

The Element of **Possibility**[™]

4th Quarter Earnings

Alcoa Corporation

January 20, 2021



Cautionary statement regarding forward-looking statements

This presentation may contain 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,” “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 performance; statements about strategies, outlook, and business and financial prospects; and statements about 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 on the global economy and our business, financial condition, results of operations, or cash flows; (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 costs or uncertainty of energy supply; (g) declines in the discount rates used to measure pension 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, or strengthening of competitiveness and operations anticipated from portfolio actions, operational and productivity improvements, cash sustainability, 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; (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; and (n) the other risk factors discussed in Item 1A of Alcoa Corporation’s Form 10-K for the fiscal year ended December 31, 2019, Form 10-Q for the quarter ended March 31, 2020, Form 10-Q for the quarter ended June 30, 2020, Form 10-Q for the quarter ended September 30, 2020, and other reports filed by Alcoa Corporation with the U.S. Securities and Exchange Commission (SEC). 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 (continued)



Non-GAAP financial measures

Some of the information included in this presentation is derived from Alcoa's consolidated financial information but is not presented in Alcoa'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 rules. 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.

Glossary of terms

A glossary of abbreviations and defined terms used throughout this presentation can be found in the appendix.

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



Operated well, delivered on strategy, positioned for future



Alcoa values and key takeaways for 2020

OUR VALUES

Act with Integrity

We are open, honest, and accountable. We do what we say we'll do.

Operate with Excellence

We relentlessly pursue outstanding and sustainable results. As we creatively transform ideas into value.

Care for People

We treat all people with dignity and provide a diverse, inclusive work culture. We work safely, promote wellness, and protect the environment.

2020 Takeaways

Safety

- One fatality; no other life-threatening or life-altering injuries

Effective operations

- Maintained COVID-19 precautions while allowing full operation
- Full year production records in Bauxite and Alumina segments
- Bécancour fully restarted

Delivered on actions

- Implemented key strategic actions and \$900 million cash program to improve operationally and financially
- \$250 million sale of Gum Springs, \$200 million cash up front
- Intalco curtailed; initiated action to address San Ciprián smelter
- Announced \$670 million sale of Warrick rolling mill

Positioned for a sustainable world

- Expanded Sustana™ brand with addition of EcoSource™
- Aluminium Stewardship Initiative (ASI) certifications available for all products; 13 sites currently certified
- Progressed multiyear portfolio transformation to further leverage our industry-leading environmental and social standards

William Oplinger

Executive Vice President and Chief Financial Officer



4Q20 Results improve sequentially and year over year



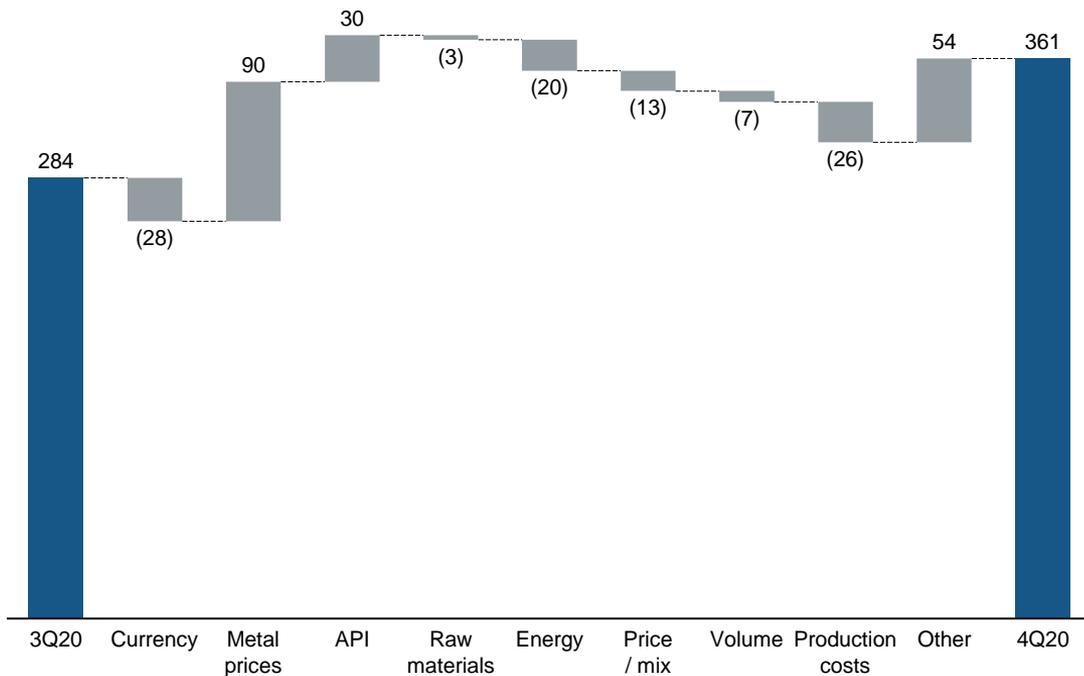
Income statement highlights

M, Except per share amounts	4Q19	3Q20	4Q20	FY19	FY20
Income statement highlights					
Revenue	\$2,436	\$2,365	\$2,392	\$10,433	\$9,286
Restructuring and other charges, net	\$363	\$5	\$60	\$1,031	\$104
Provision for income taxes	\$54	\$42	\$20	\$415	\$187
Net loss attributable to Alcoa Corporation	\$(303)	\$(49)	\$(4)	\$(1,125)	\$(170)
Diluted loss per share	\$(1.63)	\$(0.26)	\$(0.02)	\$(6.07)	\$(0.91)
Adjusted income statement highlights					
Adjusted EBITDA excluding special items	\$346	\$284	\$361	\$1,656	\$1,151
Provision for income taxes	\$86	\$229	\$27	\$436	\$226
Operational tax rate	99.5%	540.6%	25.3%	67.9%	129.7%
Adjusted net (loss) income attributable to Alcoa Corporation	\$(57)	\$(218)	\$49	\$(184)	\$(215)
Adjusted diluted (loss) earnings per share	\$(0.31)	\$(1.17)	\$0.26	\$(0.99)	\$(1.16)

