and employees are seeking to have the terms of a Collective Dismissal Agreement signed between Alcoa and the workers in January 2019 be fulfilled. Other proceedings include: a second collective claim filed in National Court on behalf employees that were not affected by the 2019 collective dismissal process, numerous individual labor claims filed in the labor courts of Avilés and La Coruña and the initiation of a separate criminal investigation by the National Court.

On June 15, 2021, the Spanish National Court ruled that the collective dismissal agreement for the divested Avilés and La Coruña aluminum facilities should be applied to the situation of the claimant workers, and that Alcoa should be liable for the severance of those employees to the extent they were affected by the 2019 collective dismissal process. Alcoa appealed this ruling to the Supreme Court of Spain.

In July 2021, the Spanish National Court appointed a judicial director to oversee the facilities and later declared the facilities insolvent. In early 2022, the insolvency administrators appointed by the courts (one for each facility) announced their intention to collectively dismiss all employees at the two facilities.

In the first quarter of 2022, the Company recorded a charge of \$77 in Restructuring and other charges, net to reflect its estimate for the agreement reached with the workers of the divested Avilés and La Coruña facilities (Spain) to settle various legal disputes related to the 2019 divestiture.

In April 2022, the Company received unanimous acceptance of the offer from all active workers of the divested Avilés and La Coruña facilities and a Global Settlement Agreement (GSA) was fully executed. The Company recorded a charge of \$2 in Restructuring and other charges, net in the quarter ended June 30, 2022 to reflect an update to its estimated liability for the GSA. The Company expects to make cash payments in the fourth quarter of 2022 upon completion of certain administrative and judicial approvals.

#### General

In addition to the matters discussed above, various other lawsuits, claims, and proceedings have been or may be instituted or asserted against Alcoa Corporation, including those pertaining to environmental, safety and health, commercial, tax, product liability, intellectual property infringement, employment, and employee and retiree benefit matters, and other actions and claims arising out of the normal course of business. While the amounts claimed in these other matters may be substantial, the ultimate liability is not readily determinable because of the considerable uncertainties that exist. Accordingly, it is possible that the Company's liquidity or results of operations in a particular period could be materially affected by one or more of these other matters. However, based on facts currently available, management believes that the disposition of these other matters that are pending or asserted will not have a material adverse effect, individually or in the aggregate, on the financial position of the Company.

### **Q. Other Financial Information**

#### **Other Expense (Income), Net**

	Third quarter ended September 30,		Nine months ended September 30,	
	2022	2021	2022	2021
Equity loss (income)	\$ 36	\$ (30)	\$ (17)	\$ (61)
Foreign currency loss (gain), net	9	(4)	17	2
Net loss (gain) from asset sales	2	(8)	7	(132)
Net (gain) loss on mark-to-market derivative instruments	(8)	9	(199)	2
Non-service costs – Pension & OPEB	13	13	44	37
Other	(17)	2	(37)	5
	\$ 35	\$ (18)	\$ (185)	\$ (147)

Net loss (gain) from asset sales for the nine months ended September 30, 2021 included a net gain of \$120 related to the sales of the former Eastalco site and the Warrick Rolling Mill (see Note C).

**Other Noncurrent Assets**

	September 30, 2022	December 31, 2021
Gas supply prepayment	\$ 310	\$ 377
Prepaid gas transmission contract	275	304
Value added tax credits	290	215
Deferred mining costs, net	147	149
Prepaid pension benefit	205	164
Goodwill	144	144
Noncurrent restricted cash	54	106
Noncurrent prepaid tax asset	69	78
Intangibles, net	30	35
Other	97	92
	\$ 1,621	\$ 1,664

**Value added tax credits**— In the fourth quarter of 2018, after an assessment of the future realizability of Brazil state VAT credits recorded, the Company established an allowance on the accumulated state VAT credit balances and stopped recording any future credit benefits. With the restart of the Alumina smelter in São Luís, Brazil and its first metal sales in June 2022, the Company now has the ability to monetize these credits. In June 2022, the Company reversed the allowance with a credit of \$83 to Restructuring and other charges, net and reversed the subsequent additions to the valuation allowance with a credit of \$46 to Cost of goods sold (same accounts as when incurred).

**Cash and Cash Equivalents and Restricted Cash**

	September 30, 2022	December 31, 2021
Cash and cash equivalents	\$ 1,432	\$ 1,814
Current restricted cash	55	4
Noncurrent restricted cash	54	106
	\$ 1,541	\$ 1,924

Current restricted cash amounts are reported in Prepaid expenses and other current assets on the accompanying Consolidated Balance Sheet. Noncurrent restricted cash amounts are reported in Other noncurrent assets on the accompanying Consolidated Balance Sheet.

**R. Subsequent Events**

On October 19, 2022, the Board of Directors declared a quarterly cash dividend of \$0.10 per share of the Company's common stock, to be paid on November 18, 2022 to stockholders of record as of the close of business on November 1, 2022.

## Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

(dollars in millions, except per-share amounts, average realized prices, and average cost amounts; dry metric tons in millions (mdmt); metric tons in thousands (kmt))

### Business Update

The aluminum industry is an energy-intensive business, and the energy crisis in Europe, caused by the ongoing conflict between Russia and Ukraine has created challenges for the global aluminum industry. While the Company has overall limited exposure to spot energy costs, two of our operating locations in Europe, the Lista smelter in southern Norway and the San Ciprián refinery in Spain, experienced significant losses in the third quarter of 2022 primarily due to the volatility in the European energy market.

In the third quarter of 2022, the Company acted to curtail a portion of production at both the Lista smelter and the San Ciprián refinery.

On August 30, 2022, the Company announced the curtailment of one-third of its production capacity (31 kmt) at the Lista (Norway) smelter. The site's exposure to spot energy pricing during the third quarter of 2022 caused significant cost increases. A fixed price power agreement, covering the period from October 1, 2022 through December 31, 2023, is now in place to eliminate this spot exposure. The Company is continuing to review operating levels with changes in market conditions.

Production at the San Ciprián refinery was reduced to approximately 50 percent of the 1.6 million metric tons of annual capacity in an attempt to mitigate the financial impact of high natural gas costs. Despite the curtailment, the ongoing high volatility in European energy markets makes estimates of future results for the San Ciprián refinery difficult to predict. As such, the Company is actively reviewing the location's operating levels, commercial options, and other forms of support.

In March 2022, in response to the conflict between Russia and Ukraine, Alcoa announced that it would cease the purchase of raw materials from, or the selling of products to, Russian businesses. The Company identified alternate sources for securing the limited number of materials that would have been purchased from Russian suppliers without any supply interruption or material financial impact on the Company.

While the current economic environment is challenging, the Company believes its cash balance and low debt levels position it well to compete in the current commodity cycle and drive improvements on items within the Company's direct control. For instance, the Company continues to progress the full restart at the Alumar smelter in Brazil and the restart of some modest capacity at the Portland Aluminium joint venture in Australia. Those sites have competitive, multi-year energy agreements; with fully renewable power sources for Alumar.

The Company also remains focused on the future as energy scarcity and decarbonization goals are expected to positively influence the aluminum industry's fundamentals. Continued investment in the Company's robust technology roadmap of break-through research and development projects, which have the potential to decarbonize the aluminum industry and differentiate Alcoa, are expected in the future.

### Capital Returns

On July 20, 2022, Alcoa Corporation's Board of Directors approved an additional common stock repurchase program under which the Company may purchase shares of its outstanding common stock up to an aggregate transactional value of \$500, depending on the Company's continuing analysis of market, financial, and other factors. The prior authorization had \$150 remaining for share repurchases at the end of the second quarter of 2022. The share repurchase programs may be suspended or discontinued at any time and do not have predetermined expiration dates. In the third quarter of 2022, the Company repurchased 3 million shares for \$150 under its common stock repurchase program; these shares were immediately retired. As the average repurchase price of \$50.14 was less than the share price implicit in additional paid in capital, the equity impact of \$150 was allocated to additional paid in capital. Refer to Liquidity and Capital, for more information.

Also, in the third quarter of 2022, the Company paid a quarterly cash dividend of \$0.10 per share of the Company's common stock in August 2022, totaling \$18.

### Strengthening the Balance Sheet

In the third quarter of 2022, the Company purchased group annuity contracts to transfer the obligation to pay remaining retirement benefits for approximately 4,400 retirees and beneficiaries from its U.S. defined benefit pension plans. The transfer of approximately \$1,000 in both plan obligations and plan assets was completed on August 11, 2022. As a result, Alcoa recognized a non-cash settlement loss of \$617 (pre- and after-tax) in Restructuring and other charges, net on the Statement of Consolidated Operations in the

third quarter of 2022. See Part I Item I of this Form 10-Q in Note K to the Consolidated Financial Statements for additional information.

On June 27, 2022, the Company successfully amended and restated its Revolving Credit Facility, which includes terms that provide improved flexibility to execute on Alcoa's long-term strategies. Among other improvements, the Revolving Credit Facility provides a debt to capitalization ratio not to exceed .60 to 1.00 to replace the maximum leverage ratio upon a ratings upgrade to investment grade by Moody's or S&P. On July 26, 2022, Moody's upgraded the rating of ANHBV's senior unsecured notes to Baa3 (investment grade) from Ba1 and set the current outlook to stable. Refer to Liquidity and Capital, for more information.

#### Other Matters

On August 16, 2022, the U.S. enacted the Inflation Reduction Act of 2022, which includes a 15% minimum tax on book income of certain large corporations, a 1% excise tax on net stock repurchases after December 31, 2022 and several tax incentives to promote clean energy. Based on the Company's current analysis of the provisions, the Company does not believe this legislation will have a material impact on the Company's Consolidated Financial Statements.

In July 2022, Alcoa made the decision to permanently close the previously curtailed magnesium smelter in Addy (Washington). The facility has been fully curtailed since 2001. The Company recorded a charge of \$29 to establish reserves for environmental and demolition obligations in Restructuring and other charges, net on the Statement of Consolidated Operations in the third quarter of 2022. Associated cash outlays are expected to be paid over the next three to five years.

