4th Quarter Earnings

Alcoa Corporation

JANUARY 19, 2022

Alcoa

Cautionary Statement regarding Forward-Looking Statements

This presentation 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 “anticipates,” “endeavors,” “working,” “potential,” “ambition,” “develop,” “reach,” “believes,” “could,” “estimates,” “expects,” “forecasts,” “goal,” “intends,” “may,” “outlook,” “plans,” “projects,” “seeks,” “sees,” “should,” “targets,” “will,” “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; 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 of the coronavirus (COVID-19) pandemic and related regulatory developments on the global economy and our business, financial condition, results of operations, or cash flows and judgments and assumptions used in our estimates; (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) deterioration in global economic and financial market conditions generally and 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) increases in energy or raw material costs or uncertainty of energy supply or raw materials; (g) 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; (h) the inability to achieve improvement in profitability and margins, cost savings, cash generation, revenue growth, fiscal discipline, sustainability targets, or strengthening of competitiveness and operations anticipated from portfolio actions, operational and productivity improvements, technology advancements, and other initiatives; (i) 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; (j) political, economic, trade, legal, public health and safety, and regulatory risks in the countries in which Alcoa Corporation operates or sells products; (k) labor disputes and/or work stoppages and strikes; (l) the outcome of contingencies, including legal and tax proceedings, government or regulatory investigations, and environmental remediation; (m) the impact of cyberattacks and potential information technology or data security breaches; (n) risks associated with long-term debt obligations; (o) the timing and amount of future cash dividends and share repurchases; 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, 2020 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.

Important information

Non-GAAP Financial Measures

Some of the information included in this presentation is derived from Alcoa Corporation's consolidated financial information but is not presented in Alcoa Corporation's financial statements prepared in accordance with accounting principles generally accepted in the United States of America (GAAP). Certain of these data are considered "non-GAAP financial measures" under SEC regulations. Alcoa Corporation believes that the presentation of non-GAAP financial measures is useful to investors because such measures provide both additional information about the operating performance of Alcoa Corporation and insight on the ability of Alcoa Corporation to meet its financial obligations by adjusting the most directly comparable GAAP financial measure for the impact of, among others, "special items" as defined by the Company, non-cash items in nature, and/or nonoperating expense or income items. The presentation of non-GAAP financial measures is not intended to be a substitute for, and should not be considered in isolation from, the financial measures reported in accordance with GAAP. Reconciliations to the most directly comparable GAAP financial measures and management's rationale for the use of the non-GAAP financial measures can be found in the appendix to this presentation.

Resources

This presentation can be found under the "Events and Presentations" tab of the "Investors" section of the Company's website, www.alcoa.com.

Roy Harvey

President and Chief Executive Officer

Alcoa

Finishing a very strong year with a productive fourth quarter

Alcoa values, strategic priorities, and key takeaways for 4Q21

OUR VALUES

Act with Integrity

Operate with Excellence

Care for People

Lead with Courage

4Q21 Takeaways

- Continued focus on safety initiatives and eliminating serious injuries
- Net loss attributable to Alcoa of $392 million, Adjusted net income of $475 million and Adjusted EBITDA excluding special items of $896 million
- Paid first quarterly cash dividend and repurchased 3.2 million shares
- Continued strategic actions: sold Rockdale site for $240 million, announced the curtailment of San Ciprián smelter, closure of Wenatchee smelter and restart of 19 kmt/year (Alcoa share) at Portland smelter
- Reduced total debt to $1.8 billion and proportional adjusted net debt to $1.1 billion
- Lowered pension risk by annuitizing $1.5 billion of U.S. gross pension liability, with no cash outlay, and adjusting asset allocation
- Announced ambition to achieve net zero greenhouse gas emissions by 2050 and held first investor day, announcing path to an even more sustainable Alcoa and aluminum industry
- Strong aluminum fundamentals continuing to support highest price levels since 2008

William Oplinger

Executive Vice President and Chief Financial Officer

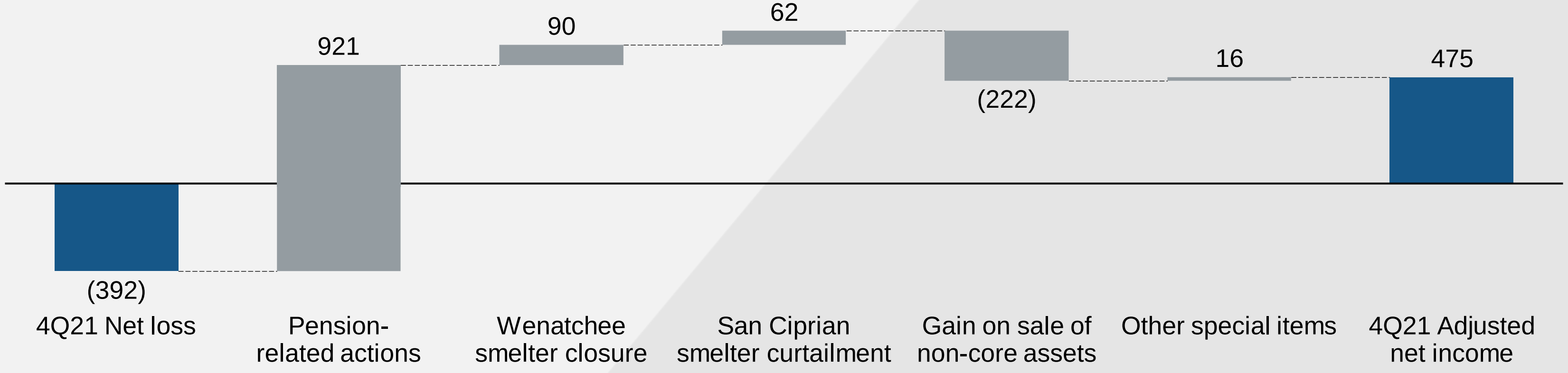
Alcoa

Quarterly Adjusted EBITDA excluding special items of $896M

Quarterly and full year income statement highlights

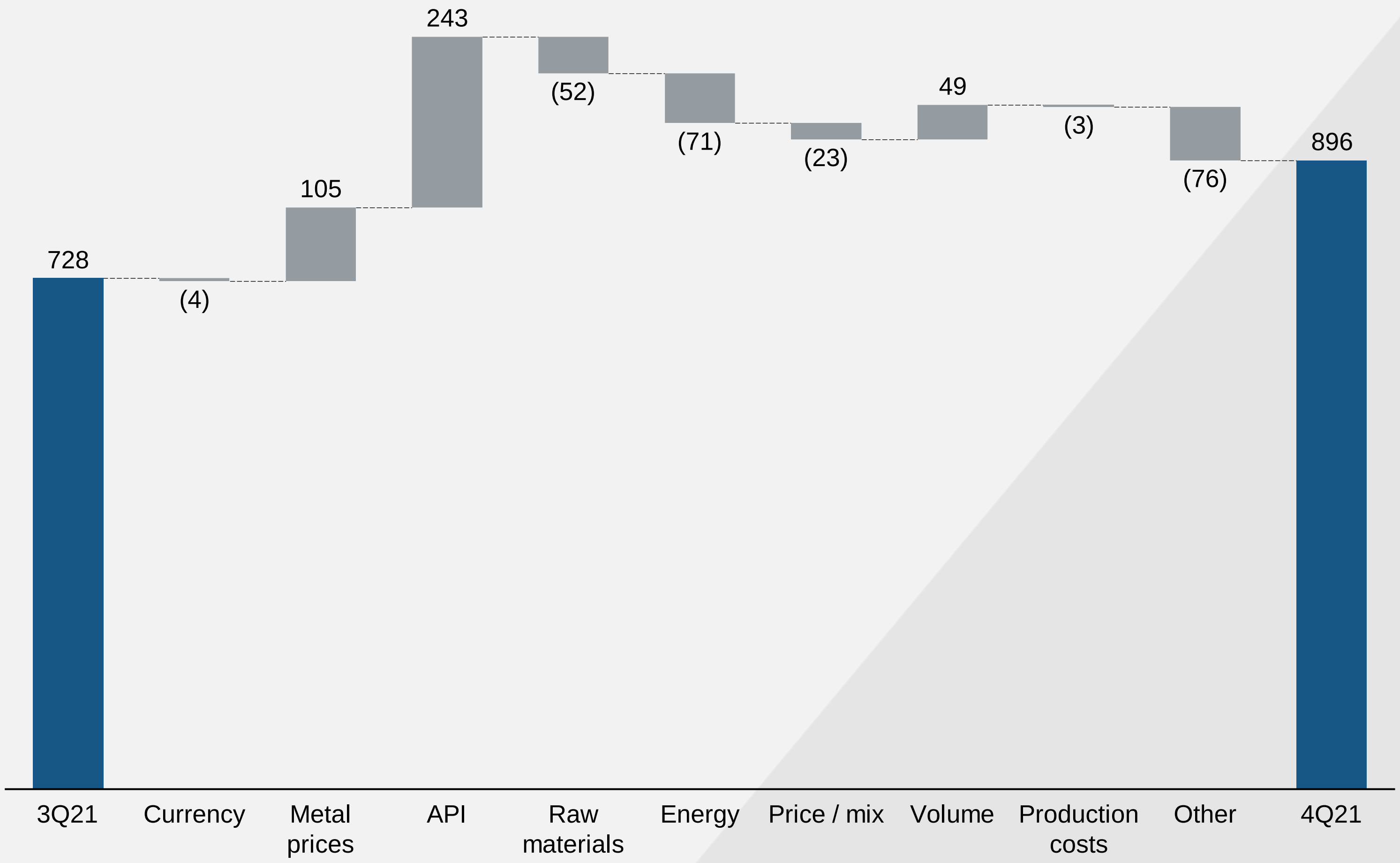
M, Except per share amounts	4Q20	3Q21	**4Q21**	FY20	FY21
Income statement highlights					
Revenue	$2,392	$3,109	**$3,340**	$9,286	$12,152
Net (loss) income attributable to Alcoa Corporation	$(4)	$337	**$(392)**	$(170)	$429
Diluted (loss) earnings per share	$(0.02)	$1.76	**$(2.11)**	$(0.91)	$2.26
Adjusted income statement highlights					
Adjusted EBITDA excluding special items	$361	$728	**$896**	$1,151	$2,763
Adjusted net income (loss) attributable to Alcoa Corporation	$49	$391	**$475**	$(215)	$1,297
Adjusted diluted earnings (loss) per share	$0.26	$2.05	**$2.50**	$(1.16)	$6.83