Higher metal and alumina prices drive EBITDA increase



Adjusted EBITDA excluding special items sequential changes, \$M



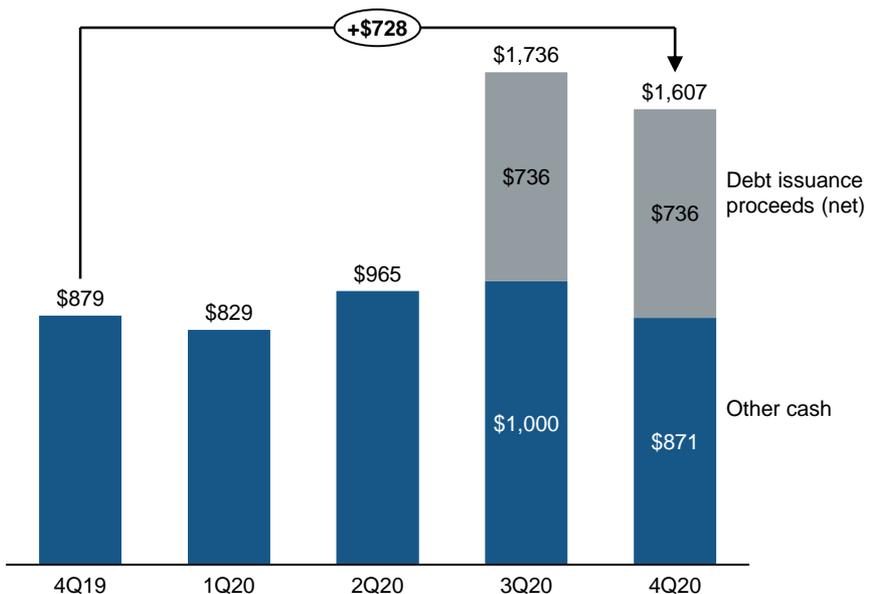
	3Q20	4Q20	Change
Bauxite	\$124	\$120	\$(4)
Alumina	119	97	(22)
Aluminum	116	181	65
Segment total	359	398	39
Transformation	(11)	(8)	3
Intersegment eliminations	(35)	5	40
Other corporate	(29)	(34)	(5)
Total	\$284	\$361	\$77

\$1.6 billion cash after \$250 million U.S. pension funding

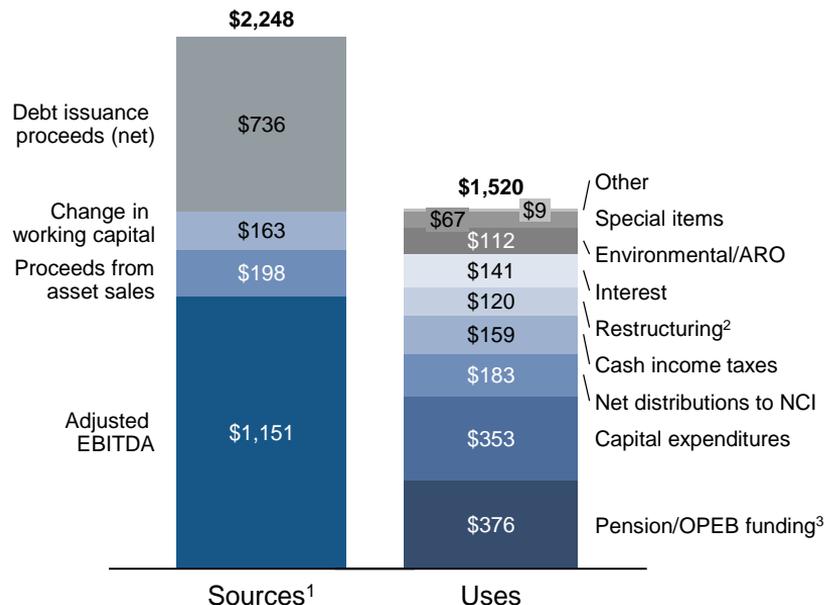


Quarterly cash comparison and cash flow information

Quarter ending cash balance, \$M



YTD Cash flow information, \$M



1. Sources defined as Adjusted EBITDA excluding special items plus changes in working capital (accounts receivable, inventories, accounts payable), proceeds from asset sales and debt issuance.