On July 1, 2022, Alcoa curtailed one of the three operating smelting potlines (54 kmt) at its Warrick Operations site due to operational challenges stemming from labor shortages in the region.

In the first quarter of 2022, the Company recorded a restructuring charge of \$77 to reflect its estimate for the agreement reached with the workers of the divested Avilés and La Coruña facilities (Spain) to settle various legal disputes related to the 2019 divestiture. The agreement was made to avoid prolonged legal proceedings over the following years; it does not represent an acknowledgement of wrongdoing or a belief that the Company would not succeed in the legal process. In April 2022, the Company received unanimous acceptance of the agreement from all active workers of the divested Avilés and La Coruña facilities and a GSA was fully executed. The Company recorded a charge of \$2 in Restructuring and other charges, net in the quarter ended June 30, 2022 to reflect an update to its estimated liability for the GSA. The Company expects to make cash payments in the fourth quarter of 2022 upon completion of certain administrative and judicial approvals.

On December 29, 2021, the Company and workers' representatives of the San Ciprián (Spain) aluminum and alumina facilities reached an agreement to temporarily curtail the smelter's 228 kmt of annual capacity due to exorbitant energy prices in Spain, and to resume normal operations at the refinery. The smelter curtailment was safely completed in January 2022, while the casthouse continues to operate.

On April 30, 2022, Alcoa completed the sale of its investment in MRN for proceeds of \$10. An additional \$30 in cash could be paid to the Company in the future if certain post-closing conditions related to future MRN mine development are satisfied. Related to this transaction, the Company recorded an asset impairment of \$58 in the first quarter of 2022 in Restructuring and other charges, net on the Statement of Consolidated Operations. In addition, the Company entered into several bauxite offtake agreements with South 32 Minerals S.A. to provide bauxite supply for existing long-term supply contracts.

On March 31, 2022, Ma'aden's put option and the Company's call option, relating to additional interests in the joint venture, expired with neither party exercising their options. In accordance with the joint venture agreement, the call and put options were exercisable for a period of six months after October 1, 2021.

See the below sections for additional details on the above-described actions.



## Results of Operations

The discussion that follows includes a comparison of our results of operations and liquidity and capital resources for the quarterly and year-to-date periods outlined in the table below.

### Selected Financial Data:

Statement of Operations	Quarter ended		Nine months ended	
	Sequential		Year-to-date	
	September 30, 2022	June 30, 2022	September 30, 2022	September 30, 2021
Sales	\$ 2,851	\$ 3,644	\$ 9,788	\$ 8,812
Cost of goods sold (exclusive of expenses below)	2,668	2,767	7,616	6,770
Selling, general administrative, and other expenses	44	52	140	159
Research and development expenses	7	7	23	21
Provision for depreciation, depletion, and amortization	149	161	470	499
Restructuring and other charges, net	652	(75)	702	73
Interest expense	25	30	80	167
Other expense (income), net	35	(206)	(185)	(147)
Total costs and expenses	3,580	2,736	8,846	7,542
(Loss) income before income taxes	(729)	908	942	1,270
Provision for income taxes	40	234	484	331
Net (loss) income	(769)	674	458	939
Less: Net (loss) income attributable to noncontrolling interest	(23)	125	186	118
Net (loss) income attributable to Alcoa Corporation	\$ (746)	\$ 549	\$ 272	\$ 821

Selected Financial Metrics	Quarter ended		Nine months ended	
	September 30, 2022	June 30, 2022	September 30, 2022	September 30, 2021
Diluted (loss) income per share attributable to Alcoa Corporation common shareholders	\$ (4.17)	\$ 2.95	\$ 1.47	\$ 4.32
Third-party shipments of alumina (kmt)	2,244	2,438	6,959	7,335
Third-party shipments of aluminum products (kmt)	621	674	1,929	2,320
Average realized price per metric ton of alumina	\$ 371	\$ 442	\$ 397	\$ 300
Average realized price per metric ton of primary aluminum	\$ 3,204	\$ 3,864	\$ 3,646	\$ 2,724
Average Alumina Price Index (API) <sup>(1)</sup>	\$ 344	\$ 418	\$ 378	\$ 291
Average London Metal Exchange (LME) 15-day lag <sup>(2)</sup>	\$ 2,402	\$ 3,062	\$ 2,870	\$ 2,330

(1) API (Alumina Price Index) is a pricing mechanism that is calculated by the Company based on the weighted average of a prior month's daily spot prices published by the following three indices: CRU Metallurgical Grade Alumina Price; Platts Metals Daily Alumina PAX Price; and FastMarkets Metal Bulletin Non-Ferrous Metals Alumina Index.

(2) LME (London Metal Exchange) is a globally recognized exchange for commodity trading, including aluminum. The LME pricing component represents the underlying base metal component, based on quoted prices for aluminum on the exchange.

*Sequential Period Comparison**Year-to-date Comparison*

<b>Overview</b>	<p>Net (loss) income attributable to Alcoa Corporation decreased \$1,295 primarily as a result of:</p> <ul style="list-style-type: none"> <li>• Higher restructuring charges</li> <li>• Lower average realized prices of aluminum and alumina</li> <li>• Decrease in favorable mark-to-market results on derivative instruments</li> <li>• Higher energy costs, primarily in Europe</li> <li>• Higher raw material costs due to inflation pressures</li> </ul> <p>Partially offset by:</p> <ul style="list-style-type: none"> <li>• Lower taxes on lower earnings</li> </ul>	<p>Net (loss) income attributable to Alcoa Corporation decreased \$549 primarily as a result of:</p> <ul style="list-style-type: none"> <li>• Higher restructuring charges</li> <li>• Higher raw material costs due to inflation pressures</li> <li>• Higher energy costs, primarily in Europe</li> <li>• Higher costs primarily associated with maintenance, transportation, direct material usage and labor</li> <li>• Higher taxes in the jurisdictions where Alcoa pays taxes</li> <li>• Absence of gains on the sale of the former Eastalco site and the divestiture of the Warrick Rolling Mill</li> <li>• Lower shipments across all segments</li> </ul> <p>Partially offset by:</p> <ul style="list-style-type: none"> <li>• Higher average realized prices of aluminum and alumina</li> <li>• Favorable mark-to-market results on derivative instruments</li> <li>• Increase in value add product sales</li> <li>• Favorable currency impacts</li> </ul>
<b>Sales</b>	<p>Sales decreased \$793 primarily as a result of:</p> <ul style="list-style-type: none"> <li>• Lower average realized prices of aluminum and alumina</li> <li>• Lower trading activities</li> <li>• Lower shipments mainly related to lower shipments from refineries and lower shipments from the Warrick smelter due to the partial curtailment, partially offset by higher shipments from the Alumar smelter due to the restart</li> <li>• Unfavorable currency impacts</li> </ul>	<p>Sales increased \$976 primarily as a result of:</p> <ul style="list-style-type: none"> <li>• Higher average realized prices of aluminum and alumina</li> <li>• Increase in value add product sales</li> </ul> <p>Partially offset by:</p> <ul style="list-style-type: none"> <li>• Decreased sales from the San Ciprián smelter due to the smelter curtailment, partially offset by increased price</li> <li>• Absence of sales from the divested Warrick Rolling Mill, partially offset by new third-party revenue from the Warrick smelter</li> <li>• Lower shipments across all three segments</li> <li>• Lower pricing at the Brazil hydro-electric facilities as drought conditions elevated prices in the prior year period</li> <li>• Lower trading activities</li> </ul>
<b>Cost of goods sold</b>	<p>Cost of goods sold as a percentage of sales increased 18% primarily as a result of:</p> <ul style="list-style-type: none"> <li>• Lower average realized prices for aluminum and alumina</li> <li>• Higher energy costs, primarily in Europe</li> <li>• Higher raw material costs due to inflation pressures</li> <li>• Absence of reversal of a valuation allowance on Brazil VAT during the second quarter of 2022</li> </ul> <p>Partially offset by:</p> <ul style="list-style-type: none"> <li>• Lower charges to establish reserves for impoundments</li> </ul>	<p>Cost of goods sold as a percentage of sales increased 1% primarily as a result of:</p> <ul style="list-style-type: none"> <li>• Higher raw material costs due to inflation pressures</li> <li>• Higher energy costs across all regions</li> <li>• Higher costs primarily associated with maintenance, transportation, direct material usage and labor</li> </ul> <p>Partially offset by:</p> <ul style="list-style-type: none"> <li>• Higher average realized prices for aluminum and alumina</li> <li>• Higher value add product sales</li> <li>• Reversal of a valuation allowance on Brazil VAT during the second quarter of 2022</li> </ul>