Sequential quarter special items bridge, $M



Favorable alumina, metal prices drive Adjusted EBITDA higher

Adjusted EBITDA excluding special items sequential changes, $M

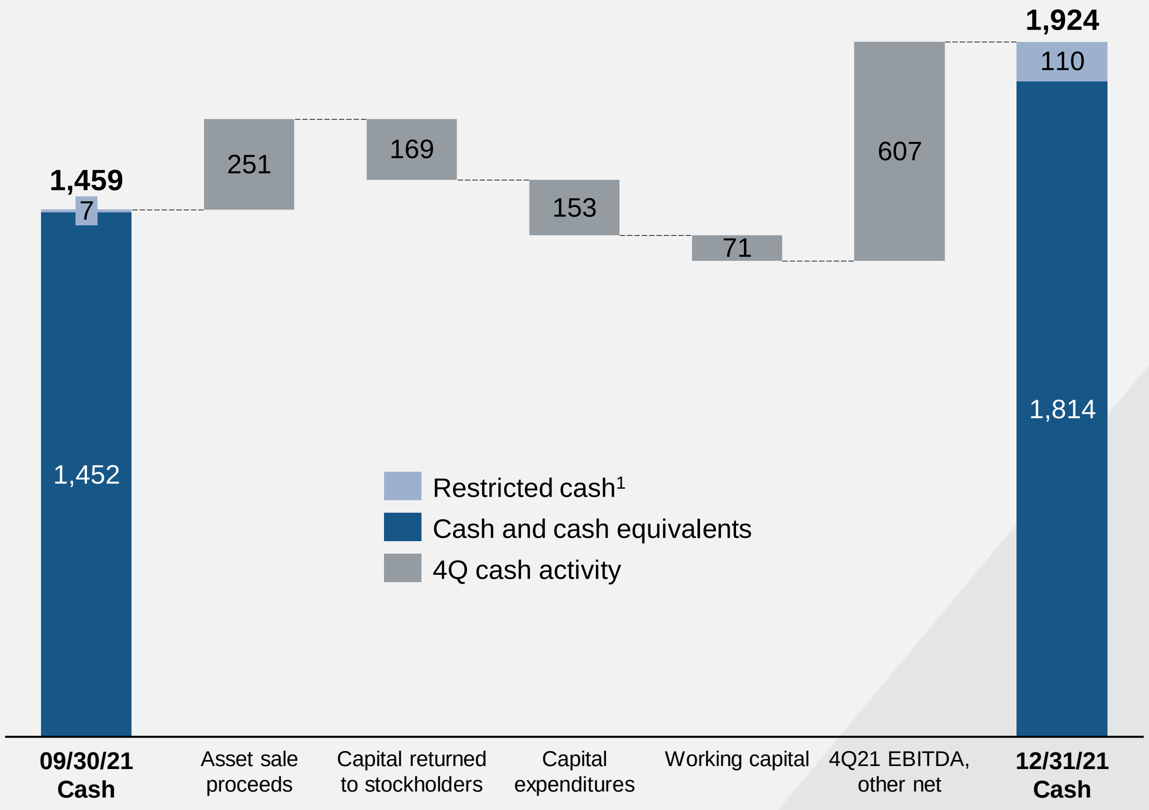


	3Q21	4Q21	Change
Bauxite	$23	$49	$26
Alumina	148	503	355
Aluminum	613	523	(90)
Segment total	784	1,075	291
Transformation	(10)	(10)	0
Intersegment eliminations	(8)	(121)	(113)
Other corporate	(38)	(48)	(10)
Total	$728	$896	$168

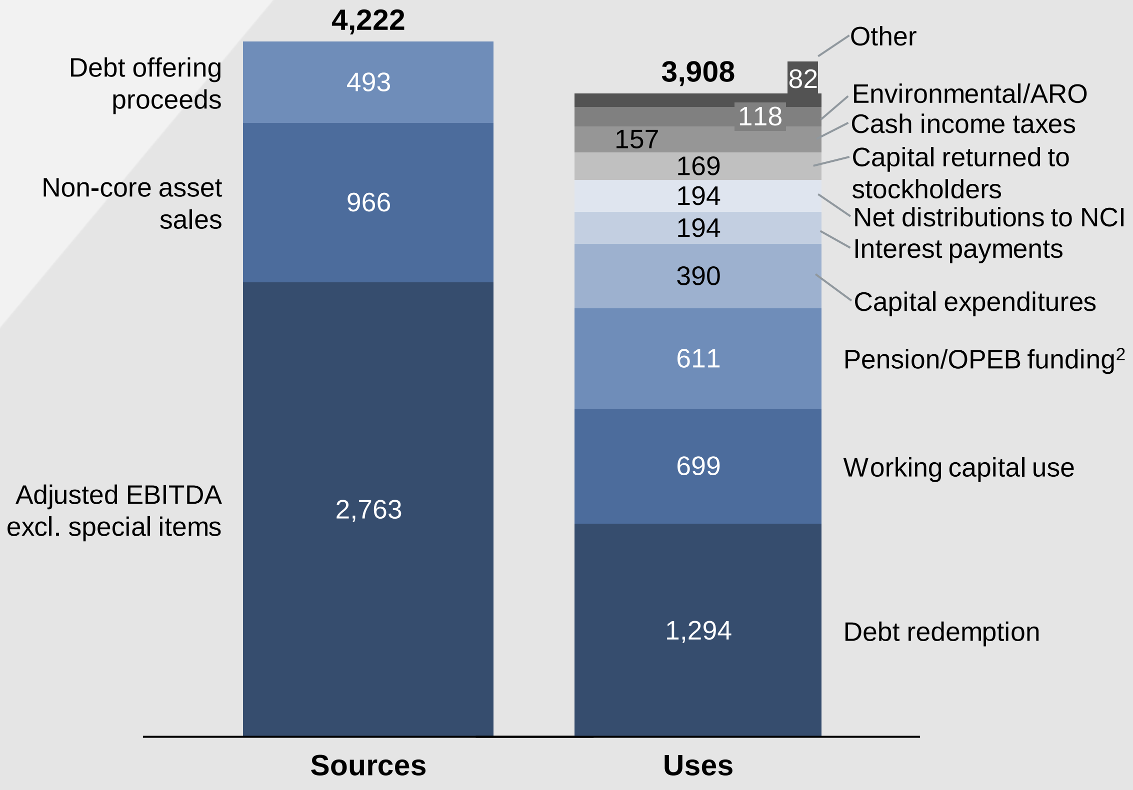
Continued strong cash flows support capital returns

Sequential quarterly and 2021 cash flow information

9/30/21 to 12/31/21 Cash changes, $M



2021 Cash flow information, $M



1. Restricted cash relates primarily to the San Ciprian smelter two year curtailment agreement
2. Pension/OPEB funding of $611 million is reflected net of $26 million related expenses within Adjusted EBITDA

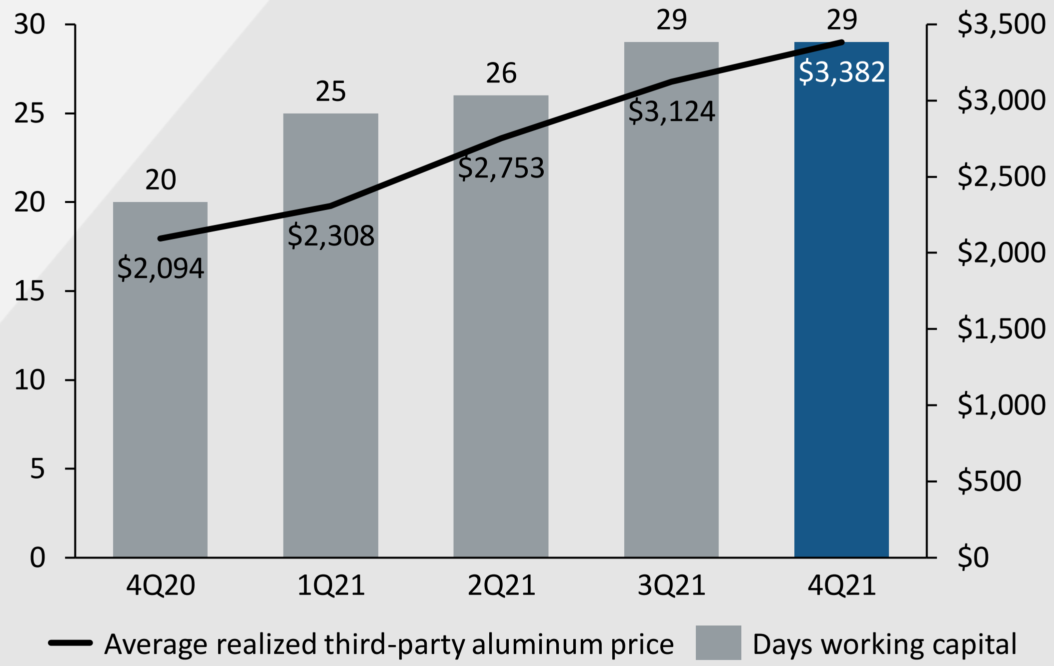
Return on equity 33%, Proportional adjusted net debt $1.1B

Key financial metrics and days working capital

Key financial metrics

FY21 Days working capital (DWC)	FY21 Return on equity
29 Days	**33.4%**
FY21 Capital expenditures	**4Q21 Proportional adjusted net debt**
$390M	**$1.1B**
FY21 Free cash flow less net NCI distributions	**4Q21 Cash balance**
$336M[1]	**$1.9B[2]**

Days working capital and aluminum pricing



- Metal and alumina prices driving YTD increase in days working capital
- 4Q20 and 4Q21 include ~3 days of working capital related to San Ciprián strikes

1. Includes $500 million pension funding in 2Q21
2. Includes $110 million in restricted cash

U.S. pension gross liability declines 42% in FY21

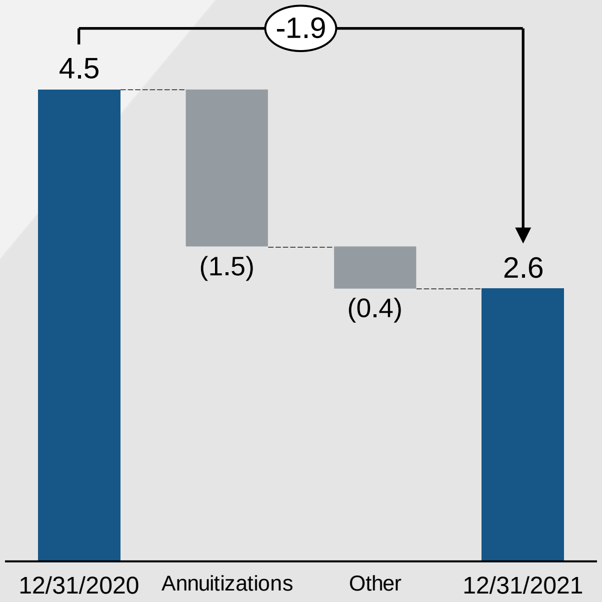
Summary of annuitizations and other impacts on U.S. qualified pension plans

Annuitization process

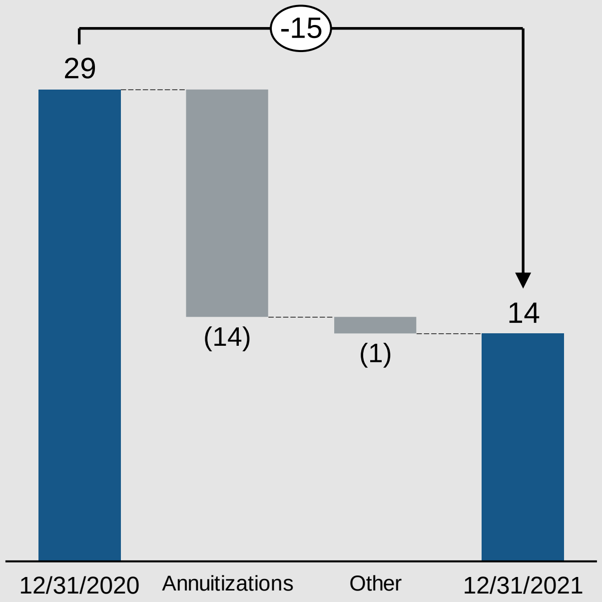
- Transferred $1.5 billion in U.S. gross pension liabilities related to ~14,000 pensioners to Athene Annuity and Life Company in the fourth quarter
- Secured highly competitive pricing for both transactions
- No cash used; used portion of prefunding balance to meet funding requirements, so no material impact on cash or proportional adjusted net debt; non-cash charge of $848 million in 4Q21
- Other reductions in U.S. pension due to benefit payments and assumption changes
- U.S. qualified pension liabilities ~100% funded

U.S. pension metrics (12/31/20 to 12/31/21)

U.S. gross pension liabilities, $B



U.S. pensioners, 000s



2022 Outlook

FY21 and FY22 Key metrics

Income statement excl. special items impacts

	FY21 Actual	FY22 Outlook
Bauxite shipments (Mdmt)	48.1	48.0 – 49.0
Alumina shipments (Mmt)	13.9	14.2 – 14.4
Aluminum shipments (Mmt)	3.0	2.5 – 2.6
Transformation (adj. EBITDA impacts)	$(44)M	~ $(75)M
Intersegment elims. (adj. EBITDA impacts)	$(101)M	Varies
Other corporate (adj. EBITDA impacts)	$(145)M	~ $(140)M
Depreciation, depletion and amortization	$664M	~ $645M
Non-operating pension/OPEB expense	$47M	~ $65M
Interest expense	$141M	~ $105M
Operational tax expense[1]	$522M	Varies
Net income of noncontrolling interest	$207M	40% of AWAC NI

Cash flow impacts

	FY21 Actual	FY22 Outlook
Pension / OPEB required cash funding	$137M	~ $75M
Additional pension funding (April 2021)	$500M	Will vary based on market conditions and cash availability
Early debt repayment (April, September 2021)	$1,250M	
Stock repurchases and dividends	$169M	
Return-seeking capital expenditures[2]	$34M	~ $75M
Sustaining capital expenditures[2]	$356M	~ $450M
Payment of prior year income taxes[3]	$33M	~ $325M
Current period cash taxes[1]	$124M	Varies
Environmental and ARO payments[4]	$118M	~ $160M
Impact of restructuring and other charges	$30M	TBD

Note: The COVID-19 pandemic has increased the potential for variance of actual results compared to our outlook.
Additional market sensitivities and business information are included in appendix.