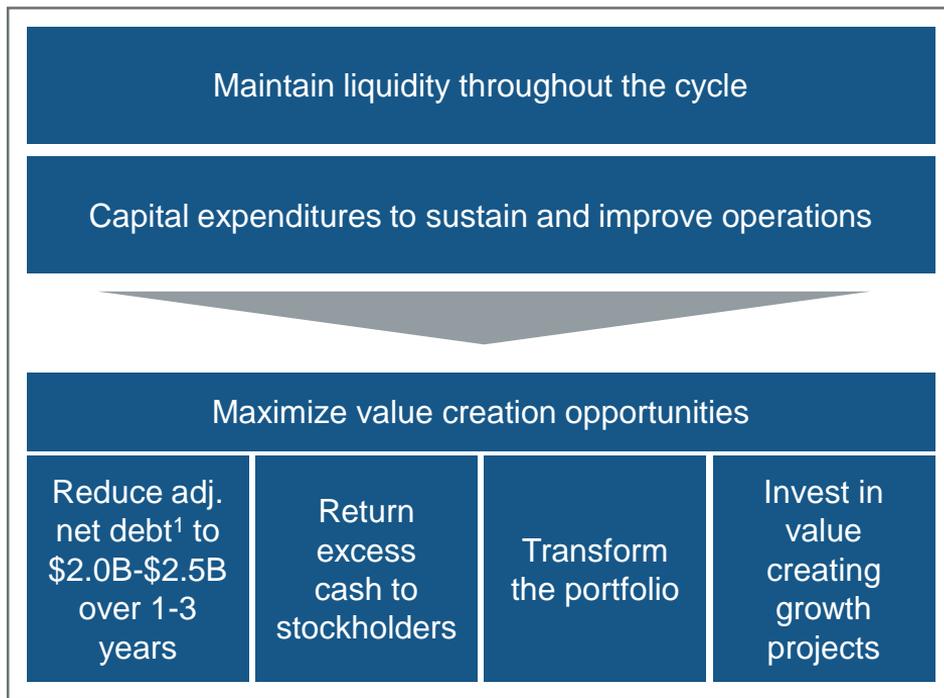
2. Restructuring includes payments related to divestiture of the Avilés and La Coruña facilities and severance related to various programs.

3. Pension/OPEB funding of \$436 million is reflected net of \$60 million related expenses within Adjusted EBITDA; \$250 million contributed to U.S. pension plan on December 18, 2020.

Capital allocation framework directs uses of excess cash



Capital allocation framework and considerations



- \$1 billion target for minimum cash balance; \$1.6 billion as of December 31
 - Sustaining capital expenditures of ~\$375 million, return seeking capital of ~\$50 million, per 2021 outlook
-
- Based on current discount rates and estimated asset returns, expect to meet adjusted net debt target solely through minimum required pension contributions
 - \$150 million available of existing \$200 million buyback authorization
 - Portfolio review and transformation over the next four years
 - Invest in major value creating projects

1. Adjusted net debt defined as the Alcoa proportional share of net debt plus net pension and OPEB liability.

Pension/OPEB net liability \$2.4 billion, DWC 4 days better

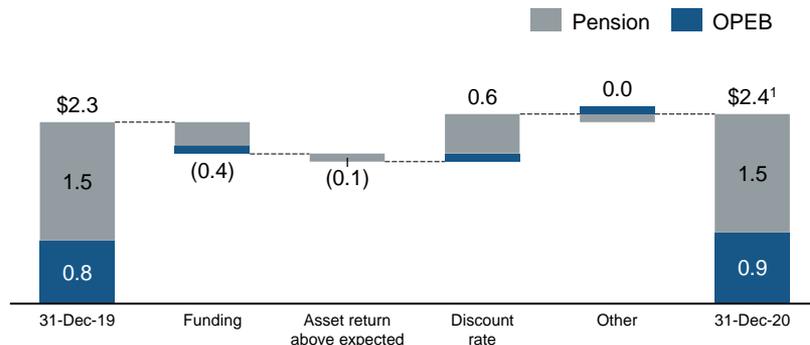


Key financial metrics and pension/OPEB update

Key financial metrics

FY20 Days working capital (DWC)	FY20 Return on equity
23 Days	(5.9)%
FY20 Capital expenditures	Proportional adjusted net debt ¹
\$353M	\$3.5B
FY20 Free cash flow less net NCI distributions	4Q20 Cash balance
\$(142)M	\$1.6B

Pension/OPEB update, \$ billion



FY20 funding

- Pension funding of \$343 million (including \$250 million in December 2020)
- OPEB payments of \$93 million
- GAAP worldwide pension funding status ~77%

After ~\$200 million use in early January 2021, U.S. pension pre-funding balance of \$500 million available for FY21+

1. Includes OPEB liabilities of approximately \$83 million related to the Warrick rolling mill sale; expected to close 1Q21. Recorded in Liabilities held for sale.

Successful cash actions, solid progress on strategic actions

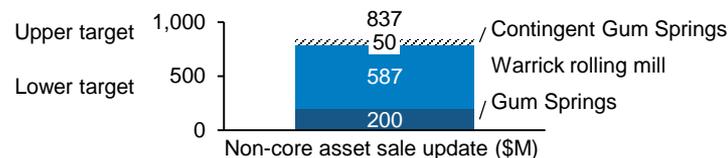


Impacts of cash actions, before tax and noncontrolling interest, \$M

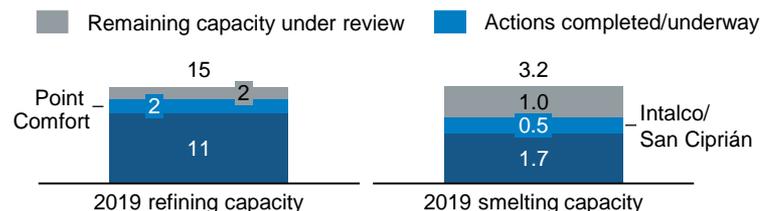
Cash actions compared to FY19 baseline		
	FY20 Target	FY20 Actual
Key strategic actions		
New operating model	45	45
Non-core asset sales	200	203
Portfolio review	10-75	21
2020 programs		
Leaner working capital	75-100	111
Lower production costs	100	73
COVID-19 response		
Reduce capital expenditures	100	122
Defer environmental/ARO	25	38
Defer pension funding to 2021	220	202 ¹
Hiring, travel, other restrictions	35	30
Total	-900	845
San Ciprián strike working capital impact		82
Total	-900	927