*Sequential Period Comparison**Year-to-date Comparison*

<b>Selling, general administrative, and other expenses</b>	<p>Selling, general administrative, and other selling expenses decreased \$8 primarily as a result of:</p> <ul style="list-style-type: none"> <li>• Lower variable compensation</li> </ul>	<p>Selling, general administrative, and other selling expenses decreased \$19 primarily as a result of:</p> <ul style="list-style-type: none"> <li>• Lower variable compensation, external legal fees, insurance and sales commissions</li> <li>• Unfavorable currency impacts</li> </ul>
<b>Provision for depreciation, depletion, and amortization</b>	<p>Depreciation decreased \$12 primarily as a result of:</p> <ul style="list-style-type: none"> <li>• Currency translation impacts</li> </ul>	<p>Depreciation decreased \$29 primarily as a result of:</p> <ul style="list-style-type: none"> <li>• Currency translation impacts</li> </ul>
<b>Interest expense</b>	<p>Interest expense decreased \$5 primarily as a result of:</p> <ul style="list-style-type: none"> <li>• Absence of the interest expense related to the repayment of the San Ciprián 2018 and 2019 carbon dioxide compensation credits</li> </ul>	<p>Interest expense decreased \$87 primarily as a result of:</p> <ul style="list-style-type: none"> <li>• Absence of interest on \$750 6.75% Senior Notes redeemed early in April 2021 and early redemption costs</li> <li>• Absence of interest on \$500 7.00% Senior Notes redeemed early in September 2021 and early redemption costs</li> </ul> <p>Partially offset by:</p> <ul style="list-style-type: none"> <li>• Interest on \$500 4.125% Senior Notes issued in March 2021</li> <li>• Interest expense related to the repayment of the San Ciprián 2018 and 2019 carbon dioxide compensation credits</li> </ul>
<b>Other expense (income), net</b>	<p>Other expense (income), net was \$35 in the third quarter of 2022 compared with \$(206) in the second quarter of 2022. The unfavorable change of \$241 was primarily a result of:</p> <ul style="list-style-type: none"> <li>• Decrease in favorable mark-to-market results on derivative instruments primarily due to lower power prices in the current quarter</li> <li>• Decrease in equity earnings from the Ma'aden aluminum joint venture primarily due to lower LME prices</li> <li>• Decrease in equity earnings from the Ma'aden alumina joint venture primarily due to lower API prices</li> <li>• Higher ELYSIS™ capital contributions, which triggered loss recognition</li> <li>• Unfavorable currency impacts due to losses recognized in the third quarter of 2022 due to the U.S. dollar strengthening primarily against the euro</li> </ul> <p>Partially offset by:</p> <ul style="list-style-type: none"> <li>• Interest income received on Brazil VAT credits in the third quarter of 2022</li> </ul>	<p>Other expense (income), net was \$(185) in the nine-month period of 2022 compared with \$(147) in the nine-month period of 2021. The favorable change of \$38 was primarily a result of:</p> <ul style="list-style-type: none"> <li>• Favorable mark-to-market results on derivative instruments primarily due to higher power prices in the current year</li> <li>• Interest income received on Brazil VAT credits</li> </ul> <p>Partially offset by:</p> <ul style="list-style-type: none"> <li>• Absence of gains on the sale of the former Eastalco site and divestiture of the Warrick Rolling Mill</li> <li>• Unfavorable currency impacts due to losses recognized in the current year due to the U.S. dollar strengthening against most currencies</li> <li>• Higher ELYSIS™ capital contributions, which triggered loss recognition</li> <li>• Decrease in equity earnings from the Ma'aden alumina joint venture primarily due to higher raw material costs primarily driven by inflation, partially offset by higher alumina prices</li> </ul>

<b>Restructuring and other charges, net</b>	<p>In the third quarter of 2022, Restructuring and other charges, net of \$652 primarily related to:</p> <ul style="list-style-type: none"> <li>• \$626 for the settlement of certain pension benefits</li> <li>• \$29 for the permanent closure of the Addy facility</li> </ul> <p>In the second quarter of 2022, Restructuring and other charges, net of \$(75) primarily related to:</p> <ul style="list-style-type: none"> <li>• \$83 for the reversal of state VAT valuation allowance associated with the restart of the Alumar smelter</li> </ul>	<p>In the nine-month period of 2022, Restructuring and other charges, net of \$702 primarily related to:</p> <ul style="list-style-type: none"> <li>• \$626 for the settlement of certain pension benefits</li> <li>• \$79 for the accrual related to the GSA for the workers of the divested Avilés and La Coruña facilities</li> <li>• \$58 for an asset impairment related to the sale of the Company's interest in the MRN mine</li> <li>• \$29 for the permanent closure of the Addy facility</li> </ul> <p>Partially offset by:</p> <ul style="list-style-type: none"> <li>• \$83 for the reversal of state VAT valuation allowance associated with the restart of the Alumar smelter</li> </ul> <p>In the nine-month period of 2021, Restructuring and other charges, net of \$73 primarily related to:</p> <ul style="list-style-type: none"> <li>• \$47 for the settlement of certain pension benefits</li> <li>• \$27 for the permanent closure of the anode portion of the Lake Charles facility</li> <li>• \$9 in settlements and curtailments of certain other postretirement benefits related to the sale of the Warrick Rolling Mill</li> </ul> <p>Partially offset by:</p> <ul style="list-style-type: none"> <li>• \$22 of reversals for environmental and ARO reserves</li> </ul>
<b>Provision for income taxes</b>	<p>The Provision for income taxes in the third quarter of 2022 was \$40 on a loss before taxes of \$(729) or (5.5%). In comparison, the second quarter of 2022 Provision for income taxes was \$234 on income before taxes of \$908 or 25.8%.</p> <p>The decrease in tax expense of \$194 is primarily attributable to the overall lower (Loss) income before income taxes noted above. Additionally, the Company had higher losses in jurisdictions where it maintains a full tax valuation allowance.</p>	<p>The Provision for income taxes in the nine-month period of 2022 was \$484 on income before taxes of \$942 or 51.4%. In comparison, the nine-month period of 2021 Provision for income taxes was \$331 on income before taxes of \$1,270 or 26.1%.</p> <p>The increase in tax expense is primarily attributable to higher income in the jurisdictions where it pays taxes. Additionally, the Company had higher losses in jurisdictions where it maintains a full tax valuation allowance.</p>
<b>Noncontrolling interest</b>	<p>Net (loss) income attributable to noncontrolling interest was \$(23) in the third quarter of 2022 compared with \$125 in the second quarter of 2022. These amounts are entirely related to Alumina Limited's 40% ownership interest in several affiliated operating entities.</p> <p>The decrease is primarily a result of lower average realized prices of alumina and higher raw material costs due to inflation pressures, lower other income primarily due to the absence of favorable mark-to-market results on derivative instruments, higher restructuring charges primarily due to the absence of a valuation allowance reversal on Brazil VAT during the second quarter of 2022, partially offset by lower depreciation and lower taxes due to lower profits before taxes.</p>	<p>Net income attributable to noncontrolling interest was \$186 in the nine-month period of 2022 compared with \$118 in the nine-month period of 2021. These amounts are entirely related to Alumina Limited's 40% ownership interest in several affiliated operating entities.</p> <p>The increase is primarily a result of higher average realized prices of alumina, higher other income primarily related to favorable mark-to-market results on derivative instruments, lower elimination of intercompany profit in inventory, lower restructuring charges primarily due to the Brazil state VAT valuation allowance reversal partially offset by the asset impairment related to the sale of the Company's interest in MRN and lower depreciation, partially offset by higher taxes on higher profits before taxes.</p>

## Segment Information

Alcoa Corporation is a producer of bauxite, alumina, and aluminum products. The Company's operations consist of three worldwide reportable segments: Bauxite, Alumina, and Aluminum. Segment performance under Alcoa Corporation's management reporting system is evaluated based on a number of factors; however, the primary measure of performance is the adjusted earnings before interest, taxes, depreciation, and amortization (Adjusted EBITDA) of each segment. The Company calculates Segment Adjusted EBITDA as Total sales (third-party and intersegment) minus the following items: Cost of goods sold; Selling, general administrative, and other expenses; and Research and development expenses. Alcoa Corporation's Adjusted EBITDA may not be comparable to similarly titled measures of other companies. See Reconciliations of Certain Segment Information.

### Bauxite

**Business Update.** Total shipments increased 0.3 million dry metric tons compared to the second quarter of 2022 due to higher demand from certain of the Alumina segment refineries in the third quarter of 2022, partially offset by lower volumes from offtake agreements.

On April 30, 2022, Alcoa completed the sale of its investment in MRN for proceeds of \$10. An additional \$30 in cash could be paid to the Company in the future if certain post-closing conditions related to future MRN mine development are satisfied. Related to this transaction, the Company recorded an asset impairment of \$58 in the first quarter of 2022 in Restructuring and other charges, net on the Statement of Consolidated Operations. In addition, the Company entered into several bauxite offtake agreements with South 32 Minerals S.A. to provide bauxite supply for existing long-term supply contracts.

Mining operations are relocated periodically in support of optimizing the value extracted from bauxite reserves. In the third quarter of 2022, the Company continued the process of moving the Juruti mining operations, which is scheduled to complete by the end of 2022. During the third quarter and nine-month period of 2022, the Company incurred \$14 and \$23, respectively, in capital expenditures related to Juruti mining operation relocation.

Production in the below table can vary from Total shipments due primarily to differences between the equity allocation of production, offtake agreements with the respective equity investment, and other supply agreements. Additionally, Total shipments include dry metric tons that were not produced by the Bauxite segment. Such bauxite was purchased to satisfy certain customer commitments. The Bauxite segment bears the risk of loss of the purchased bauxite until control of the product has been transferred to this segment's customers.

Operating costs in the table below includes all production-related costs: conversion costs, such as labor, materials, and utilities; depreciation, depletion, and amortization; and plant administrative expenses.