1. Estimate will vary with market conditions and jurisdictional profitability.
2. AWAC portion of FY22 outlook: ~55% of return-seeking capital expenditures and ~65% of sustaining capital expenditures.
3. Net of pending tax refunds.
4. As of December 31, 2021, the environmental remediation reserve balance was $309M and the ARO liability was $738M.

Roy Harvey

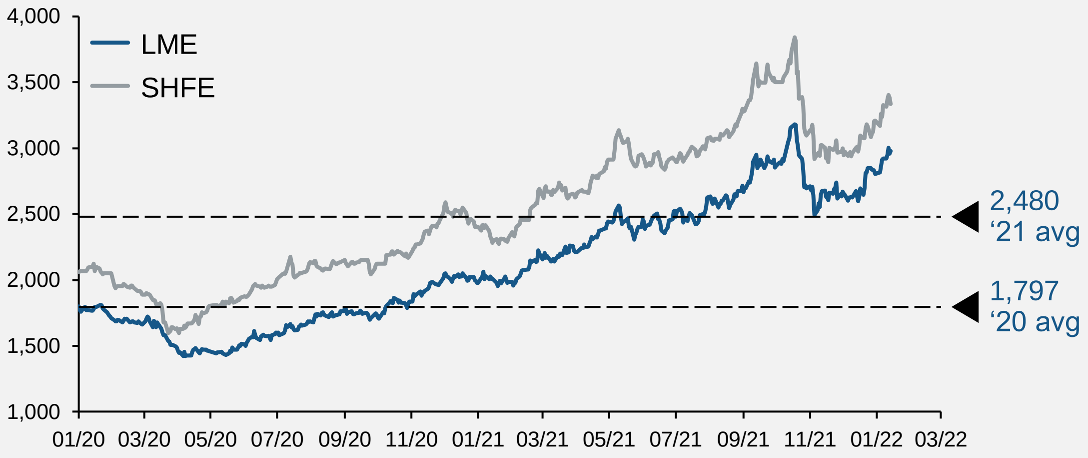
President and Chief Executive Officer

Alcoa

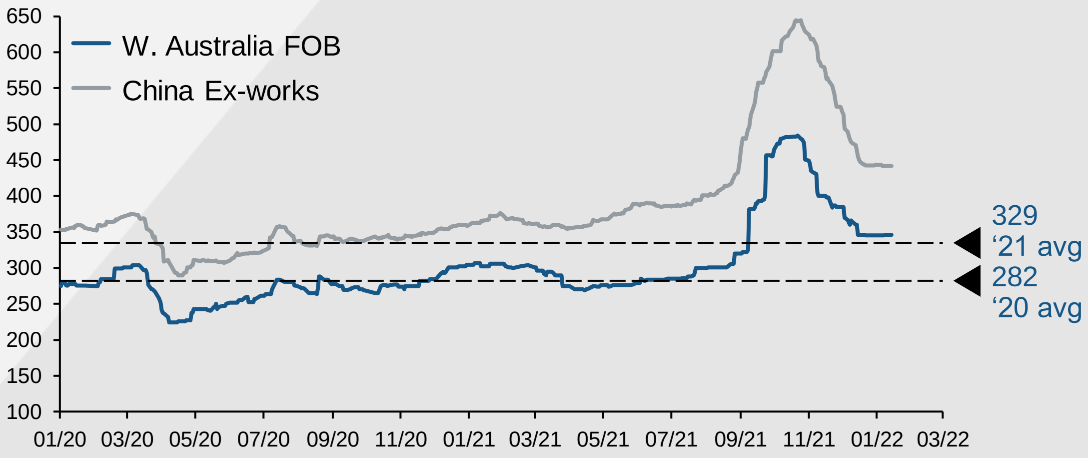
Higher prices reflect structural shift in fundamentals

Aluminum and alumina price environment and market commentary

Aluminum prices ($/tonne)



Alumina prices ($/tonne)



Market dynamics

- China continues to enforce capacity limitations
- Demand growth remains positive despite automotive supply chain challenges
- Price support from supply constraints, lower inventories, and high transportation costs

Commercial

- Alloy shortages and pricing have eased since 4Q peaks
- Annual 2022 value add product negotiations concluded with favorable year over year pricing
- Well-positioned as domestic supplier vs. import competition

Market dynamics

- Alumina production in China in flux due to environmental policy (winter heating season, upcoming Winter Olympics)
- 2021 ex-China disruptions resolving

Commercial

- Alcoa's lower relative caustic usage and integrated bauxite supply chain a competitive advantage

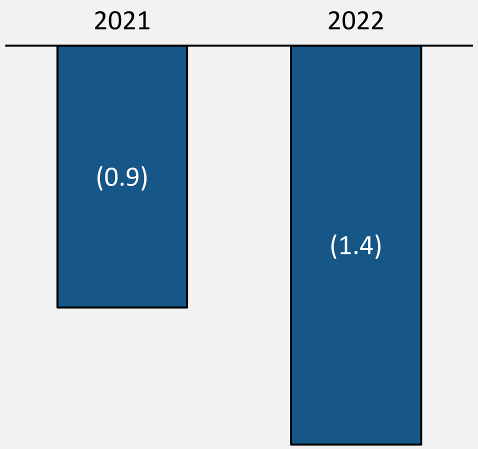
Source: LME, SHFE, Platts. SHFE and China Ex-Works prices include value-added tax (VAT). Prices updated through January 14, 2022.

2022 deficit projected as European smelters cut production

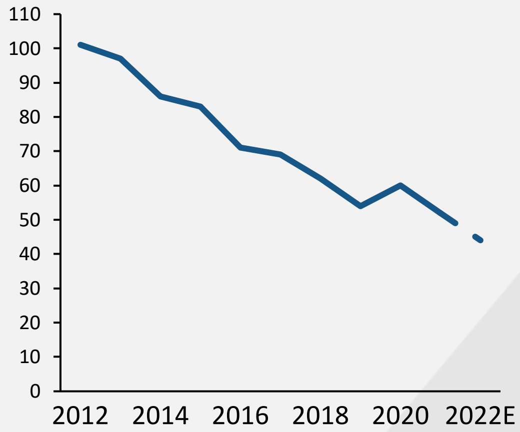
Primary aluminum market fundamentals

2nd consecutive year of deficits, stocks remain low

Analysts’ view – mean global balance,[1] Mmt

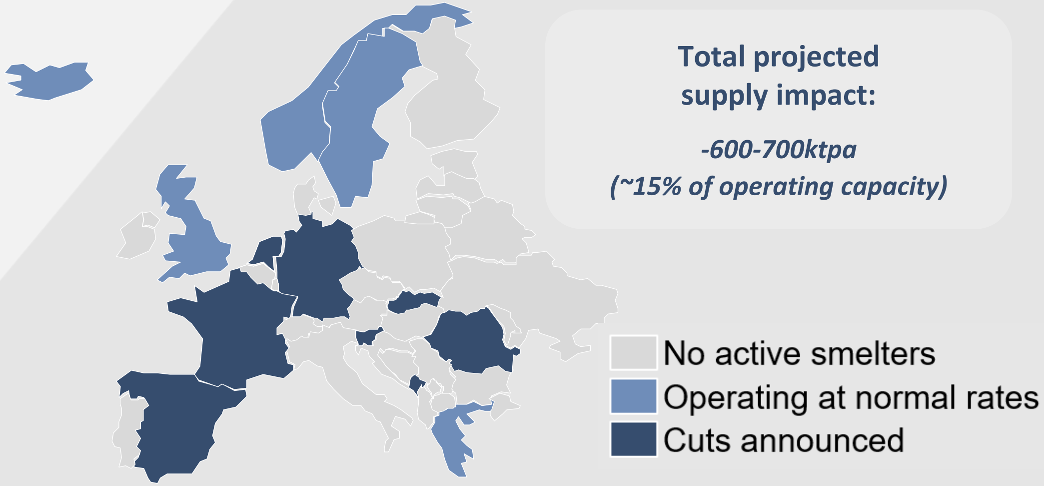


Global stocks, days of consumption[2]



- 2022 market likely to be in deficit
  - Positive global demand growth expectation (2022 vs. 2021)
  - Supply constraints due to energy issues, environmental policy
  - China to remain in primary aluminum structural deficit (approx. 1-2 Mtpa)
- Inventory days of consumption at decade low levels
- Industry costs increase vs. 2021 average

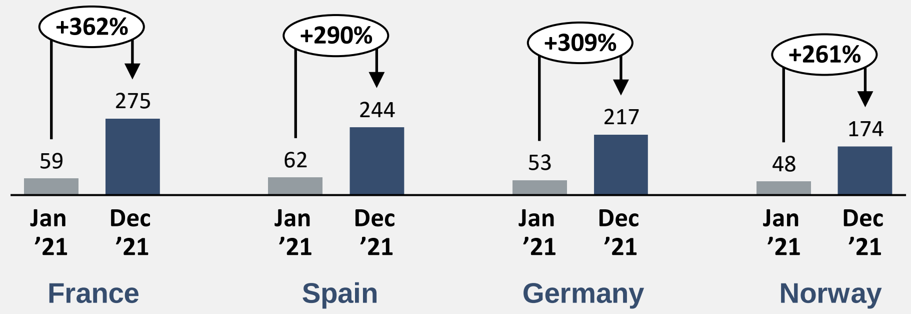
High power prices driving European smelter cuts[3]



Total projected supply impact:

-600-700ktpa
(~15% of operating capacity)

Average spot power rates, €/MWh



Sources: Alcoa analysis, CRU, Citi, CRU, Morgan Stanley, Goldman Sachs, Deutsche Bank, Nordpool, Energy-Charts, OMIE. 1. Balance views from five selected analyst reports in Nov/Dec 2021. 2. Estimate of year-end primary inventories at end of year, excl. fake semis. 3. Cuts announced since 1H2021.