New operating model: Leaner, more integrated, operator-centric organization; achieved run-rate savings of ~\$60 million per annum

Non-core asset sales: \$500 million to \$1 billion from non-core asset sales; Warrick rolling announced; Rockdale land remains on market



Portfolio review: 4 million metric tons of alumina refining and 1.5 million metric tons of smelting capacity under review; sustainability targets



1. \$202 million deferred under CARES Act during 2020; \$250 million contribution made on December 18, 2020.

FY20 and FY21 Key metrics

Income statement excl. special items impacts		Cash flow impacts			
	FY20 Actual	FY21 Outlook			
Bauxite shipments (Mdmmt)	48.7	49.0 – 50.0	Pension / OPEB funding	\$436M	~ \$315M
Alumina shipments (Mmt)	13.9	13.9 – 14.0	Discretionary debt repayment	\$0M	Will vary based on market conditions and cash availability
Aluminum shipments (Mmt)	3.0	2.7 – 2.8	Stock repurchases	\$0M	
Transformation (adj. EBITDA impacts)	\$(45)M	~ \$(65)M	Return-seeking capital expenditures ²	\$35M	~ \$50M
Intersegment elims. (adj. EBITDA impacts)	\$(8)M	Varies	Sustaining capital expenditures ²	\$318M	~ \$375M
Other corporate (adj. EBITDA impacts)	\$(113)M	~ \$(120)M	Payment of prior year income taxes ³	\$45M	~ \$25M
Depreciation, depletion and amortization	\$653M	~ \$675M	Current period cash taxes ¹	\$114M	Varies
Non-operating pension/OPEB expense	\$108M	~ \$75M	Environmental and ARO payments ⁴	\$112M	~ \$150M
Interest expense	\$146M	~ \$165M	Impact of restructuring and other charges	\$120M	TBD
Operational tax expense ¹	\$226M	Varies			
Net income of noncontrolling interest	\$163M	40% of AWAC NI			

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 FY21 CapEx outlook: ~50% of return-seeking capital expenditures, and ~60% of sustaining capital expenditures.
3. Net of pending tax refunds.
4. As of December 31, 2020, the environmental remediation reserve balance was \$321M and the ARO liability was \$753M.

Roy Harvey

President and Chief Executive Officer



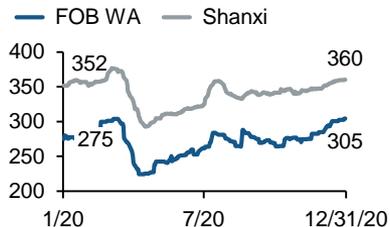
Prices above pre-crisis levels; demand continues to recover



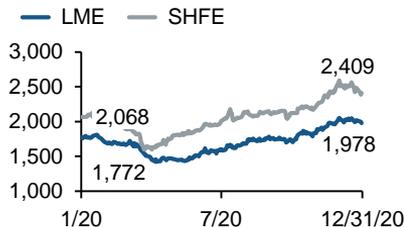
Aluminum market dynamics and commercial impacts

Prices ended 2020 higher than a year earlier

Alumina prices (\$/tonne)

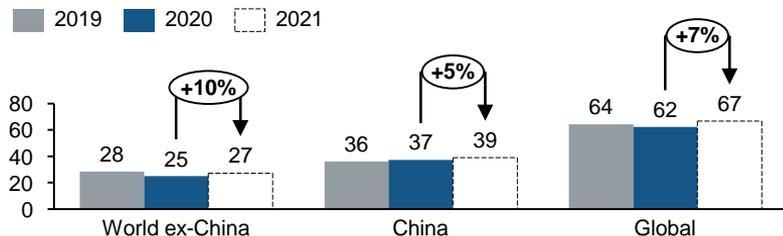


Aluminum prices (\$/tonne)



2021 global demand expected to grow ~7%

Annual primary aluminum consumption¹ (Mmt)



Alcoa commercial impacts

Bauxite

- Higher third-party bauxite revenues in 4Q20 compared to 3Q20, as volume increase more than offset pricing decrease
- Expect third-party bauxite shipments to increase in 2021 on higher production

Alumina

- Index pricing higher on improving sentiment in 4Q20 vs. 3Q20
- Smelter grade alumina shipments expected to remain stable in 2021