	Quarter ended		Nine months ended	
	September 30, 2022	June 30, 2022	September 30, 2022	September 30, 2021
Production (mdmt)	10.3	10.2	31.5	35.8
Third-party shipments (mdmt)	1.0	0.6	2.4	4.1
Intersegment shipments (mdmt)	9.9	10.0	30.0	31.8
Total shipments (mdmt)	10.9	10.6	32.4	35.9
Third-party sales	\$ 59	\$ 34	\$ 136	\$ 153
Intersegment sales	181	165	516	536
Total sales	\$ 240	\$ 199	\$ 652	\$ 689
Segment Adjusted EBITDA	\$ 15	\$ 5	\$ 58	\$ 123
Operating costs	\$ 252	\$ 225	\$ 684	\$ 675
Average cost per dry metric ton of bauxite	\$ 23	\$ 21	\$ 21	\$ 19

	<i>Sequential Period Comparison</i>	<i>Year-to-date Comparison</i>
<b>Production</b>	Production increased 1% primarily as a result of: <ul style="list-style-type: none"> <li>• Increased demand from certain of the Alumina segment refineries</li> </ul> Partially offset by: <ul style="list-style-type: none"> <li>• Lower volumes from offtake agreements</li> </ul>	Production decreased 12% primarily as a result of: <ul style="list-style-type: none"> <li>• Lower demand from certain Alumina segment refineries</li> <li>• Sale of the Company's interest in the MRN mine</li> <li>• Cessation of bauxite sales to Russian aluminum businesses</li> <li>• Lower demand due to the expiration of the Company's license to export bauxite from Australia</li> </ul>
<b>Third-party sales</b>	Third-party sales increased \$25 primarily as a result of: <ul style="list-style-type: none"> <li>• Higher volumes from offtake and supply agreements caused by the shift to third-party sales due to reduced production at the San Ciprián refinery</li> </ul>	Third-party sales decreased \$17 primarily as a result of: <ul style="list-style-type: none"> <li>• Lower shipments due to the expiration of the Company's license to export bauxite from Australia, Juruti lower customer demand and the cessation of bauxite sales to Russian aluminum businesses, and decreased demand in the Atlantic bauxite market</li> </ul> Partially offset by: <ul style="list-style-type: none"> <li>• Higher volumes from offtake and supply agreements caused by the shift to third-party sales due to reduced production at the San Ciprián refinery</li> <li>• Higher mining royalties</li> </ul>
<b>Intersegment sales</b>	Intersegment sales increased \$16 primarily as a result of: <ul style="list-style-type: none"> <li>• Higher average internal prices on sales to the Alumina segment</li> <li>• Lower intersegment shipments to the San Ciprián refinery and the Australian refineries, partially offset by higher intersegment shipments to the Alumar refinery</li> </ul>	Intersegment sales decreased \$20 primarily as a result of: <ul style="list-style-type: none"> <li>• Lower intersegment shipments primarily due to lower demand from certain Alumina segment refineries</li> </ul> Partially offset by: <ul style="list-style-type: none"> <li>• Higher average internal prices on sales to the Alumina segment</li> </ul>
<b>Segment Adjusted EBITDA</b>	Segment Adjusted EBITDA increased \$10 primarily as a result of: <ul style="list-style-type: none"> <li>• Higher average margins on sales to the Alumina segment primarily due to higher prices</li> </ul>	Segment Adjusted EBITDA decreased \$65 primarily as a result of: <ul style="list-style-type: none"> <li>• Lower shipments as discussed above</li> <li>• Higher production costs primarily due to inefficiencies at lower production rates</li> <li>• Lower average margins on sales to the Alumina segment</li> <li>• Higher energy prices across all regions</li> </ul> Partially offset by: <ul style="list-style-type: none"> <li>• Higher earnings from equity investments</li> <li>• Favorable currency impacts</li> <li>• Higher mining royalties</li> </ul>

**Forward Look.** For the fourth quarter in comparison to the third quarter of 2022, the segment expects higher sequential profitability with increased third-party shipments.

The Company has decreased its 2022 projection for annual bauxite shipments to range between 43.0 and 44.0 million dry metric tons, a change of 1 million dry metric tons from the prior projection due to lower demand from the Australian refineries.

## Alumina

**Business Update.** During the third quarter of 2022, the average API of \$344 per metric ton trended unfavorably compared to the prior quarter reflecting a 18% sequential decrease. Compared to the nine-month period of 2021, the average API of \$378 trended favorably, reflecting a 30% increase year-over-year.

In the third quarter of 2022, the Company reduced production at the San Ciprián refinery to 50 percent of the 1.6 million metric tons of annual capacity to lessen the financial impact from rising natural gas prices in Spain.

Alumina production decreased 4% in the third quarter of 2022 compared to the second quarter of 2022 due primarily to the reduction in the daily production rate at the San Ciprián refinery, partially offset by increased production at the Alumar refinery due to the non-recurrence of unplanned equipment maintenance during the second quarter of 2022. While Australian refinery production in the third quarter of 2022 was consistent with production in the second quarter of 2022, it was less than expected due to extended maintenance periods and lower bauxite quality impacting production levels. Despite production issues, total shipment volume in the third quarter of 2022 improved from the second quarter of 2022 due to shipments from inventory on hand.

During the third quarter of 2022, the Alumina segment continued to experience higher energy costs predominantly related to the San Ciprián refinery, higher raw materials costs, and higher caustic usage at certain Australian refineries related to lower bauxite quality, due to the location of mining areas.

During the second quarter of 2022, the Company recorded the reversal of a valuation allowance on Brazil state VAT of \$46 in Cost of goods sold. In the fourth quarter of 2018, after an assessment of the future realizability of the state VAT credits, Alcoa established an allowance on the accumulated state VAT credit balances and stopped recording any future credit benefits. With the restart of the Alumar smelter in Brazil and the first metal sales in June 2022, the Company has the ability to monetize these credits and reversed the valuation allowance in the second quarter of 2022.

During the second quarter of 2022, the Company recorded a charge of \$39 to Cost of goods sold and an increase to the capitalized asset retirement cost of \$8 to increase the AROs at the Poços de Caldas refinery when an initial estimate became available for improvements required on both operating and closed bauxite residue areas to comply with updated impoundment regulations in the region. In the third quarter of 2022, the Company revised the estimate and recorded an additional liability of \$9, with a charge to Cost of goods sold of \$8 and an increase to the capitalized asset retirement cost of \$1.

As of September 30, 2022, the Alumina segment had a base capacity of 13,843 mtpy with 1,014 mtpy of curtailed refining capacity. In the third quarter of 2022, curtailed capacity increased 800 mtpy compared to the second quarter of 2022, due to the partial curtailment of the San Ciprián refinery (see above).

Total shipments include metric tons that were not produced by the Alumina segment. Such alumina was purchased to satisfy certain customer commitments. The Alumina segment bears the risk of loss of the purchased alumina until control of the product has been transferred to this segment's customers. Additionally, operating costs in the table below includes all production-related costs: raw materials consumed; conversion costs, such as labor, materials, and utilities; depreciation and amortization; and plant administrative expenses.

	Quarter ended		Nine months ended	
	September 30, 2022	June 30, 2022	September 30, 2022	September 30, 2021
Production (kmt)	3,092	3,226	9,527	9,968
Third-party shipments (kmt)	2,244	2,438	6,959	7,335
Intersegment shipments (kmt)	1,005	984	2,929	3,166
Total shipments (kmt)	3,249	3,422	9,888	10,501
Third-party sales	\$ 832	\$ 1,077	\$ 2,764	\$ 2,204
Intersegment sales	418	489	1,325	1,056
Total sales	\$ 1,250	\$ 1,566	\$ 4,089	\$ 3,260
Segment Adjusted EBITDA	\$ 69	\$ 343	\$ 674	\$ 499
Average realized third-party price per metric ton of alumina	\$ 371	\$ 442	\$ 397	\$ 300
Operating costs	\$ 1,143	\$ 1,190	\$ 3,321	\$ 2,734
Average cost per metric ton of alumina	\$ 352	\$ 348	\$ 336	\$ 260

	<i>Sequential Period Comparison</i>	<i>Year-to-date Comparison</i>
<b>Production</b>	Production decreased 4% primarily as a result of: <ul style="list-style-type: none"> <li>• Decreased production at the San Ciprián refinery due to the partial curtailment</li> </ul> Partially offset by: <ul style="list-style-type: none"> <li>• Increased production at the Alumar refinery due to non-recurrence of unplanned equipment maintenance in the second quarter of 2022</li> </ul>	Production decreased 4% primarily as a result of: <ul style="list-style-type: none"> <li>• Reduced alumina production at the Australian refineries due to ongoing unplanned equipment maintenance</li> <li>• Decreased production at the San Ciprián refinery due to the partial curtailment</li> </ul> Partially offset by: <ul style="list-style-type: none"> <li>• Increased production at Alumar refinery due to non-recurrence of ship unloader outage in 2021</li> </ul>
<b>Third-party sales</b>	Third-party sales decreased \$245 primarily as a result of: <ul style="list-style-type: none"> <li>• Lower average realized price of \$71/ton principally driven by a lower average API</li> <li>• Lower shipments at the San Ciprián refinery and Australian refineries</li> <li>• Unfavorable currency impacts</li> </ul>	Third-party sales increased \$560 primarily as a result of: <ul style="list-style-type: none"> <li>• Higher average realized price of \$97/ton principally driven by a higher average API</li> <li>• Favorable changes to customer mix</li> </ul> Partially offset by: <ul style="list-style-type: none"> <li>• Lower shipments due to decreased production at the Australian refineries</li> </ul>
<b>Intersegment sales</b>	Intersegment sales decreased \$71 primarily as a result of: <ul style="list-style-type: none"> <li>• Lower average realized prices on sales to the Aluminum segment</li> </ul> Partially offset by: <ul style="list-style-type: none"> <li>• Higher shipments due to increased demand from the Aluminum segment</li> </ul>	Intersegment sales increased \$269 primarily as a result of: <ul style="list-style-type: none"> <li>• Higher average realized prices on sales to the Aluminum segment</li> </ul> Partially offset by: <ul style="list-style-type: none"> <li>• Lower shipments due to the San Ciprián smelter curtailment</li> </ul>
<b>Segment Adjusted EBITDA</b>	Segment Adjusted EBITDA decreased \$274 primarily as a result of: <ul style="list-style-type: none"> <li>• Lower average realized price of \$71/ton principally driven by a lower average API</li> <li>• Absence of reversal of a valuation allowance on Brazil VAT associated with the restart of the Alumar smelter during the second quarter of 2022</li> <li>• Higher costs primarily associated with direct material usage and maintenance</li> <li>• Higher raw material costs primarily due to higher market prices for caustic and bauxite</li> <li>• Higher energy prices, primarily in Spain</li> </ul> Partially offset by: <ul style="list-style-type: none"> <li>• Lower charges to establish reserves for impoundments at the Poços de Caldas refinery</li> <li>• Lower shipments from San Ciprián refinery causing favorable impact due to negative margin</li> </ul>	Segment Adjusted EBITDA increased \$175 primarily as a result of: <ul style="list-style-type: none"> <li>• Higher average realized price of \$97/ton principally driven by a higher average API</li> <li>• Favorable currency impacts</li> <li>• Favorable changes to customer mix</li> <li>• Reversal of a valuation allowance on Brazil VAT associated with the restart of the Alumar smelter in the second quarter of 2022</li> </ul> Partially offset by: <ul style="list-style-type: none"> <li>• Higher energy prices across all regions</li> <li>• Higher raw material costs primarily due to higher market prices for caustic and lime</li> <li>• Higher costs primarily associated with increased maintenance costs, direct material usage, and higher transportation costs</li> <li>• Higher charges to establish reserves for impoundments</li> </ul>

**Forward Look.** For the fourth quarter in comparison to the third quarter of 2022, the segment anticipates lower energy costs for the San Ciprián refinery. Additionally, benefits of the San Ciprián curtailment are expected to offset the impact of lower bauxite quality in areas where we are currently mining in Australia and higher raw material costs.