Reached agreement on future of San Ciprián smelter

Details of San Ciprián smelter curtailment agreement and Spanish power market

Key points of curtailment agreement

- Two year curtailment of smelter with restart in January 2024
- Seeking competitive long term power purchase agreement for restart
- Committed $68 million for capital investments and $35 million for restart costs; restructuring charges of $62 million in 4Q21
- Provides smelter employees full wages, benefits and new CBA with no collective dismissal process until December 31, 2025 at the earliest
- Immediate cessation of strike action; casthouse and refinery to continue to operate
- While curtailed, expect annual net losses of $20 million to $25 million in both 2022 and 2023

Spanish electricity market dynamics

- Spanish power prices hit all time highs in late 2021, with December 2021 averaging 244 €/mwh
- San Ciprián smelter buys power at rates approximating market, so exposed to power market volatility
- Near term market prices expected to remain at high levels until additional resources come online

1. Source: OMIE – Market operator

2021 Accomplishments position us well for the future

Highlighting notable 2021 actions

OUR VALUES

Act with Integrity

Operate with Excellence

Care for People

Lead with Courage

Commercial

- Made first EcoSource™ third party alumina shipments
- Announced sales of EcoLum™ and ELYSIS™ metal for Audi Etron GT

Operational

- Received additional ASI certifications at two Canadian locations; 15 locations now certified
- Successfully completed Willowdale mine move to Larego from Orion
- Deployed an operational risk management system
- Set various annual and quarterly production records across the globe

Portfolio transformation

- Repowered Portland aluminum smelter
  Alcoa share: 197 kmt/year
- Restart announced for Alumar aluminum smelter
  Alcoa share: 268 kmt/year
- Announced closure of Wenatchee aluminum smelter
  Alcoa share: 146 kmt/year
- Announced two-year curtailment for San Ciprián aluminum smelter
  Alcoa share: 228 kmt/year

Future-oriented R&D

- Announced Refinery of the Future project which includes mechanical vapor recompression (MVR) and electric calcination innovations
- Sales of ELYSIS™ carbon-free aluminum continue as construction of 450ka prototype cells underway
- Announced joint development project for high purity alumina production
- Announced ASTRAEA™ post-consumer aluminum scrap purification project

Financial

- Closed debt offering for $500 million of 4.125% notes due in 2029
- Redeemed $750 million of 6.75% notes due in 2024 and $500 million of 7.00% notes due in 2026
- Funded $500 million into U.S. pension plan, closed $1.5 billion pension annuitizations
- Paid first quarterly cash dividend of $0.10 per share; repurchased 3.2 million shares; FY21 ROE 33%
- Reduced proportional adj. net debt to $1.1 billion
- Received cash proceeds of ~$1.0 billion from selling the Warrick rolling mill, former Eastalco smelter site, and Rockdale site

Key initiatives in 2022

Key operational, commercial, financial and technology initiatives in 2022

Operational, commercial and financial

- Restart Alumar smelter (Alcoa share 268 kmt/year); first metal expected 2Q22; restarted production based on renewable energy
- Complete San Ciprian curtailment and resolve energy solution for restart in 2024
- Restart a portion of Portland smelter (Alcoa share 19 kmt/year) with expected production in 3Q22; continue investigation of renewable energy sources
- Implement major capital programs including Juruti mine move and residue filtration and storage projects
- Investigate further pension annuitization and risk reduction opportunities as market conditions allow

Overview of future-oriented R&D programs

ELYSIS™
inert anode solution

- In 2022, will begin detailed planning to scale-up the supply chain; will commence facility design and engineering
- Working on the scale-up towards the 2023 demonstration of commercial sized 450kA cells in Quebec

ASTRAEA™
post-consumer scrap recycling

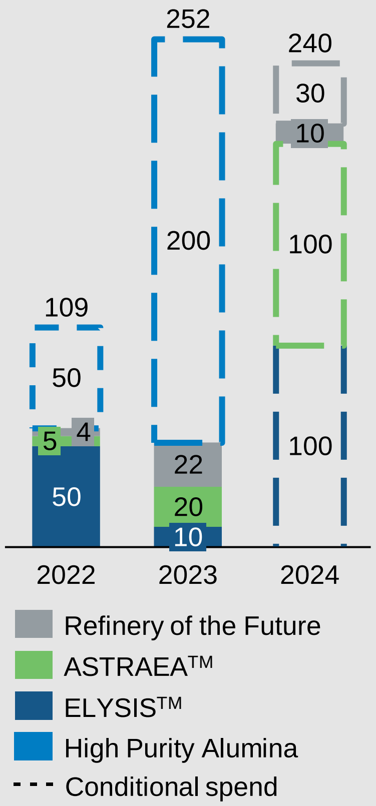
- At the bench to small pilot level
- Plan to have a pilot demonstration in 2023

Refinery of the Future
sustainable alumina production

- Mechanical vapor recompression – preparing for first trial at Wagerup; plan for pilot a demonstration in 2023
- Electric calcination – early stages of R&D

High Purity Alumina
entering a specialty alumina market

- In stage one of three – production trials and detailed design of 1,000 mtpa demonstration facility



Capital allocation framework refreshed in November 2021

Capital allocation framework and considerations

Maintain strong balance sheet through the cycle

Capital expenditures to sustain existing operations

Maximize value creation

Return cash to stockholders	Transform portfolio	Position for growth

Strong balance sheet:

- Keep cash balance and net debt at comfortable levels
- No long-term debt maturities until 2027

Capital expenditures:

- Sustaining capital expenditures of $356 million in 2021, $450 million in 2022

Return cash to stockholders:

- In October 2021:
  - Announced quarterly cash dividend program, $0.10/share quarterly dividend paid 4Q21
  - Authorized additional $500 million share buyback program, closed out prior $200 million authorization by buying back 3.2 million shares in 4Q21

Continue portfolio transformation through 2023

Position for value creating growth; key timeframe ~2024

- Expansions and/or breakthrough technology implementations

A transformative year; positioned for more success

FY21 Summary

Our Purpose:

Turn Raw Potential Into Real Progress

Our Vision

Reinvent the aluminum industry for a sustainable future

Our Priorities

Reduce Complexity | Drive Returns | Advance Sustainably

Our Values

Act with Integrity | Operate with Excellence | Care for People | Lead with Courage

- **Profiting from long position in all three segments**
  Made highest Alcoa Adj. net income and highest Aluminum segment Adj. EBITDA; spot price now ~ $3,000 per tonne

- **Strengthening the company while providing capital returns**
  Reduced adjusted net debt, annuitized $1.5 billion pension liability, repurchased 3.2 million shares, paid first quarterly dividend

- **Positioning to succeed in a sustainable world**
  Continued to transform portfolio, sell sustainable products and invest in future technologies leveraging industry-leading environmental and social standards

Drive results and **deliver returns** to stockholders over the long term

Appendix

Strengthening the Company

Actions to improve Alcoa, 2017 – 2021

2017 – 2020

Operating Safely and Efficiently

- Revitalized safety program; maintained comprehensive COVID-19 preparedness and response plan
- Implemented new operating model and announced $60 million annual savings starting in 2Q20
- Modernized labor contracts in Canada, U.S. and Australia

Advancing Financial Longevity

- Froze salaried pension plan as of Jan. 1, 2021; prefunded pension with $500 million debt issue in July 2018
- Bolstered liquidity through July 2020 $750 million debt issuance; renegotiated revolving credit for more favorable terms
- Reduced administrative locations across the globe; relocated headquarters to Pittsburgh

Optimizing the Portfolio

- Restarted Lake Charles, Portland, Bécancour, and Warrick facilities
- Sold Gum Springs treatment facility; finalized Point Comfort, Rockdale, and Suriname closures; curtailed Intalco
- Divested Avilés, La Coruña, and Portovesme facilities, and minority interest in Saudi rolling mill

Investing in Sustainable Growth

- Set annual, quarterly, location, and segment production records; initiated new smelter creep project
- Launched ELYSIS™ joint venture, joined International Council on Mining and Metals, ASI certified across value chain
- Expanded sales of Sustana™ low carbon products, introduced EcoSource™ world's first low carbon alumina

2021

- Issued $500 million aggregate principal amount of 4.125% senior notes due 2029; redeemed in full outstanding $750 million 6.75% senior notes due 2024 and $500 million 7.00% senior notes due 2026
- Funded $500 million into U.S. pension plan, closed $1.5 billion pension annuitizations
- Announced new power agreements for Portland smelter and restart of 19 kmt/year (Alcoa share); electric grid aiming for 50% renewables by 2030
- Completed sale of Warrick rolling mill for $670 million consideration, former Eastalco smelter site for $100 million, and Rockdale site for $240 million
- Shipped or announced contracts for EcoSource™ low carbon alumina, ELYSIS™ zero carbon aluminum, and low carbon EcoLum™ sustainable products
- Announced restart of Alumar (São Luís) smelter, curtailment of San Ciprián smelter and closure of Wenatchee smelter
- Paid first quarterly cash dividend and repurchased 3.2 million shares in 4Q21, added new share repurchase authorization of $500 million
- Stated ambition to reach net zero greenhouse gas emissions across global operations by 2050

Quarterly income statement

Quarterly income statement

M, Except realized prices and per share amounts	4Q20	3Q21	**4Q21**	Prior Year Change	Sequential Change
Realized primary aluminum price ($/mt)	$2,094	$3,124	**$3,382**	$1,288	$258
Realized alumina price ($/mt)	$268	$312	**$407**	$139	$95
Revenue	$2,392	$3,109	**$3,340**	$948	$231
Cost of goods sold	1,974	2,322	**2,383**	409	61
SG&A and R&D expenses	64	61	**78**	14	17
Adjusted EBITDA	354	726	**879**	525	153
Depreciation, depletion and amortization	170	156	**165**	(5)	9
Other expenses (income), net	44	(18)	**(298)**	(342)	(280)
Interest expense	43	58	**28**	(15)	(30)
Restructuring and other charges, net	60	33	**1,055**	995	1,022
Provision for income taxes	20	127	**298**	278	171
Net income (loss)	17	370	**(369)**	(386)	(739)
Less: Net income attributable to noncontrolling interest	21	33	**23**	2	(10)
Net (loss) income attributable to Alcoa Corporation	$(4)	$337	**$(392)**	$(388)	$(729)
Diluted (loss) earnings per share	$(0.02)	$1.76	**$(2.11)**	$(2.09)	$(3.87)
Diluted average shares[1]	185.9	190.8	**185.7**	(0.2)	(5.1)

1. For 4Q20 and 4Q21, share equivalents related to employee stock-based compensation were excluded from Diluted average shares as the impact was anti-dilutive given an adjusted net loss attributable to Alcoa Corporation.