Aluminum

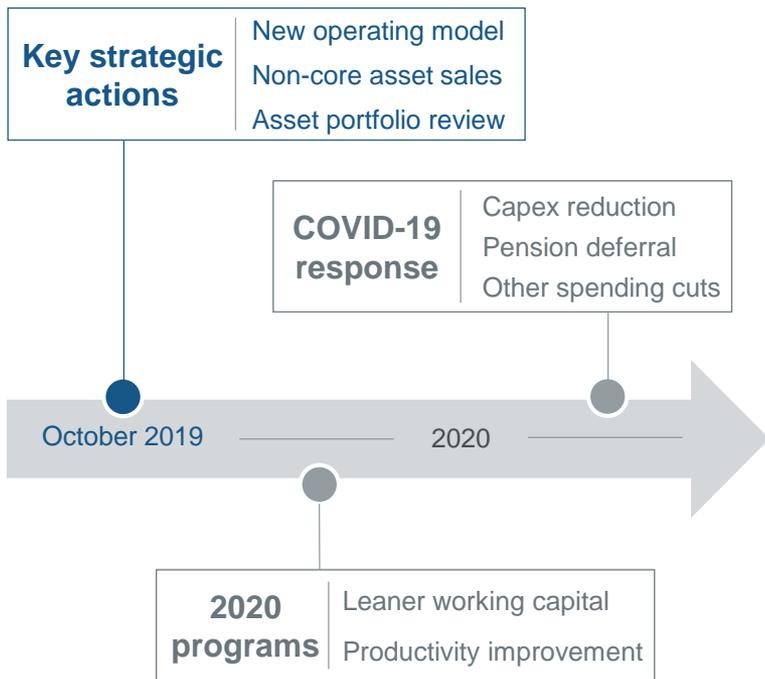
- Value-add product sales volume improved 13% in 4Q20 (vs. 3Q20); good recovery particularly in automotive
- In 2021, value-add product volume expected to grow ~5% on world ex-China growth

Source: Alcoa analysis, CRU, LME, Platts, SHFE, Baiinfo, Aladdiny. 1. Figures rounded.

Repositioning to drive value in evolving aluminum market



Key strategic action progression and future positioning



Near term actions

- Close sale of Warrick rolling mill
- Resolve San Ciprián smelter status
- Complete Portland power negotiations
- Continue non-core asset sales in 2021

Future positioning

Bauxite	Alumina	Aluminum
<ul style="list-style-type: none"> ▪ Retain 1st quartile cost position ▪ Maintain current license to operate in sensitive areas ▪ World class mine rehabilitation 	<ul style="list-style-type: none"> ▪ Retain 1st quartile cost position ▪ Remain lowest CO₂e intensity refiner in industry¹ ▪ Sustainable residue management, including use of press filtration 	<ul style="list-style-type: none"> ▪ Aim to achieve 1st quartile cost position ▪ Up to 85% of production from renewable energy² ▪ Strive for lowest CO₂e intensity producer in industry¹

1. Per independent 3rd party reviews, Scope 1 & 2 emissions 2. Direct and purchased

Positioned to drive value through sustainability



Sustainability and key value drivers

Sustain operations

Preserve license to operate and grow our assets

- Maintain right to operate in sensitive areas, e.g., Amazon and Jarrah forest
- Renew and expand mine permits/leases, other facility operating permits
- Create optionality for future growth

Reduce risk

Minimize impacts to operations and balance sheet

- Optimize financial impacts of carbon pricing mechanisms
- Minimize future cost of mine rehabilitation, remediation of residue impoundments
- Reduce risk related to water scarcity
- Reduce operating costs through efficiency improvements and application of digital technologies

Improve profitability

Enhance the value of our products through differentiation

- Position product segments to benefit from a more sustainable world
- Expand margins from world-leading sustainable products
- Partner with preferred customers through market cycles
- Advance breakthrough technologies; commissioning new ELYSIS™ R&D center to scale up technology

Operating well through pandemic; positioning for future



Key takeaways



- **Operated effectively**
Maintained effective COVID-19 precautions and set production records
- **Delivered on actions**
Implemented key strategic actions to improve operationally and financially
- **Positioned for a sustainable world**
Made progress to transform portfolio to leverage our industry-leading environmental and social standards for a sustainable future



Drive results and deliver returns to stockholders over the long term

Appendix



Strengthening the Company, 2017-2020



Multi-year strategy to remain competitive in a quickly evolving market

2017 – 2019

Operating Safely and Efficiently

- Revitalized safety program with zero fatalities
- Implemented new operating model and announced \$60M 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
- Renegotiated revolving credit for more favorable terms
- Reduced administrative locations; moved headquarters to Pittsburgh

Optimizing and Reshaping the Portfolio

- Restarted Lake Charles, Portland, and Warrick facilities
- Finalized Point Comfort, Rockdale, and Suriname closures
- Divested Avilés, La Coruña, and Portovesme facilities, and minority interest in Saudi rolling mill

Investing in Growth and Sustainability

- Set both annual and quarterly production records
- Initiated new smelter creep project
- Launched ELYSIS™ joint venture, joined International Council on Mining and Metals, achieved ASI certifications across value chain

2020

- Continued safety focus; comprehensive preparedness and response plan maintained across all locations to protect personnel and mitigate impact of COVID-19
- Set numerous location and segment production records; Bécancour restart complete
- Bolstered liquidity through \$750 million debt issuance; deferred ~\$200 million of U.S. pension funding throughout 2020 and made \$250 million contribution in December
- Made first non-core asset sales: Gum Springs treatment facility sold for \$250 million and announced sale of Warrick rolling mill for \$670 million (expect closing in 1Q21)
- Curtailed Intalco and announced San Ciprián action as part of the multi-year review of asset portfolio
- Expanded sales of Sustana™ low carbon products, introduced EcoSource™ world's first low carbon alumina
- 2020 cash programs, comprised of lower production costs and working capital reduction, achieved \$184 million of the \$175 million to \$200 million target, despite \$82 million higher working capital related to union actions at San Ciprián