As discussed above, in the third quarter of 2022, the Company reduced production at the San Ciprián refinery to 50 percent of the 1.6 million metric tons of annual capacity in an effort to reduce the refinery's losses related to natural gas prices. The high volatility in European energy markets makes estimates of future results for the facility difficult to predict. As such, the Company is actively reviewing the refinery's operating levels, commercial options, and other support.

The Company has decreased its 2022 projection for shipments to range between 13.1 and 13.3 million metric tons, a reduction of 0.5 million metric tons from the prior forecast primarily due to the reduced production at the San Ciprián refinery and lower shipments from the Australian refineries.



## Aluminum

Business Update. During the third quarter of 2022, third-party sales decreased 22% sequentially on lower LME and regional premiums and lower shipments. Metal prices decreased with LME prices on a 15-day lag averaging \$2,402 per metric ton. The Aluminum segment also experienced higher energy and raw material costs during the third quarter of 2022.

On December 29, 2021, the Company and workers' representatives at the San Ciprián, Spain aluminum facility reached an agreement for the two-year curtailment of the smelter's 228 kmt of annual capacity due to exorbitant energy prices in Spain. The curtailment was completed in January 2022 while the casthouse continues to operate. During the third quarter and nine-month period of 2022, \$9 and \$17, respectively, of payments were made to reduce the employee leave compensation and take or pay contractual obligations of \$62 recorded in the fourth quarter of 2021. The Company has not made any expenditures against the commitments for capital investments of \$68 and restart costs of \$35. In October 2022, the Company signed an agreement with a renewable energy provider for approximately 30% of the smelter's power needs upon restart and continues to negotiate with other generators to secure the remaining power supply needs for the smelter. Approximately 70% of the smelter's power needs have been secured under long-term agreements to date.

In conjunction with the previously announced restart of the Alumar smelter in São Luís, Brazil, Alcoa incurred restart expenses of \$14 and \$48 during the third quarter and nine-month period of 2022, respectively. The first metal sales occurred in the second quarter of 2022 and the Company expects the majority of the capacity (approximately 75%) to be operational by the end of the first quarter of 2023.

In conjunction with the previously announced restart of 19 kmt (Alcoa share) of previously curtailed capacity at the Portland smelter, Alcoa incurred restart expenses of \$6 and \$9 during the third quarter and nine-month period of 2022. Metal production began in September 2022.

On August 22, 2022, a strike at the Mosjøen (Norway) smelter commenced, after negotiations for a nationwide collective labor agreement between Industri Energi, a federation of Norwegian industries that includes Alcoa and Norsk Industri, which represents workers reached an impasse. The strike affected numerous industrial plants representing the Norwegian electrochemical industry. The strike ended on August 24, 2022, with a solution reached on the labor dispute, and normal operations resumed at the Mosjøen smelter with no material impact on the Company.

On August 30, 2022, the Company announced the curtailment of one third of the production capacity (31 kmt) at the Lista smelter in Norway to mitigate high energy costs for the site. The site was exposed to spot energy pricing, which had increased to above \$600 per megawatt hour. In July 2022, the Company entered into a fixed price power agreement effective for the fourth quarter 2022 through December 31, 2023.

On July 1, 2022, Alcoa curtailed one of the three operating smelting potlines (54 kmt) at the Warrick Operations site due to operational challenges stemming from labor shortages in the region.

Total aluminum third-party shipments and total primary aluminum shipments include metric tons that were not produced by the Aluminum segment. Such aluminum was purchased by this segment to satisfy certain customer commitments. The Aluminum segment bears the risk of loss of the purchased aluminum until control of the product has been transferred to this segment's customer. Until the sale of the Warrick Rolling Mill on March 31, 2021, total aluminum information includes flat-rolled aluminum while primary aluminum information does not. Primary aluminum third-party sales exclude realized gains and losses related to embedded derivative instruments designated as cash flow hedges of forward sales of aluminum.

The average realized third-party price per metric ton of primary aluminum includes three elements: a) the underlying base metal component, based on quoted prices from the LME; b) the regional premium, which represents the incremental price over the base LME component that is associated with the physical delivery of metal to a particular region (e.g., the Midwest premium for metal sold in the United States); and c) the product premium, which represents the incremental price for receiving physical metal in a particular shape (e.g., billet, slab, rod, etc.) or alloy.

Operating costs includes all production-related costs: raw materials consumed; conversion costs, such as labor, materials, and utilities; depreciation and amortization; and plant administrative expenses.

	Quarter ended		Nine months ended	
	September 30, 2022	June 30, 2022	September 30, 2022	September 30, 2021
<b>Total Aluminum information</b>				
Third-party aluminum shipments (kmt)	621	674	1,929	2,320
Third-party sales	\$ 1,976	\$ 2,539	6,903	\$ 6,444
Intersegment sales	10	8	25	13
Total sales	\$ 1,986	\$ 2,547	\$ 6,928	\$ 6,457
Segment Adjusted EBITDA	\$ 152	\$ 596	\$ 1,461	\$ 1,356

	Quarter ended		Nine months ended	
	September 30, 2022	June 30, 2022	September 30, 2022	September 30, 2021
<b>Primary Aluminum information</b>				
Production (kmt)	497	499	1,494	1,639
Third-party shipments (kmt)	621	674	1,929	2,237
Third-party sales	\$ 1,990	\$ 2,624	\$ 7,033	\$ 6,094
Average realized third-party price per metric ton	\$ 3,204	\$ 3,864	\$ 3,646	\$ 2,724
Total shipments (kmt)	621	674	1,929	1,540
Operating costs	\$ 1,870	\$ 1,936	\$ 5,483	\$ 4,772
Average cost per metric ton	\$ 3,011	\$ 2,872	\$ 2,843	\$ 2,110

*Sequential Period Comparison**Year-to-date Comparison*

<b>Production</b>	Production was flat between periods primarily as a result of: <ul style="list-style-type: none"><li>• Partial curtailment of the Warrick smelter in July 2022</li></ul> Partially offset by: <ul style="list-style-type: none"><li>• Alumar smelter restart</li></ul>	Production decreased 9% primarily as a result of: <ul style="list-style-type: none"><li>• Curtailment of the San Ciprián smelter, completed in January 2022</li><li>• Partial curtailment of the Warrick smelter in July 2022</li></ul> Partially offset by: <ul style="list-style-type: none"><li>• Alumar smelter restart</li></ul>
<b>Third-party sales</b>	Third-party sales decreased \$563 primarily as a result of: <ul style="list-style-type: none"><li>• Lower average realized price of \$660/ton driven by a lower average LME (on a 15-day lag) and lower regional premiums</li><li>• Lower trading activities</li><li>• Lower shipments mainly due to the partial curtailment of the Warrick smelter and partial curtailment of the Lista smelter, partially offset by higher shipments from the Alumar smelter due to the restart</li><li>• Unfavorable currency impacts</li></ul>	Third-party sales increased \$459 primarily as a result of: <ul style="list-style-type: none"><li>• Higher average realized price of \$922/ton driven by a higher average LME (on a 15-day lag) and regional premiums</li><li>• Increase in value add product sales</li></ul> Partially offset by: <ul style="list-style-type: none"><li>• Absence of sales from the divested Warrick Rolling Mill, partially offset by new third-party revenue from the Warrick smelter</li><li>• Decreased sales from the San Ciprián smelter due to the smelter curtailment, partially offset by increased price</li><li>• Lower pricing at the Brazil hydro-electric facilities as year-to-date 2021 drought conditions elevated prices in the prior year period</li><li>• Lower trading activities</li><li>• Lower shipments mainly due to the partial curtailment of the Warrick smelter and timing of maintenance at European smelters, partially offset by higher shipments from the Alumar smelter due to the restart</li></ul>
<b>Segment Adjusted EBITDA</b>	Segment Adjusted EBITDA decreased \$444 primarily as a result of: <ul style="list-style-type: none"><li>• Lower average realized price driven by lower average LME (on a 15-day lag) and lower regional premiums</li><li>• Higher energy prices, primarily in Europe</li><li>• Lower shipments mainly related to the partial curtailment of the Warrick smelter</li><li>• Unfavorable raw material costs, primarily on higher prices for carbon, partially offset by lower average alumina input costs</li></ul> Partially offset by: <ul style="list-style-type: none"><li>• Increased third-party sales at the Warrick power plant due to the partial curtailment of the Warrick smelter</li></ul>	Segment Adjusted EBITDA increased \$105 primarily as a result of: <ul style="list-style-type: none"><li>• Higher average realized price driven by higher average LME (on a 15-day lag) and regional premiums</li><li>• Increase in value add product sales</li><li>• Warrick power plant energy sales driven by higher third-party energy price</li><li>• Favorable currency impacts</li></ul> Partially offset by: <ul style="list-style-type: none"><li>• Unfavorable raw material costs, primarily on higher average alumina input costs and higher market prices for carbon</li><li>• Higher costs primarily associated with higher transportation costs, increased maintenance costs, and higher labor expenses</li><li>• Lower pricing at the Brazil hydro-electric facilities</li><li>• Higher energy costs, primarily in Europe</li><li>• Curtailment of the San Ciprián smelter</li><li>• Lower shipments mainly related to the partial curtailment of the Warrick smelter</li><li>• Divestiture of the Warrick Rolling Mill</li></ul>

The following table provides consolidated capacity and curtailed capacity (each in kmt) for each smelter owned by Alcoa Corporation:

Facility	Country	September 30, 2022		June 30, 2022		September 30, 2021	
		Capacity (1)	Curtailed	Capacity (1)	Curtailed	Capacity (1)	Curtailed
Portland (2)	Australia	197	22	197	30	197	30
São Luís (Alumar) (3)	Brazil	268	204	268	239	268	268
Baie Comeau	Canada	312	—	312	—	280	—
Bécancour	Canada	347	—	347	—	310	—
Deschambault	Canada	287	—	287	—	260	—
Fjarðaál	Iceland	351	—	351	—	344	—
Lista (7)	Norway	94	31	94	—	94	—
Mosjøen	Norway	200	—	200	—	188	—
San Ciprián (4)	Spain	228	228	228	228	228	—
Intalco	U.S.	279	279	279	279	279	279
Massena West	U.S.	130	—	130	—	130	—
Warrick (5)	U.S.	269	162	269	108	269	108
Wenatchee (6)	U.S.	—	—	—	—	146	146
		<b>2,962</b>	<b>926</b>	<b>2,962</b>	<b>884</b>	<b>2,993</b>	<b>831</b>

(1) These figures represent Alcoa Corporation's share of the facility Nameplate Capacity based on its ownership interest in the respective smelter.