Special items

Breakdown of special items by income statement classification – gross basis

M, Except per share amounts	4Q20	3Q21	**4Q21**	**Description of significant 4Q21 special items**
Net (loss) income attributable to Alcoa Corporation	$(4)	$337	**$(392)**	
Diluted (loss) earnings per share	($0.02)	$1.76	**$(2.11)**	
Special items	$53	$54	**$867**	
Cost of goods sold	*3*	*1*	***16***	Alumar smelter restart costs, Wenatchee smelter closure
SG&A and R&D expenses	*4*	*1*	***1***	
Restructuring and other charges, net	*60*	*33*	***1,055***	Pension-related actions, Wenatchee smelter closure, San Ciprián smelter curtailment
Interest	-	*22*	**-**	
Other (income) expenses, net	*(2)*	*2*	***(249)***	Gain on non-core asset sales
Provision for income taxes	*(7)*	*(1)*	***107***	Valuation allowance on Spanish alumina deferred tax assets
Noncontrolling interest	*(5)*	*(4)*	***(63)***	Partner's share of special items
Adjusted net income attributable to Alcoa Corporation	$49	$391	**$475**	
Adjusted diluted earnings per share	$0.26	$2.05	**$2.50**	

Quarterly income statement excluding special items

Quarterly income statement excluding special items

M, Except realized prices and per share amounts	4Q20	3Q21	**4Q21**	Prior Year Change	Sequential Change
Realized primary aluminum price ($/mt)	$2,094	$3,124	**$3,382**	$1,288	$258
Realized alumina price ($/mt)	$268	$312	**$407**	$139	$95
Revenue	$2,392	$3,109	**$3,340**	$948	$231
Cost of goods sold	1,971	2,321	**2,367**	396	46
COGS % of Revenue	82.4%	74.7%	**70.9%**	(11.5)% pts.	(3.8)% pts.
SG&A and R&D expenses	60	60	**77**	17	17
SG&A and R&D % of Revenue	2.5%	1.9%	**2.3%**	(0.2)% pts.	0.4% pts.
Adjusted EBITDA	361	728	**896**	535	168
Depreciation, depletion and amortization	170	156	**165**	(5)	9
Other expenses (income), net	46	(20)	**(49)**	(95)	(29)
Interest expense	43	36	**28**	(15)	(8)
Provision for income taxes	27	128	**191**	164	63
Operational tax rate	25.3%	23.1%	**25.5%**	0.2% pts.	2.4% pts.
Adjusted net income	75	428	**561**	486	133
Less: Adjusted net income attributable to noncontrolling interest	26	37	**86**	60	49
Adjusted net income attributable to Alcoa Corporation	$49	$391	**$475**	$426	$84
Adjusted diluted earnings per share	$0.26	$2.05	**$2.50**	$2.24	$0.45
Diluted average shares	187.7	190.8	**189.9**	2.2	(0.9)

4Q21 Financial summary

Three months ending December 31, 2021, excluding special items

$M	Bauxite	Alumina	Aluminum[3]	Transformation	Intersegment eliminations	Other corporate	Alcoa Corporation
Total revenue	$258	$1,465	$2,327	$1	$(711)	-	$3,340
Third-party revenue	$83	$935	$2,322	$1	-	$(1)	$3,340
Adjusted EBITDA[1]	$49	$503	$523	$(10)	$(121)	$(48)	$896
Adjusted EBITDA margin %	*19.0%*	*34.3%*	*22.5%*				*26.8%*
Depreciation, depletion and amortization	$34	$55	$71	-	-	$5	$165
Other expenses (income), net[2]	-	$(11)	$(37)	-	-	$(1)	$(49)
Interest expense							$28
Provision for income taxes							$191
Adjusted net income							$561
Net income attributable to noncontrolling interest							$86
Adjusted net income attributable to Alcoa Corporation							$475

1. Includes the Company's proportionate share of earnings from equity investments in certain bauxite mines, hydroelectric generation facilities, and an aluminum smelter located in Brazil, Canada, and/or Guinea.
2. Amounts for Alumina and Aluminum represent the Company's proportionate share of earnings from its equity investment in the Saudi Arabian joint venture.
3. Third-party energy sales volume, revenue and adjusted EBITDA in Brazil were 830GWh, $55M and $42M, respectively.

4Q21 Adjusted EBITDA drivers by segment

Adjusted EBITDA excluding special items sequential changes by segment, $M

Segment	Adj. EBITDA 3Q21	Currency	Metal prices	API	Raw materials	Energy	Price/mix	Volume	Production costs	Other	Adj. EBITDA 4Q21
Bauxite	$23	3	0	0	0	(1)	1	4	7	12	$49
Alumina	$148	(1)	0	393	(21)	(12)	(36)	1	20	11	$503
Aluminum	$613	(6)	88	(59)	(31)	(58)	12	44	(30)	(50)	$523
Segment Total	**$784**	**(4)**	**88**	**334**	**(52)**	**(71)**	**(23)**	**49**	**(3)**	**(27)**	**$1,075**

Income statement information

FY20 and FY21 Annual income statement

	FY20			FY21		
M, Except realized prices and per share amounts	**Reported**	**Special items**	**Adjusted excl. special items**	**Reported**	**Special items**	**Adjusted excl. special items**
Realized primary aluminum price ($/mt)	$1,915		$1,915	$2,879		$2,879
Realized alumina price ($/mt)	$273		$273	$326		$326
Revenue	$9,286		$9,286	$12,152		$12,152
Cost of goods sold	7,969	$(59)	7,910	9,153	$(18)	9,135
COGS % revenue	85.8%		85.2%	75.3%		75.2%
SG&A and R&D expenses	233	(8)	225	258	(4)	254
SG&A and R&D % revenue	2.5%		2.4%	2.1%		2.1%
Adjusted EBITDA	1,084	67	1,151	2,741	22	2,763
Depreciation, depletion and amortization	653		653	664		664
Other expenses (income), net	8	170	178	(445)	377	(68)
Interest expense	146		146	195	(54)	141
Restructuring and other charges, net	104	(104)	-	1,128	(1,128)	-
Provision for income taxes	187	39	226	629	(107)	522
Tax rate	108.1%		129.7%	52.5%		25.8%
Net (loss) income	(14)	(38)	(52)	570	934	1,504
Less: Net income attributable to noncontrolling interest	156	7	163	141	66	207
Net (loss) income attributable to Alcoa Corporation	$(170)	$(45)	$(215)	$429	$868	$1,297
Diluted (loss) earnings per share	$(0.91)	$(0.25)	$(1.16)	$2.26	$4.57	$6.83
Diluted average shares[1]	185.9		185.9	189.9		189.9

1. For FY20, share equivalents related to employee stock-based compensation were excluded from Diluted average shares as the impact was anti-dilutive given an adjusted net loss attributable to Alcoa Corporation.

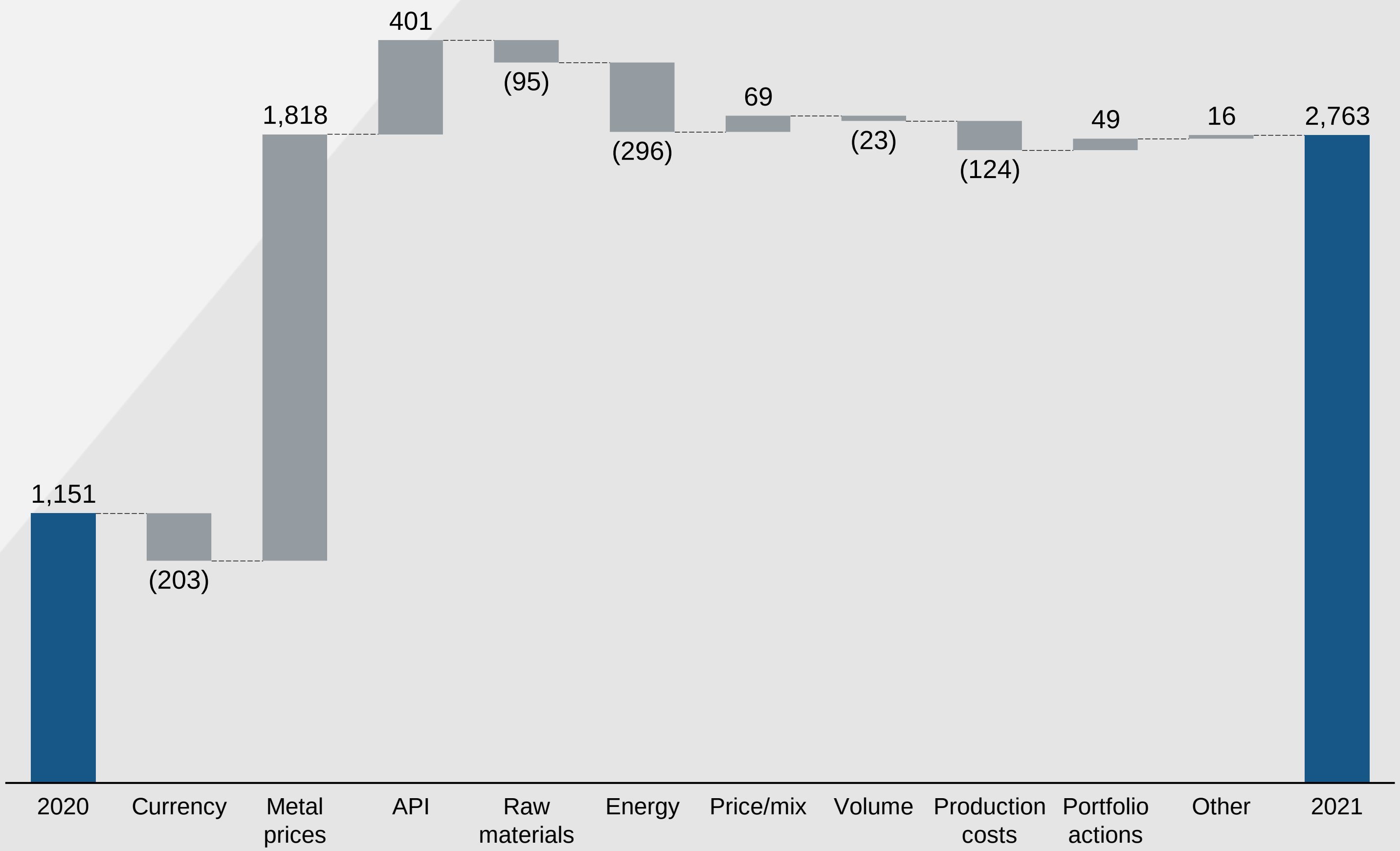
FY21 Financial information

FY21 Highlights and annual change impacts

Full year financial highlights

	FY20	FY21
Realized primary aluminum price ($/mt)	$1,915	$2,879
Realized alumina price ($/mt)	$273	$326
Revenue, $M	$9,286	$12,152
Adjusted EBITDA excl. special items, $M	$1,151	$2,763
Net (loss) income attributable to Alcoa, $M	$(170)	$429
Adjusted net (loss) income attributable to Alcoa, $M	$(215)	$1,297
Adjusted (loss) earnings per share	$(1.16)	$6.83

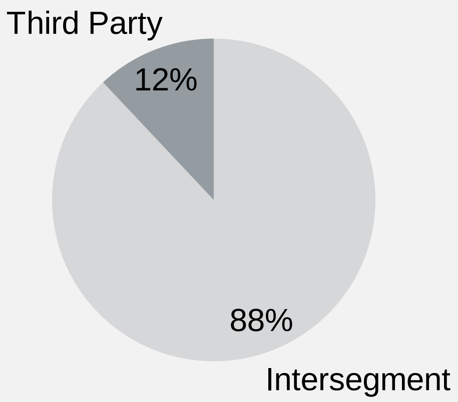
Adjusted EBITDA excl. special items bridge, $M