Quarterly income statement



Quarterly income statement

M, Except realized prices and per share amounts

	4Q19	3Q20	4Q20	Prior Year Change	Sequential Change
Realized primary aluminum price (\$/mt)	\$2,042	\$1,904	\$2,094	\$52	\$190
Realized alumina price (\$/mt)	\$291	\$274	\$268	\$(23)	\$(6)
Revenue	\$2,436	\$2,365	\$2,392	\$(44)	\$27
Cost of goods sold	2,048	2,038	1,974	(74)	(64)
SG&A and R&D expenses	68	53	64	(4)	11
Adjusted EBITDA	320	274	354	34	80
Depreciation, depletion and amortization	183	161	170	(13)	9
Other expenses, net	44	45	44	0	(1)
Interest expense	31	41	43	12	2
Restructuring and other charges, net	363	5	60	(303)	55
Provision for income taxes	54	42	20	(34)	(22)
Net (loss) income	(355)	(20)	17	372	37
Less: Net (loss) income attributable to noncontrolling interest	(52)	29	21	73	(8)
Net loss attributable to Alcoa Corporation	\$(303)	\$(49)	\$(4)	\$299	45
Diluted loss per share	\$(1.63)	\$(0.26)	\$(0.02)	\$1.61	\$0.24
Diluted average shares ¹	185.6	185.9	185.9	0.3	0.0

- For all periods presented, 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.

Breakdown of special items by income statement classification – gross basis

<i>M, Except per share amounts</i>	4Q19	3Q20	4Q20	Description of significant <u>4Q20</u> special items
Net loss attributable to Alcoa Corporation	\$(303)	\$(49)	\$(4)	
Diluted loss per share	\$(1.63)	\$(0.26)	(\$0.02)	
Special items	\$246	\$(169)	\$53	
<i>Cost of goods sold</i>	26	7	3	Lake Charles hurricane costs
<i>SG&A and R&D expenses</i>	-	3	4	Portfolio action costs
<i>Restructuring and other charges, net</i>	363	5	60	Pension/OPEB related actions
<i>Other (income) expenses, net</i>	(1)	4	(2)	
<i>Provision for income taxes</i>	(32)	(187)	(7)	Discrete tax items and interim tax impacts
<i>Noncontrolling interest</i>	(110)	(1)	(5)	
Adjusted net (loss) income attributable to Alcoa Corporation	\$(57)	\$(218)	\$49	
Adjusted diluted (loss) income per share	\$(0.31)	\$(1.17)	\$0.26	

Quarterly income statement excluding special items



Quarterly income statement excluding special items

<i>M, Except realized prices and per share amounts</i>	4Q19	3Q20	4Q20	Prior Year Change	Sequential Change
Realized primary aluminum price (\$/mt)	\$2,042	\$1,904	\$2,094	\$52	\$190
Realized alumina price (\$/mt)	\$291	\$274	\$268	\$(23)	\$(6)
Revenue	\$2,436	\$2,365	\$2,392	\$(44)	\$27
Cost of goods sold	2,022	2,031	1,971	(51)	(60)
COGS % of Revenue	83.0%	85.9%	82.4%	(0.6)% pts.	(3.5)% pts.
SG&A and R&D expenses	68	50	60	(8)	10
SG&A and R&D % of Revenue	2.8%	2.1%	2.5%	(0.3)% pts.	0.4% pts.
Adjusted EBITDA	346	284	361	15	77
Depreciation, depletion and amortization	183	161	170	(13)	9
Other expenses, net	45	41	46	1	5
Interest expense	31	41	43	12	2
Provision for income taxes	86	229	27	(59)	(202)
Operational tax rate	99.5%	540.6%	25.3%	(74.2)% pts.	(515.3)% pts.
Adjusted net income (loss)	1	(188)	75	74	263
Less: Adjusted net income attributable to noncontrolling interest	58	30	26	(32)	(4)
Adjusted net (loss) income attributable to Alcoa Corporation	\$(57)	\$(218)	\$49	\$106	\$267
Adjusted diluted (loss) income per share	\$(0.31)	\$(1.17)	\$0.26	\$0.57	\$1.43
Diluted average shares ¹	185.6	185.9	187.7	2.1	1.8

1. For 4Q19 and 3Q20, 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.

4Q20 Financial summary



Three months ending December 31, 2020, excluding special items

<i>\$M</i>	Bauxite	Alumina	Aluminum ^{3,4}	Transformation	Intersegment eliminations	Other corporate	Alcoa Corporation
Total revenue	\$304	\$934	\$1,690	\$4	\$(544)	\$4	\$2,392
Third-party revenue	\$79	\$620	\$1,685	\$4	-	\$4	\$2,392
Adjusted EBITDA ¹	\$120	97	\$181	\$(8)	\$5	\$(34)	\$361
<i>Adjusted EBITDA margin %</i>	<i>39.5%</i>	<i>10.4%</i>	<i>10.7%</i>				<i>15.1%</i>
Depreciation, depletion and amortization	\$38	\$45	\$82	-	-	\$5	\$170
Other expenses (income), net ²	-	\$2	\$(6)	-	-	\$50	\$46
Interest expense							\$43
Provision for income taxes							\$27
Adjusted net income							\$75
Net income attributable to noncontrolling interest							\$26
Adjusted net income attributable to Alcoa Corp.							\$49

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. Flat-rolled aluminum shipments, revenue and adjusted EBITDA were 0.08 Mmt, \$297M and \$21M, respectively.
4. Third-party energy sales volume, revenue and adjusted EBITDA in Brazil were 921 GWh, \$32M and \$6M, respectively.