(2) In 2021, the Company announced that the Portland Aluminium joint venture will restart 35,000 mtpy of idle smelting capacity at the Portland smelter in Australia (19,000 mtpy Alcoa share), and metal production began in September 2022. Curtailed capacity decreased from June 30, 2022 as a result of the restart process.

(3) In 2021, the Company announced the restart of its 268,000 mtpy of idle smelting capacity at the Alumar smelter in Brazil; the first metal sales occurred in the second quarter of 2022 and the Company expects the majority of the capacity to be operational by the end of the first quarter of 2023. Curtailed capacity decreased from June 30, 2022 as a result of the restart process.

(4) On December 29, 2021, the Company and the workers' representatives at the San Ciprián, Spain aluminum plant reached an agreement that called for the two-year curtailment of the smelter's 228,000 mtpy annual smelting capacity; the curtailment was completed in January of 2022.

(5) On July 1, 2022, the Company announced curtailment of approximately 54,000 mtpy at the Warrick smelter in the state of Indiana.

(6) In December 2021, the Company permanently closed 146,000 mtpy of idled smelting capacity at the Wenatchee smelter in the state of Washington.

(7) On August 30, 2022, the Company announced curtailment of approximately 31,000 mtpy at the Lista smelter in Norway.

**Forward Look.** For the fourth quarter in comparison to the third quarter of 2022, the segment expects higher raw materials costs, lower Warrick power plant sales and lower value add product premiums to be offset by lower energy costs at the Lista smelter.

Additionally, the Norwegian government recently issued a budget proposal that sets a floor for the carbon dioxide compensation scheme to be paid in 2023 based on 2022 power purchased. If approved by the Norwegian government, the Company would record an adjustment of approximately \$25 in the fourth quarter of 2022 to reverse amounts accrued in Cost of goods sold for 2022 credits earned through September 30, 2022. The total impact of this budget proposal on the Company's full year results would be approximately \$35.

The Company expects total Aluminum segment shipments to remain unchanged from the prior projection, ranging between 2.5 and 2.6 million metric tons in 2022.

## Reconciliations of Certain Segment Information

### Reconciliation of Total Segment Third-Party Sales to Consolidated Sales

	Quarter ended		Nine months ended	
	September 30, 2022	June 30, 2022	September 30, 2022	September 30, 2021
Bauxite	\$ 59	\$ 34	\$ 136	\$ 153
Alumina	832	1,077	2,764	2,204
Aluminum:				
Primary aluminum	1,990	2,624	7,033	6,094
Other <sup>(1)</sup>	(14)	(85)	(130)	350
Total segment third-party sales	2,867	3,650	9,803	8,801
Other	(16)	(6)	(15)	11
Consolidated sales	\$ 2,851	\$ 3,644	\$ 9,788	\$ 8,812

- <sup>(1)</sup> Other includes third-party sales of flat-rolled aluminum and energy, as well as realized gains and losses related to embedded derivative instruments designated as cash flow hedges of forward sales of aluminum. Following the sale of the Warrick Rolling Mill on March 31, 2021, Other no longer includes the sales of flat-rolled aluminum.

### Reconciliation of Total Segment Operating Costs to Consolidated Cost of Goods Sold

	Quarter ended		Nine months ended	
	September 30, 2022	June 30, 2022	September 30, 2022	September 30, 2021
Bauxite	\$ 252	\$ 225	\$ 684	\$ 675
Alumina	1,143	1,190	3,321	2,734
Primary aluminum	1,870	1,936	5,483	4,772
Other <sup>(1)</sup>	97	149	373	636
Total segment operating costs	3,362	3,500	9,861	8,817
Eliminations <sup>(2)</sup>	(626)	(682)	(2,005)	(1,625)
Provision for depreciation, depletion, and amortization <sup>(3)</sup>	(143)	(156)	(452)	(480)
Other <sup>(4)</sup>	75	105	212	58
Consolidated cost of goods sold	\$ 2,668	\$ 2,767	\$ 7,616	\$ 6,770

- <sup>(1)</sup> Prior to the sale of the Warrick Rolling Mill on March 31, 2021, Other largely relates to the Aluminum segment's flat-rolled aluminum product division.
- <sup>(2)</sup> Represents the elimination of Cost of goods sold related to intersegment sales between Bauxite and Alumina and between Alumina and Aluminum.
- <sup>(3)</sup> Provision for depreciation, depletion, and amortization is included in the operating costs used to calculate average cost for each of the bauxite, alumina, and primary aluminum product divisions (see Bauxite, Alumina, and Aluminum above). However, for financial reporting purposes, Provision for depreciation, depletion, and amortization is presented as a separate line item on Alcoa Corporation's Statement of Consolidated Operations.
- <sup>(4)</sup> Other includes costs related to Transformation, and certain other items that are not included in the operating costs of segments (see footnotes 1 and 3 in the Reconciliation of Total Segment Adjusted EBITDA to Consolidated Net (Loss) Income Attributable to Alcoa Corporation below).

## Reconciliation of Total Segment Adjusted EBITDA to Consolidated Net Loss (Income) Attributable to Alcoa Corporation

	Quarter ended		Nine months ended	
	September 30, 2022	June 30, 2022	September 30, 2022	September 30, 2021
Total Segment Adjusted EBITDA	\$ 236	\$ 944	\$ 2,193	\$ 1,978
Unallocated amounts:				
Transformation <sup>(1)</sup>	(19)	(11)	(44)	(34)
Intersegment eliminations	17	20	139	20
Corporate expenses <sup>(2)</sup>	(27)	(35)	(91)	(84)
Provision for depreciation, depletion, and amortization	(149)	(161)	(470)	(499)
Restructuring and other charges, net	(652)	75	(702)	(73)
Interest expense	(25)	(30)	(80)	(167)
Other expense (income), net	(35)	206	185	147
Other <sup>(3)</sup>	(75)	(100)	(188)	(18)
Consolidated (loss) income before income taxes	(729)	908	942	1,270
Provision for income taxes	(40)	(234)	(484)	(331)
Net (loss) income attributable to noncontrolling interest	23	(125)	(186)	(118)
Consolidated net (loss) income attributable to Alcoa Corporation	\$ (746)	\$ 549	\$ 272	\$ 821

(1) Transformation includes, among other items, the Adjusted EBITDA of previously closed operations.

(2) Corporate expenses are composed of general administrative and other expenses of operating the corporate headquarters and other global administrative facilities, as well as research and development expenses of the corporate technical center.

(3) Other includes certain items that are not included in the Adjusted EBITDA of the reportable segments.

### Environmental Matters

See the Environmental Remediation Matters section of Note P to the Consolidated Financial Statements in Part I Item 1 of this Form 10-Q.

### Liquidity and Capital Resources

Management believes that the Company's cash on hand, future operating cash flows, and liquidity options, combined with its strategic actions, are adequate to fund its short-term and long-term operating and investing needs. Further, the Company has no significant debt maturities until 2027 and no significant cash contribution requirements related to its U.S. pension plan obligations for the foreseeable future. However, the Company's access to, and the availability of, financing on acceptable terms in the future will be affected by many factors, including: (i) Alcoa Corporation's credit rating; (ii) the liquidity of the overall capital markets; (iii) the current state of the economy and commodity markets, and (iv) short- and long-term debt ratings. There can be no assurances that the Company will continue to have access to capital markets on terms acceptable to Alcoa Corporation.

On July 26, 2022, Moody's upgraded the rating of ANHBV's senior unsecured notes to Baa3 (investment grade) from Bal and set the current outlook to stable.

Changes in market conditions caused by global or macroeconomic events, such as the ongoing conflict between Russia and Ukraine, could have adverse effects on Alcoa's ability to obtain additional financing and cost of borrowing. Inability to generate sufficient earnings could impact the Company's ability to meet the financial covenants in our outstanding debt and revolving credit facility agreements and limit our ability to access these sources of liquidity or refinance or renegotiate our outstanding debt or credit agreements on terms acceptable to the Company. Additionally, the impact on market conditions from such events could adversely affect the liquidity of Alcoa's customers, suppliers, and joint venture partners and equity method investments, which could negatively impact the collectability of outstanding receivables and our cash flows.

In March 2022, in response to the conflict between Russia and Ukraine, the Company announced that it ceased the purchase of raw materials from and the sale of our products to Russian businesses and identified alternate source for securing the limited number of materials purchased from Russian suppliers. To date, these actions have not had a material impact on the Company's liquidity options or profile, and the Company continues to monitor the situation to address any impacts going forward.