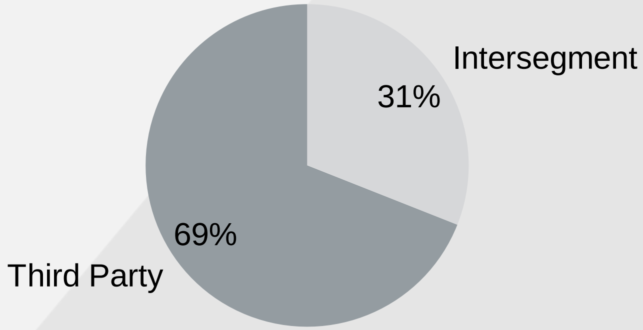
Aluminum value chain

FY21 Alcoa product shipments by segment

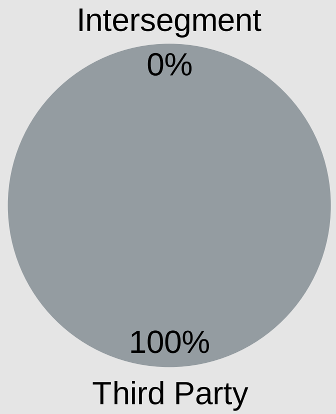
48.1 Mdmt shipments



13.9 Mmt shipments



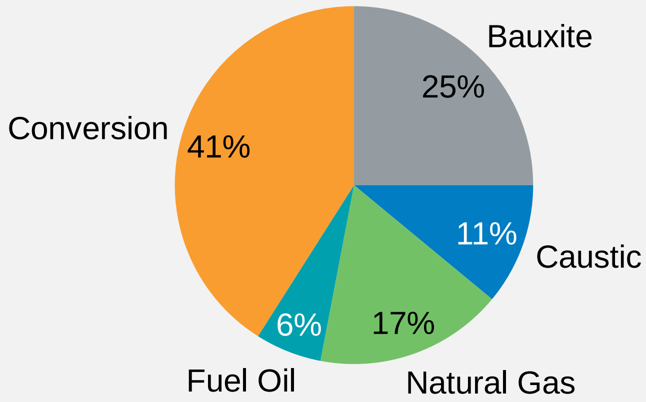
3.0 Mmt shipments



Composition of alumina and aluminum production costs

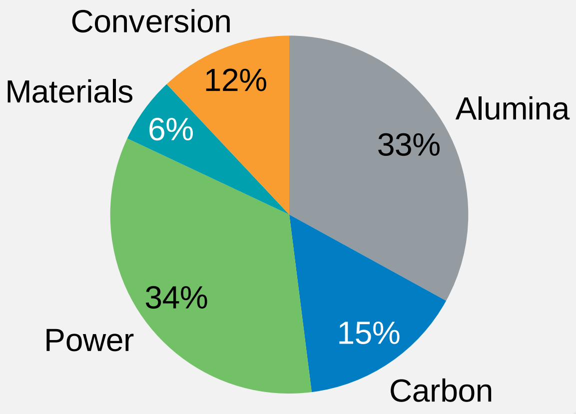
Alcoa 4Q21 production cash costs

Alumina refining



Input Cost	Inventory Flow	Pricing Convention	FY21 Annual Cost Sensitivity
Caustic Soda	5 - 6 Months	Quarterly, Spot	$10M per $10/dmt
Natural Gas	1 Month	Quarterly, 85% with CPI adjustment	$11M per $0.10/GJ
Fuel Oil	1 - 2 Months	Prior Month	$3M per $1/barrel

Aluminum smelting



Input Cost	Inventory Flow	Pricing Convention	FY21 Annual Cost Sensitivity
Alumina	~2 Months	API on a 6 to 8 month average	$42M per $10/mt
Petroleum Coke	1 - 2 Months	Quarterly	$7M per $10/mt
Coal Tar Pitch	1 - 2 Months	Quarterly	$1.8M per $10/mt

2022 Business information

Estimated annual Adjusted EBITDA sensitivities

$M Segment	LME + $100/mt	API + $10/mt	Midwest + $100/mt	Europe + $100/mt	Japan + $100/mt	AUD + 0.01 0.73[1]	BRL + 0.10 5.58[1]	CAD + 0.01 1.26[1]	EUR + 0.01 1.14[1]	ISK + 10 129.94[1]	NOK + 0.10 8.73[1]
Bauxite						(4)	2				
Alumina		123				(16)	5		(1)		
Aluminum	189	(42)	124	69	17	(3)	(1)	4	1	10	3
Total	189	81	124	69	17	(23)	6	4	0	10	3

Pricing conventions

Segment	Third party revenue
Bauxite	▪ Negotiated prices
Alumina	▪ ~95% of third party smelter grade alumina priced on API/spot ▪ API based on prior month average of spot prices
Aluminum	▪ LME + regional premium + product premium ▪ Primary aluminum 15-day lag ▪ Brazilian hydroelectric sales at market prices

Regional premium breakdown

Regional premiums	% of 2022 Primary aluminum shipments
Midwest	~50%
Rotterdam Duty Paid	~40%
CIF Japan	~10%

1. Average 4Q21 exchange rates

Currency impacts on Adjusted EBITDA

Currency balance sheet revaluation and EBITDA sensitivities ($M, except currencies)

Balance sheet revaluation impact

	AUD	BRL	CAD	EUR	ISK	NOK	Total
4Q20 revaluation	(10.6)	(2.1)	(3.6)	1.7	(0.1)	(3.3)	(11.4)
3/31/21 currencies	0.76	5.76	1.26	1.17	126.68	8.56	
1Q21 revaluation	4.5	4.6	(0.3)	0.3	(0.8)	(2.0)	6.2
1Q21 sequential impact	15.1	6.7	3.3	(1.4)	(0.7)	(5.3)	17.7
6/30/21 currencies	0.75	4.95	1.24	1.19	123.79	8.58	
2Q21 revaluation	3.0	(8.4)	0.5	(0.8)	0.0	0.3	(5.4)
2Q21 sequential impact	(1.5)	(13.0)	0.8	(1.1)	0.8	2.3	(11.7)
9/30/21 currencies	0.72	5.42	1.27	1.17	129.24	8.70	
3Q21 revaluation	6.2	3.7	0.3	0.4	0.0	(1.3)	9.3
3Q21 sequential impact	3.2	12.1	(0.2)	1.2	0.0	(1.6)	14.7
12/31/21 currencies	0.73	5.63	1.26	1.14	129.79	8.76	
4Q21 revaluation	(0.9)	1.1	0.5	(1.8)	(1.2)	(1.7)	(4.0)
4Q21 revaluation sequential impact	**(7.1)**	**(2.6)**	**0.2**	**(2.2)**	**(1.2)**	**(0.4)**	**(13.3)**

Currency annual sensitivity and actual impact

	+0.01 AUD	+0.10 BRL	+0.01 CAD	+0.01 EUR	+ 10 ISK	+0.10 NOK	Total
2021 EBITDA sensitivity	**(21)**	**5**	**2**	**(4)**	**7**	**2**	
4Q20 currency avg.	0.73	5.40	1.31	1.19	134.72	9.05	
1Q21 currency avg.	0.77	5.46	1.27	1.21	128.02	8.51	
1Q21 currency impact	(22.1)	1.2	(1.7)	(1.0)	(0.7)	(1.7)	(25.9)
2Q21 currency avg.	0.77	5.31	1.23	1.20	123.74	8.38	
2Q21 currency impact	1.3	(2.1)	(3.4)	0.3	(1.2)	(0.9)	(6.0)
3Q21 currency avg.	0.73	5.22	1.26	1.18	126.04	8.75	
3Q21 currency impact	21.1	(1.0)	1.6	2.3	0.4	1.5	25.9
12/31/21 currency avg.	0.73	5.58	1.26	1.14	129.94	8.73	
4Q21 currency impact	**3.1**	**3.9**	**0.0**	**2.9**	**0.3**	**(0.5)**	**9.7**
Total 4Q21 EBITDA currency impact[1]	**(4.0)**	**1.3**	**0.2**	**0.7**	**(0.9)**	**(0.9)**	**(3.6)**

Totals may not tie due to rounding

1. Total EBITDA currency impact includes balance sheet revaluation (based on December end values) and currency impacts (based on quarterly averages

Additional business considerations

Items expected to impact Adjusted EBITDA for 1Q22

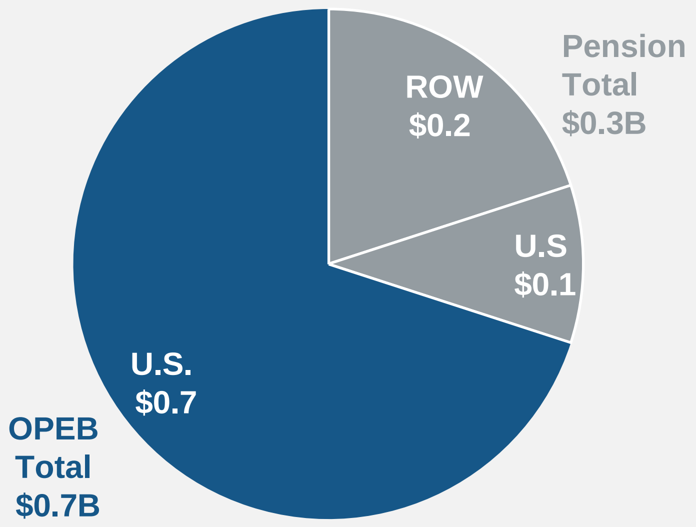
Alcoa anticipates Adjusted EBITDA and Adjusted net income levels for the first quarter of 2022 to be similar to the fourth quarter of 2021 based on current pricing. Alcoa expects that current metal index price benefits will roughly offset the raw materials and energy challenges, and that improvements from portfolio actions and sales contract pricing will mitigate other seasonal changes and headwinds.

- In Bauxite, we expect lower Adjusted EBITDA of ~$25 million on seasonally lower volume and higher maintenance, and annual true ups that do not recur in the first quarter.
- In Alumina, we expect improvement of ~$10 million with resolution of the San Ciprián strike (higher shipments of 89kmt), and unfavorable impacts of ~$70 million in higher raw materials and energy costs and $9 million in non-recurrence of Brazilian VAT credit recognized in 4Q21.
- In the Aluminum segment, excluding index metal pricing and currency impacts, we expect:
  - Alumina costs are estimated to increase $25 million assuming today's alumina prices persist
  - Improvement from the curtailment of the San Ciprián smelter of ~$65 million
  - Higher energy and raw materials prices of $30 million
  - Non-recurrence of Brazilian VAT credit recognized in 4Q21 of $22 million
- Estimate intersegment profit elimination for every $10/mt decrease in API prices to be a $7 million to $9 million favorable impact based on comparison of the average API of the last two months of each quarter (API is based on average of prior month spot prices); consider intersegment eliminations as component of minority interest calculation.
- Computed using quarter end exchange rates, 4Q21 Adjusted EBITDA included an unfavorable balance sheet revaluation impact of $4 million ($13 million unfavorable sequentially compared to 3Q21); impacts related to balance sheet revaluation are not incorporated into the currency sensitivities provided for Adjusted EBITDA.
- Other income is expected to decline sequentially by $35 million as equity income declines on additional funding to Elysis, non-recurring interest income, and higher non-service pension expense.
- In addition, the Company expects 1Q22 operational tax expense to approximate $165 million to $175 million based on recent pricing.

Pension and OPEB summary

Net pension and OPEB liability and financial impacts

Net liability as of December 31, 2021[1]



GAAP pension funding status as of December 31, 2021

- U.S. greater than 95%
- Worldwide greater than 90%

U.S. pension contributions currently not tax deductible

Estimated financial impacts, $M

Expense impact	2022
Segment pension	$15
Segment OPEB	5
Corporate pension & OPEB	-
Total adj. EBITDA impact	**20**
Non-operating	65
Special items (curtailment/settlement)	-
Total expense impact	**$85**

Cash flow impact	2022
Minimum required pension funding[2]	$15
OPEB payments	60
Total cash impact	**$75**

1. The impact on the combined pension and OPEB liability of a 25 basis point change in the weighted average discount rate is approximately $150 million. In 4Q21, the asset allocation for the U.S. pension plans transitioned to a 90% hedge of U.S. Treasury interest rate risk for the U.S. gross pension liability, limiting the net exposure to changes in pension discount rates.
2. U.S. minimum required pension cash funding for 2022 is $0 as it is Alcoa's intention to use prefunding balance.