4Q20 Adjusted EBITDA drivers by segment



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

Segment	Adj. EBITDA 3Q20	Currency	Metal prices	API	Raw materials	Energy	Price/mix	Volume	Production costs	Other	Adj. EBITDA 4Q20
Bauxite	\$124	(4)	0	0	0	0	(12)	(6)	(3)	21	\$120
Alumina	\$119	(16)	0	20	3	(5)	(10)	(1)	(5)	(8)	\$97
Aluminum	\$116	(8)	93	(10)	(6)	(15)	9	0	(18)	20	\$181
Segment Total	\$359	(28)	93	10	(3)	(20)	(13)	(7)	(26)	33	\$398

Income statement information



FY19 and FY20 Annual income statement

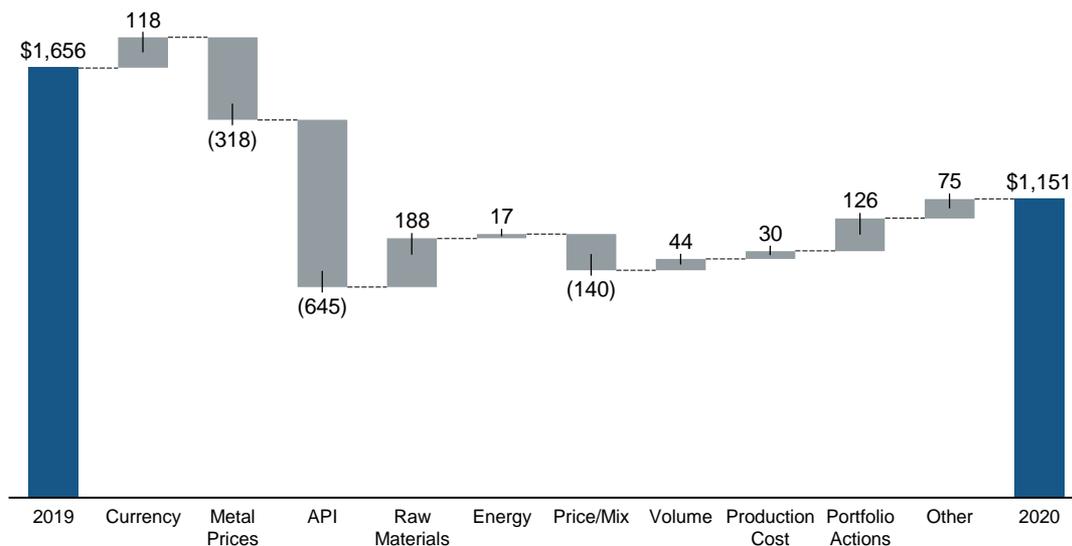
<i>M, Except realized prices and per share amounts</i>	FY19			FY20		
	Reported	Special items	Adjusted excl. special items	Reported	Special items	Adjusted excl. special items
Realized primary aluminum price (\$/mt)	\$2,141		\$2,141	\$1,915		\$1,915
Realized alumina price (\$/mt)	\$343		\$343	\$273		\$273
Revenue	\$10,433		\$10,433	\$9,286		\$9,286
Cost of goods sold	8,537	\$(65)	8,472	7,969	\$(59)	7,910
COGS % revenue	81.8%		81.2%	85.8%		85.2%
SG&A and R&D expenses	307	(2)	305	233	(8)	225
SG&A and R&D % revenue	2.9%		2.9%	2.5%		2.4%
Adjusted EBITDA	1,589	67	1,656	1,084	67	1,151
Depreciation, depletion and amortization	713		713	653		653
Other expenses, net	162	17	179	8	170	178
Interest expense	121		121	146		146
Restructuring and other charges, net	1,031	(1,031)	-	104	(104)	-
Provision for income taxes	415	21	436	187	39	226
Tax rate	-94.9%		67.9%	108.1%		129.7%
Net (loss) income	(853)	1,060	207	(14)	(38)	(52)
Less: Net income attributable to noncontrolling interest	272	119	391	156	7	163
Net loss attributable to Alcoa Corporation	\$(1,125)	\$941	\$(184)	\$(170)	\$(45)	\$(215)
Diluted loss per share	\$(6.07)	\$5.08	\$(0.99)	\$(0.91)	\$(0.25)	\$(1.16)
Diluted average shares	185.5		185.5	185.9		185.9

FY20 Highlights and annual change impacts

Full year financial highlights

	FY20	vs. FY19
Realized primary aluminum price (\$/mt)	\$1,915	\$(226)
Realized alumina price (\$/mt)	\$273	\$(70)
Revenue, \$M	\$9,286	\$(1,147)
Adjusted EBITDA excl. special items, \$M	\$1,151	\$(505)
Net loss attributable to Alcoa, \$M	\$(170)	\$955
Adjusted net loss attributable to Alcoa, \$M	\$(215)	\$(31)
Adjusted EPS, \$ per share	\$(1.16)	\$(0.17)