### **Cash from Operations**

Cash provided from operations was \$704 in the nine-month period of 2022 compared to \$355 in the same period of 2021. Notable changes to sources and (uses) of cash include:

- \$148 higher net income generation, excluding the impacts from restructuring charges, primarily on higher aluminum and alumina prices, partially offset by higher energy and raw material costs;
- \$61 in certain working capital accounts (receivables from customers, inventories, and accounts payable, trade), primarily an increase in receivables balances on higher aluminum and alumina prices in the 2021 nine-month period, partially offset by an increase in inventories and accounts payable, trade on higher raw material and energy prices in the 2022 nine-month period;
- \$(340) in income taxes paid on prior year earnings, as well as on higher current year pre-tax income within its taxable jurisdictions, and;
- \$563 in lower contributions to the Company's defined benefit pension plans.

During 2022, AofA will continue to record its tax provision and tax liability without effect of the ATO assessment, since it expects to prevail. The tax payable will remain on AofA's balance sheet as a noncurrent liability, increased by the tax effect of subsequent periods' interest deductions, until dispute resolution, which is expected to take several years. At September 30, 2022, the noncurrent liability resulting from the cumulative interest deductions was approximately \$165 (A\$254). See description of the tax dispute in Note P to the Consolidated Financial Statements in Part I Item I of this Form 10-Q.

### **Financing Activities**

Cash used for financing activities was \$743 in the 2022 nine-month period compared with \$966 in the 2021 nine-month period.

The use of cash in the nine-month period of 2022 was primarily \$169 of net cash paid to Alumina Limited (see Noncontrolling interest in Results of Operations above), \$500 for the repurchase of common stock, and \$55 of dividends paid.

The use of cash in the nine-month period of 2021 was primarily \$775 for the full, early repayment of \$750 aggregate principal amount of 2024 Notes (including \$25 redemption premium) in April 2021, \$518 for the full, early repayment of \$500 aggregate principal amount of 2026 Notes (including \$18 redemption premium) in September 2021, \$169 in net cash paid to Alumina Limited (see Noncontrolling interest in Results of Operations above) and \$14 in financial contributions primarily related to the divested Spanish facilities. The uses of cash were partially offset by the issuance of \$500 aggregate principal amount 2029 Notes by ANHBV in March 2021 with net proceeds of approximately \$493.

The Company may determine in the future to repurchase portions of its outstanding notes from time to time in accordance with applicable SEC and other legal requirements and in consideration of market and other conditions.

### Credit Facilities

On June 27, 2022, Alcoa Corporation and ANHBV, a wholly owned subsidiary of Alcoa Corporation and the borrower, entered into an amendment and restatement agreement (the Third Amendment and Restatement) (as amended and restated, the Revolving Credit Facility) that provides additional flexibility to the Company and ANHBV by (i) extending the maturity date of the Revolving Credit Facility from November 2023 to June 2027, (ii) reducing the aggregate commitments under the facility from \$1,500 to \$1,250, (iii) releasing the collateral package that had previously secured the Revolving Credit Facility, which will continue so long as certain credit ratings are maintained, (iv) increasing the maximum leverage ratio from 2.75 to 1.00 to 3.25 to 1.00, which increases following material acquisitions for four consecutive fiscal quarters following an acquisition, (v) providing a debt to capitalization ratio not to exceed .60 to 1.00 to replace the maximum leverage ratio upon a ratings upgrade to investment grade by Moody's or S&P, and (vi) providing flexibility for dividends and other restricted payments, to make investments, and to incur additional indebtedness. The Revolving Credit Facility implements a sustainability adjustment to the applicable margin and commitment fee that may result in a positive or negative adjustment based on two of the Company's existing sustainability metrics.

If Alcoa Corporation or ANHBV, as applicable, fails to have a rating of at least Ba1 from Moody's and BB+ from S&P, then the Company would be required to execute all security documents to re-secure collateral under the Revolving Credit Facility.

On July 26, 2022, Moody's upgraded the rating of ANHBV's senior unsecured notes to Baa3 (investment grade) from Ba1 and set the current outlook to stable.

As of September 30, 2022, the Company was in compliance with all covenants. The Company may access the entire amount of commitments under the Revolving Credit Facility. There were no borrowings outstanding at September 30, 2022 and December 31, 2021, and no amounts were borrowed during the third quarter and nine-months ended 2022 and 2021 related to this facility.

### Dividend

On July 28, 2022, the Board of Directors declared a cash dividend of \$0.10 per share of the Company's common stock to stockholders of record as of the close of business on August 9, 2022. On August 25, 2022, the Company paid cash dividends of \$18.

### Common Stock Repurchase Program

In July 2022, the Company announced an additional \$500 share repurchase program. In the third quarter of 2022, the Company repurchased 2,992,100 shares of its common stock for \$150 under a prior authorization; the shares were immediately retired. The Company has remaining authorization to repurchase up to a total of \$500, in the aggregate, of its outstanding shares of common stock.

### **Investing Activities**

Cash used for investing activities was \$324 in the nine-month period of 2022 compared to cash provided from investing activities of \$471 for the same period of 2021.

In the nine-month period of 2022, the use of cash was primarily attributable to \$309 of capital expenditures and \$32 of cash contributions to the ELYSISTM joint venture, partially offset by the sale of the Company's interest in the MRN mine of \$10.

In the nine-month period of 2021, the source of cash was primarily attributable to proceeds from the sale of assets of \$715, primarily the Warrick Rolling Mill and Eastalco site sales, partially offset by \$237 in capital expenditures.

### **Recently Adopted and Recently Issued Accounting Guidance**

See Note B to the Consolidated Financial Statements in Part I Item 1 of this Form 10-Q.

### **Dissemination of Company Information**

Alcoa Corporation intends to make future announcements regarding company developments and financial performance through its website, <http://www.alcoa.com>, as well as through press releases, filings with the Securities and Exchange Commission, conference calls, and webcasts.



**Item 3. Quantitative and Qualitative Disclosures About Market Risk.**

See Quantitative and Qualitative Disclosures About Market Risk in Item 7A of Part II of our Annual Report on Form 10-K for the year ended December 31, 2021. Our exposure to market risk has not changed materially since December 31, 2021. Refer to Derivatives and Other Financial Instruments section of Note L to the Consolidated Financial Statements in Part I Item 1 of this Form 10-Q for additional information.

**Item 4. Controls and Procedures.****(a) Evaluation of Disclosure Controls and Procedures**

Alcoa Corporation's Chief Executive Officer and Chief Financial Officer have evaluated the Company's disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) of the U.S. Securities Exchange Act of 1934, as amended, as of the end of the period covered by this report, and they have concluded that these controls and procedures were effective as of September 30, 2022.

**(b) Changes in Internal Control over Financial Reporting**

There have been no changes in internal control over financial reporting during the third quarter of 2022, that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

## PART II – OTHER INFORMATION

### Item 1. Legal Proceedings.

In the ordinary course of its business, Alcoa is involved in a number of lawsuits and claims, both actual and potential. Various lawsuits, claims, and proceedings have been or may be instituted or asserted against Alcoa Corporation, including those pertaining to environmental, safety and health, commercial, tax, product liability, intellectual property infringement, employment, employee and retiree benefit matters, and other actions and claims arising out of the normal course of business. While the amounts claimed in these other matters may be substantial, the ultimate liability is not readily determinable because of the considerable uncertainties that exist. Accordingly, it is possible that the Company's liquidity or results of operations in a particular period could be materially affected by one or more of these other matters. However, based on facts currently available, management believes that the disposition of these other matters that are pending or asserted will not have a material adverse effect, individually or in the aggregate, on the financial position of the Company.

A discussion of our material pending lawsuits and claims can be found in Part I Item 3 Legal Proceedings of Alcoa Corporation's Annual Report on Form 10-K for the fiscal year ended December 31, 2021 and in Part II Item 1 Legal Proceedings of Alcoa Corporation's Quarterly Reports on Form 10-Q for the quarterly periods ended June 30, 2022 and March 31, 2022. See Part I Item 1 of this Form 10-Q in Note P to the Consolidated Financial Statements for additional information regarding legal proceedings.

### Item 1A. Risk Factors.

We face a number of risks that could materially and adversely affect our business, results of operations, cash flow, liquidity, or financial condition. A full discussion of our risk factors can be found in Part I Item 1A. Risk Factors of Alcoa Corporation's Annual Report on Form 10-K for the fiscal year ended December 31, 2021 and in Part II Item 1A Risk Factors of Alcoa Corporation's Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2022. Furthermore, impacts from the conflict between Russia and Ukraine and the continuing coronavirus (COVID-19) pandemic could exacerbate other risks discussed in our prior reports, any of which could have a material adverse effect on us. This situation is continuously evolving, and additional impacts may arise of which we are not currently aware.

The information provided below updates, and should be read in conjunction with, the risks factors and information disclosed in Alcoa Corporation's Annual Report on Form 10-K for the fiscal year ended December 31, 2021 and other filings with the SEC. Except as presented below, there have been no material changes to the risk factors disclosed in Alcoa Corporation's Annual Report on Form 10-K for the fiscal year ended December 31, 2021 and Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2022.

***Our operations and profitability have been and could continue to be adversely affected by unfavorable changes in the cost, quality, or availability of raw materials or other key inputs, or by disruptions in the supply chain.***

Our business, financial condition, and results of operations have been and could continue to be negatively affected by unfavorable changes in the cost, quality, or availability of energy, raw materials, including carbon products, caustic soda, and other key inputs, such as bauxite, as well as freight costs associated with transportation of raw materials and key inputs to refining and smelting locations. We may not be able to fully offset the effects of higher raw material or energy costs through price increases, productivity improvements, cost reduction programs, or reductions or curtailments to production at our operations. A decrease in the quality of raw materials or key inputs has in the past and could continue to cause increased production costs, which also has in the past and could continue to result in lower production volumes. Changes in the costs of bauxite, alumina, energy and other inputs during a particular period may not be adequate to offset concurrent sharper decreases in the price of alumina or aluminum and could have a material adverse effect on our operating results.