Investments summary

Investments listing and income statement location

Investee	Country	Nature of Investment[4]	Ownership Interest	Carrying Value as of December 31, 2021	Income Statement Location of Equity Earnings
ELYSIS™ Limited Partnership	Canada	Aluminum smelting technology	48.235%		
Ma'aden Aluminium Company[1]	Saudi Arabia	Aluminum smelter	25.1%		
Ma'aden Bauxite and Alumina Company[1]	Saudi Arabia	Bauxite mine and Alumina refinery	25.1%[5]		
Subtotal Ma'aden and ELYSIS™				***$687M***	***Other expenses, net***
Consorcio Serra do Facão	Brazil	Hydroelectric generation facility	34.97%		
Energetica Barra Grande S.A.	Brazil	Hydroelectric generation facility	42.18%		
Halco Mining, Inc.[2]	Guinea	Bauxite mine	45.0%[5]		
Manicouagan Power Limited Partnership	Canada	Hydroelectric generation facility	40.0%		
Mineração Rio do Norte S.A. (MRN)	Brazil	Bauxite mine	18.2%[5]		
Pechiney Reynolds Quebec, Inc.[3]	Canada	Aluminum smelter	50.0%		
Subtotal other				***$512M***	***COGS***
Total investments				**$1,199M**	

1. Alcoa Corporation has an investment in a joint venture related to the ownership and operation of an integrated aluminum complex (bauxite mine, alumina refinery, and aluminum smelter) in Saudi Arabia. The joint venture is owned 74.9% by the Saudi Arabian Mining Company (known as "Ma'aden") and 25.1% by Alcoa Corporation.
2. Halco Mining, Inc. owns 100% of Boké Investment Company, which owns 51% of Compagnie des Bauxites de Guinée (CBG).
3. Pechiney Reynolds Quebec, Inc. owns a 50.1% interest in the Bécancour smelter in Quebec, Canada thereby entitling Alcoa Corporation to a 25.05% interest in the smelter. Through two wholly-owned Canadian subsidiaries, Alcoa Corporation also owns 49.9% of the Bécancour smelter.
4. Each of the investees either owns the facility listed or has an ownership interest in an entity that owns the facility listed.
5. A portion or all of each of these ownership interests are held by majority-owned subsidiaries that are part of AWAC.

Alcoa sustainability goals

Alcoa strategic long-term sustainability goals, baseline and progress

Goal	Description	2015 Baseline	2020 Progress
Safety	Zero fatalities and serious injuries (life-threatening, life-altering injury or illness)	5 fatal or serious injuries/illnesses	1 fatal or serious injury/illness
Diversity and inclusion	Attain an inclusive 'everyone culture' that reflects the diversity of the communities in which we operate	N/A	15.6% global women
Mine rehabilitation	Maintain a corporate-wide running 5-year average ratio of 1:1 or better for active mining disturbance (excluding long-term infrastructure) to mine rehabilitation	N/A	0.92:1
Bauxite residue	From a 2015 baseline, reduce bauxite residue land requirements per metric ton of alumina produced by 15% by 2030	53.2 m2/kmt Ala	12.8% reduction
Waste	From a 2015 baseline, reduce landfilled waste 15% by 2025 and 25% by 2030	146.6 mt	14.4% reduction
Water	From a 2015 baseline, reduce the intensity of our total water use from Alcoa-defined water-scarce locations by 5% by 2025 and 10% by 2030	3.37 m3/mt	3% reduction
Greenhouse gas emissions	Align our greenhouse gas (direct + indirect) emissions reduction targets with the 2ºC decarbonization path by reducing greenhouse gas intensity by 30% by 2025, and 50% by 2030 from a 2015 baseline	7.10 mt CO_2e/mt	14.6% reduction
Sustainable value chain	By 2022, implement a social management system at all locations, including the definition of performance metrics and long-term goals to be accomplished by 2025 and 2030	N/A	New indigenous peoples policy

Source: 2020 Sustainability Report

Production and capacity information

Alcoa Corporation annual consolidated amounts as of December 31, 2021

Bauxite production, Mdmt

Mine	Country	2021 Production
Darling Range	Australia	34.7
Juruti	Brazil	5.8
Poços de Caldas	Brazil	0.4
Trombetas (MRN)	Brazil	2.0
Boké (CBG)	Guinea	3.5
Al Ba'itha[1]	Saudi Arabia	1.2
Total		**47.6**

Alumina refining, kmt

Facility	Country	Capacity	Curtailed
Kwinana	Australia	2,190	-
Pinjarra	Australia	4,234	-
Wagerup	Australia	2,555	-
Poços de Caldas	Brazil	390	214
São Luís (Alumar)	Brazil	1,890	-
San Ciprián	Spain	1,500	-
Total		**12,759**	**214**
Ras Al Khair[1]	*Saudi Arabia*	*452*	-

Aluminum smelting, kmt

Facility	Country	Capacity	Curtailed
Portland[2]	Australia	197	30
São Luís (Alumar)[3]	Brazil	268	268
Baie Comeau	Canada	280	-
Bécancour	Canada	310	-
Deschambault	Canada	260	-
Fjarðaál	Iceland	344	-
Lista	Norway	94	-
Mosjøen	Norway	188	-
San Ciprián[4]	Spain	228	-
Intalco	U.S.	279	279
Massena West	U.S.	130	-
Warrick	U.S.	269	108
Total[5]		**2,847**	**685**
Ras Al Khair[1]	*Saudi Arabia*	*186*	-

1. The Company's proportionate share of earnings from its equity investment in the Saudi Arabian joint venture does not impact adjusted EBITDA.
2. On November 7, 2021, the Company announced that the Portland Aluminium joint venture plans to restart a portion of the curtailed capacity at its aluminum smelter in the State of Victoria in Australia, with metal production expected to start in the third quarter of 2022. Once the restart is complete, Portland Aluminium will operate at approximately 95 percent of total capacity and Alcoa Corporation will have approximately 186,000 mtpy of its consolidated capacity at Portland operating.
3. On September 20, 2021, the Company announced plans to restart 268,000 metric tons per year (mtpy) of aluminum capacity at the Alumar smelter in São Luís, Brazil. The Company expects full capacity to be operational in the fourth quarter of 2022.
4. On December 29, 2021, the Company announced a two-year curtailment of the San Ciprián smelter's 228,000 metric tons of annual capacity, and a commitment by the Company to begin the restart of the smelter in January 2024. Curtailment activities began on January 1, 2022, with the goal of completion before the end of January 2022.
5. On December 13, 2021, the Company announced the closure of 146,000 metric tons of aluminum smelting capacity at the Wenatchee Works aluminum smelter located in the state of Washington.

Valuation framework

Valuation framework key considerations

				FY21 Adj. EBITDA excl. special items
Business Operations	+	Bauxite	Economic value using market multiple of: i. AWAC joint venture, minus small portions of AWAC JV in Aluminum and Transformation ii. Ownership in certain mines and refineries outside the JV	$172M
	+	Alumina		$1,002M
	+	Aluminum	Economic value using market multiple of: i. Smelters, casthouses, rolling mill, and energy assets ii. Smelters and casthouses restart optionality	$1,879M
	-	Non-segment expenses (income)	Economic value using market multiple of: i. Net corporate expenses and Transformation	$290M
	=	Enterprise value		
Financial Considerations	-	Noncontrolling interest	Implied value of noncontrolling interest in AWAC JV, based on Alumina Limited's observed enterprise value	
	-	Debt & debt-like items[1]	Book value of debt of $1.8B ($1.8B, >95% Alcoa), pension & OPEB net liabilities of $1.0B ($1.0B, >95% Alcoa; U.S. contributions not tax deductible), environmental & ARO liabilities of $0.8B ($1B, ~75% Alcoa)	
	+	Cash & equity investments[1]	Cash position of $1.6B ($1.8B, ~90% Alcoa) plus carrying value of investments in the Ma´aden joint venture and ELYSIS™ of $0.6B ($0.7B, ~85% Alcoa)	
	=	Equity value		

1. Dollar amounts reflect Alcoa Corporation's consolidated balance sheet values as of December 31, 2021. The "Alcoa" percentages exclude amounts attributable to Alcoa Corporation's partner in the AWAC JV.

Adjusted EBITDA reconciliation

$M	4Q20	FY20	1Q21	2Q21	3Q21	4Q21	FY21
Net income (loss) attributable to Alcoa	**$(4)**	**$(170)**	**$175**	**$309**	**$337**	**$(392)**	**$429**
Add:							
Net income attributable to noncontrolling interest	21	156	44	41	33	23	141
Provision for income taxes	20	187	93	111	127	298	629
Other (income) expenses, net	44	8	(24)	(105)	(18)	(298)	(445)
Interest expense	43	146	42	67	58	28	195
Restructuring and other charges, net	60	104	7	33	33	1,055	1,128
Depreciation, depletion and amortization	170	653	182	161	156	165	664
Adjusted EBITDA	**354**	**1,084**	**519**	**617**	**726**	**879**	**2,741**
Special items before tax and noncontrolling interest	**7**	67	2	1	2	17	22
Adjusted EBITDA excl. special items	**$361**	**$1,151**	**$521**	**$618**	**$728**	**$896**	**$2,763**

Alcoa Corporation's definition of Adjusted EBITDA is net margin plus an add-back for depreciation, depletion, and amortization. Net margin is equivalent to Sales minus the following items: Cost of goods sold; Selling, general administrative, and other expenses; Research and development expenses; and Provision for depreciation, depletion, and amortization. Adjusted EBITDA is a non-GAAP financial measure. Management believes that this measure is meaningful to investors because Adjusted EBITDA provides additional information with respect to Alcoa Corporation's operating performance and the Company's ability to meet its financial obligations. The Adjusted EBITDA presented may not be comparable to similarly titled measures of other companies.

Segment Adjusted EBITDA reconciliation

$M	FY17	FY18	FY19	FY20	FY21
Net income (loss) attributable to Alcoa	**$279**	**$250**	**$(1,125)**	**$(170)**	**$429**
Add:					
Net income attributable to noncontrolling interest	329	643	272	156	141
Provision for income taxes	592	732	415	187	629
Other expenses (income), net	27	64	162	8	(445)
Interest expense	104	122	121	146	195
Restructuring and other charges, net	309	527	1,031	104	1,128
Depreciation, depletion and amortization	750	733	713	653	664
Adjusted EBITDA	**2,390**	**3,071**	**1,589**	**1,084**	**2,741**
Special items before tax and noncontrolling interest	88	58	67	67	22
Adjusted EBITDA excl. special items	**$2,478**	**$3,129**	**$1,656**	**$1,151**	**$2,763**
Aluminum Segment Adjusted EBITDA	**$1,026**	**$451**	**$25**	**$325**	**$1,879**
Alumina Segment Adjusted EBITDA	1,289	2,373	1,097	497	1,002
Bauxite Segment Adjusted EBITDA	424	426	504	495	172
Unallocated Adjusted EBITDA[1]	(349)	(179)	(37)	(233)	(312)
Special items before tax and noncontrolling interest	88	58	67	67	22
All Other Adjusted EBITDA, excluding special items	**$1,452**	**$2,678**	**$1,631**	**$826**	**$884**

Alcoa Corporation's definition of Adjusted EBITDA is net margin plus an add-back for depreciation, depletion, and amortization. Net margin is equivalent to Sales minus the following items: Cost of goods sold; Selling, general administrative, and other expenses; Research and development expenses; and Provision for depreciation, depletion, and amortization. Adjusted EBITDA is a non-GAAP financial measure. Management believes that this measure is meaningful to investors because Adjusted EBITDA provides additional information with respect to Alcoa Corporation's operating performance and the Company's ability to meet its financial obligations. The Adjusted EBITDA presented may not be comparable to similarly titled measures of other companies.

1. Includes Transformation, Intersegment eliminations, Corporate expenses, and Other (unallocated items not in Adjusted EBITDA of the reportable segments).