In addition, due to global supply chain disruptions, we may not be able to obtain sufficient supply of our raw materials, energy, or other key inputs in a timely manner, including due to shortages, inflationary cost pressures, or transportation delays, which could cause disruption in our operations or production curtailments. Though we have been able to source our raw materials and other key inputs in adequate amounts from other suppliers or our own stockpiles to date, there can be no guarantee that our operations or profitability will not be adversely affected in the future. Our suppliers, vendors, and customers could experience similar constraints that could impact our operations and profitability.

**Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.**Issuer Purchases of Equity Securities

The table below sets forth information regarding the repurchase of shares of our common stock during the periods indicated.

<b>Period</b>	<b>Total Number of Shares Purchased</b>	<b>Weighted Average Price Paid Per Share</b>	<b>Total Number of Shares Purchased as Part of Publicly Announced Programs</b>	<b>Approximate Dollar Value of Shares that May Yet be Purchased Under the Programs (1)</b>
July 1 to July 31	—	\$ —	—	\$ 650,000,000
August 1 to August 31	1,454,800	51.55	1,454,800	575,000,000
September 1 to September 30	1,537,300	48.80	1,537,300	500,000,000
<b>Total</b>	<b>2,992,100</b>	<b>50.14</b>	<b>2,992,100</b>	

- (1) On October 14, 2021, Alcoa Corporation announced that its Board of Directors approved a common stock repurchase program under which the Company may purchase shares of its outstanding common stock up to an aggregate transactional value of \$500, depending on cash availability, market conditions, and other factors.

On July 20, 2022, Alcoa Corporation announced that its Board of Directors approved an additional common stock repurchase program under which the Company may purchase shares of its outstanding common stock up to an aggregate transactional value of \$500, depending on the Company's continuing analysis of market, financial, and other factors (the New Repurchase Program).

In the third quarter of 2022, the Company repurchased 2,992,100 shares of its common stock for \$150 (weighted average share price of \$50.14 (includes \$0.02 broker commission)).

As of the date of this report, the Company is currently authorized to repurchase up to a total of \$500, in the aggregate, of its outstanding shares of common stock under the New Repurchase Program. Repurchases under this program may be made using a variety of methods, which may include open market purchases, privately negotiated transactions, or pursuant to a Rule 10b5-1 plan. This program may be suspended or discontinued at any time and does not have a predetermined expiration date. Alcoa Corporation intends to retire repurchased shares of common stock.

**Item 6. Exhibits.**

10.1	<a href="#"><u>Alcoa Corporation Non-Employee Director Compensation Policy, effective September 28, 2022 (filed herewith)</u></a>
31.1	<a href="#"><u>Certification of Principal Executive Officer required by Rule 13a-14(a) or 15d-14(a)</u></a>
31.2	<a href="#"><u>Certification of Principal Financial Officer required by Rule 13a-14(a) or 15d-14(a)</u></a>
32.1	<a href="#"><u>Certification of Principal Executive Officer required by Rule 13a-14(b) or Rule 15d-14(b) and Section 1350 of Chapter 63 of Title 18 of the United States Code</u></a>
32.2	<a href="#"><u>Certification of Principal Financial Officer required by Rule 13a-14(b) or Rule 15d-14(b) and Section 1350 of Chapter 63 of Title 18 of the United States Code</u></a>
101.INS	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

October 27, 2022

\_\_\_\_\_  
Date

Alcoa Corporation

\_\_\_\_\_  
/s/ William F. Oplinger

William F. Oplinger  
Executive Vice President and  
Chief Financial Officer  
(Principal Financial Officer)

October 27, 2022

\_\_\_\_\_  
Date

\_\_\_\_\_  
/s/ Molly S. Beerman

Molly S. Beerman  
Senior Vice President and Controller  
(Principal Accounting Officer)

## ALCOA CORPORATION

## NON-EMPLOYEE DIRECTOR COMPENSATION POLICY

Effective September 28, 2022

1. General. This Non-Employee Director Compensation Policy (the “Policy”), sets forth the cash and equity-based compensation that has been approved by the Board of Directors (the “Board”) of Alcoa Corporation, a Delaware corporation (the “Company”), as payable to eligible non-employee members of the Board (“Non-Employee Directors”) commencing September 28, 2022. The cash and equity-based compensation described in this Policy shall be paid or be made, as applicable, automatically and without further action of the Board, to each Non-Employee Director who may be eligible to receive such compensation. This Policy shall remain in effect until it is revised or rescinded by further action of the Board.

2. Cash Compensation.

(a) Annual Retainers. Each Non-Employee Director shall be eligible to receive an annual cash retainer of \$130,000 for service on the Board. In addition, a Non-Employee Director shall receive the following additional annual retainers, as applicable:

Non-Employee Director Position	Additional Annual Cash Retainer Fee
Non-Executive Chairman Fee	\$150,000
Audit Committee Chair Fee (includes Audit Committee Member Fee)	\$27,500
Audit Committee Member Fee	\$11,000
Compensation and Benefits Committee Chair Fee	\$20,000
Other Committee Chair Fee	\$16,500

(b) Payment of Retainers. The annual retainers described in Section 2(a) shall be earned on a quarterly basis based on a calendar quarter and shall be paid by the Company in arrears not later than the third business day following the end of each calendar quarter (if not deferred by the Non-Employee Director in accordance with subsection (c) hereof). In the event a Non-Employee Director does not serve as a Non-Employee Director, or in the applicable positions described in Section 2(a), for an entire calendar quarter, the retainer paid to such Non-Employee Director shall be prorated for the portion of such calendar quarter actually served as a Non-Employee Director, or in such positions, as applicable.

(c) Deferral of Retainers. Non-Employee Directors may elect to defer payment of all or a portion of the annual retainers described in Section 2(a) into specified investment funds and/or into vested restricted share units for shares of the Company’s common stock, which deferral will be made pursuant to the terms of the Company’s 2016 Deferred Fee Plan for Directors, as may be amended from time to time, or its successor plan (the “Deferred Fee Plan”). Unless otherwise determined by the Board, any restricted share units will be granted under the Alcoa Corporation 2016 Stock Incentive Plan or its successor plan (the “Equity Plan”), on the date on which such retainer(s) would otherwise have been paid in cash.

3. Equity Compensation. Non-Employee Directors shall be granted the equity awards described below. The awards described below in paragraphs 3(a) and 3(b) shall be granted under and shall be subject to the terms and provisions

of the Equity Plan and shall be granted subject to an award agreement in substantially the same form approved by the Board on or prior to the grant date, setting forth the terms of the award, consistent with the Equity Plan. For purposes of this Section 3, the number of shares subject to any restricted share unit award will be determined by dividing the grant date dollar value specified under subsection (a) or (b) hereof by the Fair Market Value (as defined in the Equity Plan) of a share of the Company's common stock on the grant date.

(a) Annual Equity Award. A person who is a Non-Employee Director immediately following each annual meeting of the Company's stockholders and who will continue to serve as a Non-Employee Director following such annual meeting shall be automatically granted, on the second market trading day following the date of each such annual meeting, a restricted share unit award with a grant date value equal to \$160,000 (the "Annual Equity Award"). The Annual Equity Award shall vest on the earlier of the first anniversary date of the grant date or the date of the Company's next subsequent annual meeting of stockholders following the grant date.

(b) Pro-Rated Annual Equity Award. On the date of a person's initial appointment as a Non-Employee Director (or, if such date is not a market trading day, the first market trading day thereafter), and provided such person has not otherwise received an Annual Equity Award for the relevant year under Section 3(a), the Non-Employee Director shall be automatically granted a restricted share unit award with a grant date value equal to \$160,000 multiplied by a fraction, the numerator of which is 365 less the number of days that have elapsed since the date of the Company's last annual meeting of stockholders and the Non-Employee Director's date of initial appointment, and the denominator of which is 365 (the "Pro-Rated Award"). The Pro-Rated Award shall vest on the date of the Company's next subsequent annual meeting of stockholders following the date of the Non-Employee Director's appointment to the Board.

(c) Deferral of Equity Award. Payment of the Annual Equity Award or any Pro-Rated Award will be deferred until the Non-Employee Director's separation from service, in accordance with the terms of the Deferred Fee Plan, unless otherwise required by applicable laws.

4. Stock Ownership Guideline. Non-Employee Directors are required to attain ownership of at least \$750,000 in the Company's common stock and maintain such ownership until retirement from the Board.

5. Policy Subject to Amendment, Modification and Termination. This Policy may be amended, modified or terminated by the Board in the future at its sole discretion, provided that no such action that would materially and adversely impact the rights with respect to annual retainers payable in the fiscal quarter during which a Non-Employee Director is then performing services shall be effective without the consent of the affected Non-Employee Director.

**Certifications**

I, Roy C. Harvey, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Alcoa Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: October 27, 2022

/s/ ROY C. HARVEY

Name: Roy C. Harvey

Title: President and Chief Executive Officer



**Certifications**

I, William F. Oplinger, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Alcoa Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: October 27, 2022

/s/ WILLIAM F. OPLINGER

Name: William F. Oplinger

Title: Executive Vice President and Chief Financial Officer

**Certification**  
**Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code), the undersigned officer of Alcoa Corporation, a Delaware corporation (the "Company"), does hereby certify that:

1. The Quarterly Report on Form 10-Q for the quarter ended September 30, 2022 (the "Form 10-Q") of the Company fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and,
2. The information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: October 27, 2022

/s/ ROY C. HARVEY

Name: Roy C. Harvey

Title: President and Chief Executive Officer

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

The foregoing certification is being furnished to the Securities and Exchange Commission as an exhibit to the Form 10-Q and shall not be considered filed as part of the Form 10-Q.

**Certification**  
**Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code), the undersigned officer of Alcoa Corporation, a Delaware corporation (the "Company"), does hereby certify that:

1. The Quarterly Report on Form 10-Q for the quarter ended September 30, 2022 (the "Form 10-Q") of the Company fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and,
2. The information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: October 27, 2022

/s/ WILLIAM F. OPLINGER

Name: William F. Oplinger

Title: Executive Vice President and Chief Financial Officer

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

The foregoing certification is being furnished to the Securities and Exchange Commission as an exhibit to the Form 10-Q and shall not be considered filed as part of the Form 10-Q.