Adj. net income (loss) attributable to Alcoa reconciliation

$M	FY17	FY18	FY19	FY20	FY21
Net income (loss) attributable to Alcoa	**$279**	**$250**	**$(1,125)**	**$(170)**	**$429**
Special items:					
Restructuring and other charges, net	309	527	1,031	104	1,128
Other special items	(9)	39	50	(103)	(301)
Discrete tax items and interim tax impacts	93	2	11	(26)	101
Tax impact on special items	(24)	(89)	(32)	(13)	6
Noncontrolling interest impact	(23)	(31)	(119)	(7)	(66)
Subtotal	**346**	**448**	**941**	**(45)**	**868**
Adjusted net income (loss) attributable to Alcoa	**$625**	**$698**	**$(184)**	**$(215)**	**$1,297**

Adjusted net income (loss) attributable to Alcoa Corporation is a non-GAAP financial measure. Management believes this measure is meaningful to investors because management reviews the operating results of Alcoa Corporation excluding the impacts of restructuring and other charges, various tax items, and other special items (collectively, "special items"). There can be no assurances that additional special items will not occur in future periods. To compensate for this limitation, management believes it is appropriate to consider both Net income (loss) attributable to Alcoa Corporation determined under GAAP as well as Adjusted net income (loss) attributable to Alcoa Corporation.

Operational tax reconciliation

$M	4Q20	FY20	1Q21	2Q21	3Q21	4Q21	FY21
Provision for income taxes	$20	$187	$93	$111	$127	$298	$629
Tax on special items	1	13	-	(3)	2	(5)	(6)
Discrete tax items	25	26	2	-	(1)	(102)	(101)
Interim tax impacts[1]	(19)	-	-	-	-		-
Operational tax provision	**$27**	**$226**	**$95**	**108**	**128**	**191**	**522**
Operational tax rate	**25.3%**	**129.7%**	**32.8%**	**25.1%**	**23.1%**	**25.5%**	**25.8%**

The Company's non-GAAP financial measures are adjusted for applicable income tax impacts. The non-GAAP income tax provision, which we refer to as our operational tax, is calculated on a full year basis in a manner consistent with our GAAP tax provision except for exclusion of the following items:

- Tax cost or benefit attributable to special items based on the applicable statutory rates in the jurisdictions where the special items occurred; and
- Discrete tax items (generally unusual or infrequently occurring items, changes in law, items associated with uncertain tax positions, or effects of measurement-period adjustments).

[1] Beginning in the first quarter of 2021, the Company revised the way our operational tax provision is calculated on an interim basis. The operational tax provision now includes the interim tax impacts required under GAAP, which have the effect of smoothing tax provisioned across quarters, that had previously been excluded from our operational tax provision calculation. In periods of volatility when profit before tax by jurisdiction moves considerably between periods, inclusion of the GAAP interim tax impacts can reduce the fluctuations in the interim operational tax provision. This change will have no impact on our full year forecasted operational tax provision and will be used in all future periods.

Free cash flow reconciliation

$M	4Q20	FY20	1Q21	2Q21	3Q21	4Q21	FY21
Cash (used for) provided from operations	$38	$394	$6	$(86)[1]	$435	$565	$920
Capital expenditures	(111)	(353)	(75)	(79)	(83)	(153)	(390)
Free cash flow	**(73)**	**41**	**(69)**	**(165)**	**352**	**412**	**530**
Contributions from noncontrolling interest	-	24	-	-	8	13	21
Distributions to noncontrolling interest	(55)	(207)	(62)	(75)	(40)	(38)	(215)
Free cash flow less net distributions to noncontrolling interest	**$(128)**	**$(142)**	**$(131)**	**$(240)**	**$320**	**$387**	**$336**

Free cash flow and Free cash flow less net distributions to noncontrolling interest are non-GAAP financial measures. Management believes that these measures are meaningful to investors because management reviews cash flows generated from operations after taking into consideration capital expenditures and net distributions to noncontrolling interest. Capital expenditures are necessary to maintain and expand Alcoa Corporation's asset base and are expected to generate future cash flows from operations, while net distributions to noncontrolling interest are necessary to fulfill our obligations to our joint venture partners. It is important to note that Free cash flow and Free cash flow less net distributions to noncontrolling interest do not represent the residual cash flows available for discretionary expenditures since other non-discretionary expenditures, such as mandatory debt service requirements, are not deducted from the measure.

1. Cash used for operations in 2Q21 includes discretionary pension funding of $500 million.

Net debt reconciliation

$M	FY19 Cons.	FY19 NCI	FY19 Alcoa Prop.	FY20 Cons.	FY20 NCI	FY20 Alcoa Prop.	FY21 Cons.	FY21 NCI	FY21 Alcoa Prop.
Short-term borrowings	$-	$-	$-	$77	$31	$46	$75	$30	$45
Long-term debt due within one year	1	-	1	2	-	2	1	-	1
Long-term debt, less amount due within one year	1,799	31	1,768	2,463	-	2,463	1,726	-	1,726
Total debt	1,800	31	1,769	2,542	31	2,511	1,802	30	1,772
Less: Cash and cash equivalents	879	167	712	1,607	176	1,431	1,814	177	1,637
Net debt (net cash)	**921**	**(136)**	**1,057**	**935**	**(145)**	**1,080**	**(12)**	**(147)**	**135**
Plus: Net pension / OPEB liability	2,330	40	2,290	2,395[1]	52	2,343[1]	1,007	17	990
Adjusted net debt	**$3,251**	**$(96)**	**$3,347**	**$3,330**	**$(93)**	**$3,423**	**$995**	**$(130)**	**$1,125**

Net debt is a non-GAAP financial measure. Management believes that this measure is meaningful to investors because management assesses Alcoa Corporation's leverage position after considering available cash that could be used to repay outstanding debt. When cash exceeds total debt, the measure is expressed as net cash.

Adjusted net debt and proportional adjusted net debt are also non-GAAP financial measures. Management believes that these additional measures are meaningful to investors because management also assesses Alcoa Corporation's leverage position after considering available cash that could be used to repay outstanding debt and net pension/OPEB liability, net of the portion of those items attributable to noncontrolling interest (NCI).

1. Includes OPEB liabilities of approximately $83 million related to the Warrick rolling mill sale which was a negotiated estimate as of December 31, 2020 and subsequently trued up in 2021. Recorded in Liabilities held for sale.

Days working capital reconciliation

$M	**4Q20**	**1Q21**	**2Q21**	**3Q21**	**4Q21**
Receivables from customers	$471	$587	$644	$769	$757
Add: Inventories	1,398	1,417	1,547	1,702	1,956
Less: Accounts payable, trade	1,403	1,284	1,392	1,482	1,674
DWC working capital	$466	$720	$799	$989	$1,039
Sales[1]	$2,105	$2,551	$2,833	$3,109	$3,340
Number of days in the quarter	92	90	91	92	92
Days Working Capital[2]	**20**	**25**	**26**	**29**	**29**

1. Excludes Warrick rolling mill sales in 4Q20 and 1Q21.
2. Days Working Capital = DWC working capital divided by (Sales / number of days in the quarter).

Annualized Return on Equity (ROE)

ROE Reconciliation and calculation information as of December 31, 2021

$M	2020	2021
Numerator:		
Net (loss) income attributable to Alcoa Corporation	$(170)	$429
Add: Special items[1]	(45)	868
ROE Adjusted Net (loss) income YTD	**$(215)**	**$1,297**
Denominator[2]:		
Total assets	$14,009	$14,642
Less: Total Liabilities	8,723	9,142
Less: Noncontrolling Interest	1,621	1,617
Shareholders' Equity	**$3,665**	**$3,883**
ROE	**-5.9%**	**33.4%**

$$\text{ROE \%} = \frac{\text{(Net Loss/Income Attributable to Alcoa + Special Items)}}{\text{(Total Assets – Total Liabilities – Noncontrolling Interest)}^2} \times 100$$

$$\text{2020 YTD ROE \%} = \frac{(-\$170 – \$45)}{(\$14{,}009 – \$8{,}723 – \$1{,}621)} \times 100 = -5.9\%$$

$$\text{2021 YTD ROE \%} = \frac{(\$429 + \$868)}{(\$14{,}642 – \$9{,}142 – \$1{,}617)} \times 100 = 33.4\%$$

1. Special items include provisions for interest expense, income taxes, and noncontrolling interest.
2. Denominator calculated using quarter ending balances.

Annualized Return on Capital (ROC)

ROC Reconciliation and calculation information as of December 31, 2021

$M	2020	2021
Numerator:		
Net (loss) income attributable to Alcoa Corporation	$(170)	$429
Add: Net income attributable to noncontrolling interest	156	141
Add: Provision for income taxes	187	629
Profit before taxes (PBT)	**173**	**1,199**
Add: Interest expense	146	195
Less: Interest income	7	19
Add: Special items[1]	1	773
ROC earnings before taxes	**$313**	**$2,148**
ROC earnings after fixed tax rate of 35%	**$204**	**$1,396**
Denominator[2]:		
Total assets	$14,009	$14,642
Less: Cash, cash equivalents, restricted cash and short-term investments	1,287	1,869
Less: Current liabilities	2,352	3,011
Add: Long-term debt due within one year and short-term borrowings	21	264
Capital Base	**$10,391**	**$10,026**
ROC	**2.0%**	**13.9%**

$$\text{ROC \%} = \frac{(\text{PBT} + \text{net interest}^3 + \text{special items}^1) \times 4/3 \times (1 - \text{fixed tax rate}^4)}{(\text{Total assets} - \text{cash}^5 - \text{current liabilities} + \text{short-term debt})} \times 100$$

$$\text{2020 YTD ROC \%} = \frac{(\$173 + \$139 + \$1) \times (1 - 0.35)}{(\$14{,}009 - \$1{,}287 - \$2{,}352 + \$21)} \times 100 = 2.0\%$$

$$\text{2021 YTD ROC \%} = \frac{(\$1{,}199 + \$176 + \$773) \times (1 - 0.35)}{(\$14{,}642 - \$1{,}869 - \$3{,}011 + \$264)} \times 100 = 13.9\%$$

1. Special items exclude interest expense, income taxes, and noncontrolling interest.
2. Denominator calculated using quarter ending balances.
3. Interest expense less interest income.
4. Fixed tax rate of 35%.
5. Defined as cash, cash equivalents, restricted cash and short-term investments.

Glossary of terms

Abbreviations listed in alphanumeric order

Abbreviation	Description
% pts	Percentage points
1H##	Six months ending June 30
1Q##	Three months ending March 31
2H##	Six months ending December 31
2Q##	Three months ending June 30
3Q##	Three months ending September 30
4Q##	Three months ending December 31
Adj.	Adjusted
API	Alumina Price Index
ARO	Asset retirement obligations
AUD	Australian dollar
AWAC	Alcoa World Alumina and Chemicals
B	Billion
BRL	Brazilian real
CAD	Canadian dollar
CIF	Cost, insurance and freight
CO_2e	Carbon dioxide equivalent
COGS	Cost of goods sold
Cons.	Consolidated
CPI	Consumer Price Index
dmt	Dry metric ton
DWC	Days working capital
EBITDA	Earnings before interest, taxes, depreciation and amortization
Elims.	Eliminations
EPS	Earnings per share
ERISA	Employee Retirement Income Security Act of 1974
EUR	Euro
Est.	Estimated
excl. or ex.	Excluding

Abbreviation	Description
FOB WA	Freight on board Western Australia
FY##	Twelve months ending December 31
GAAP	Accounting principles generally accepted in the United States of America
GJ	Gigajoule
GWh	Gigawatt hour
ISK	Icelandic krona
JV	Joint venture
kmt/kdmt	Thousand metric tonnes/Thousand dry metric tonnes
LME	London Metal Exchange
LTM	Last twelve months
M	Million
Mdmt	Million dry metric tons
Mmt	Million metric tons
mt	Metric ton
NCI	Noncontrolling interest
NI	Net income
NOK	Norwegian krone
OPEB	Other postretirement employee benefits
PBT	Profit before taxes
Prop.	Proportional
R&D	Research and development
RoW	Rest of world
SEC	Securities and Exchange Commission
SG&A	Selling, general administrative and other
SHFE	Shanghai Futures Exchange
TBD	To be determined
U.S.	United States of America
USD	United States dollar
YTD, YoY	Year to date, year over year

Alcoa