Adjusted EBITDA excl. special items bridge, \$M



Aluminum value chain

FY20 Alcoa product shipments by segment



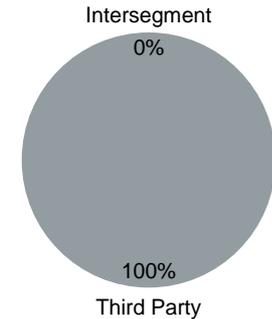
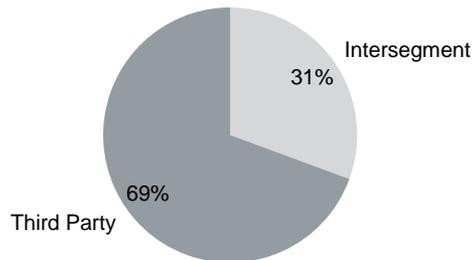
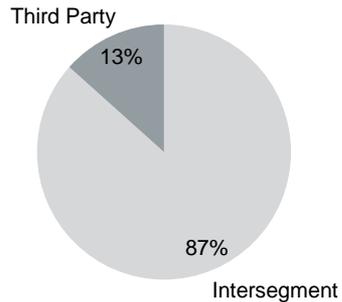
48.7 Mdmmt shipments



13.9 Mmt shipments



3.0 Mmt shipments

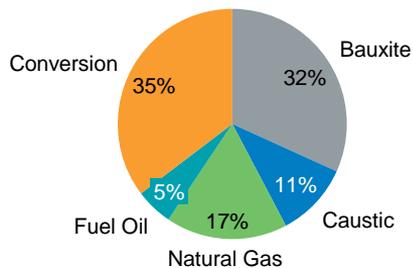


Composition of alumina and aluminum production costs



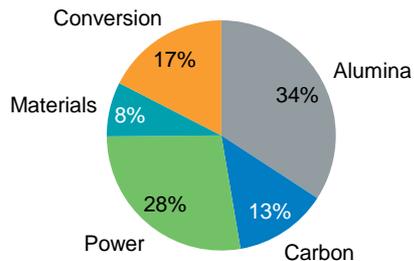
Alcoa 4Q20 production cash costs

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 - 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

2021 Business information



Estimated annual Adjusted EBITDA sensitivities

\$M	LME	API	Midwest	Europe	Japan	AUD	BRL	CAD	EUR	ISK	NOK
Segment	+ \$100/mt	+ \$10/mt	+ \$100/mt	+ \$100/mt	+ \$100/mt	+ 0.01 0.73 ¹	+ 0.10 5.40 ¹	+ 0.01 1.31 ¹	+ 0.01 1.19 ¹	+ 10 134.72 ¹	+ 0.10 9.05 ¹
Bauxite						(4)	2				
Alumina		120				(16)	4		(1)		
Aluminum	195	(42)	122	82	31	(1)	(1)	2	(3)	7	2
Total	195	78	122	82	31	(21)	5	2	(4)	7	2

Pricing conventions

Segment	Third party revenue
Bauxite	<ul style="list-style-type: none"> Negotiated prices
Alumina	<ul style="list-style-type: none"> ~95% of third party smelter grade alumina priced on API/spot API based on prior month average of spot prices
Aluminum	<ul style="list-style-type: none"> LME + regional premium + product premium Primary aluminum 15-day lag; flat rolled aluminum 30-day lag Brazilian hydroelectric sales at market prices

Regional premium breakdown

Regional premiums	% of 2021 Primary aluminum shipments
Midwest	~50%
Rotterdam Duty Paid	~40%
CIF Japan	~10%

1. Average 4Q20 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
12/31/19 currencies	0.70	4.05	1.31	1.12	121.38	8.82	
3/31/20 currencies	0.61	5.16	1.42	1.11	139.54	10.57	
1Q20 revaluation	20.9	10.0	4.4	0.4	3.1	(1.6)	37.2
6/30/20 currencies	0.69	5.44	1.37	1.13	137.77	9.68	
2Q20 revaluation	(20.1)	1.8	(1.6)	(0.5)	0.6	(1.0)	(20.8)
2Q20 sequential impact	(40.9)	(8.2)	(6.0)	(1.0)	(2.5)	0.7	(58.0)
9/30/20 currencies	0.71	5.65	1.34	1.17	138.66	9.47	
3Q20 revaluation	(4.7)	3.6	(0.8)	(1.1)	1.4	0.0	(1.7)
3Q20 sequential impact	15.4	1.8	0.8	(0.6)	0.8	1.0	19.1
12/31/20 currencies	0.77	5.19	1.28	1.23	127.22	8.58	
4Q20 revaluation	(10.6)	(2.1)	(3.6)	1.7	(0.1)	3.3	(11.4)
4Q20 revaluation sequential impact	(5.9)	(5.7)	(2.7)	2.9	(1.5)	3.2	(9.7)

Currency annual sensitivity and actual impact

	+0.01 AUD	+0.10 BRL	+0.01 CAD	+0.01 EUR	+ 10 ISK	+0.10 NOK	Total
EBITDA sensitivity	(22)	9	2	(4)	11	2	
4Q19 currency avg.	0.68	4.12	1.32	1.11	123.54	9.12	
1Q20 currency avg.	0.66	4.44	1.34	1.10	127.78	9.44	
1Q20 currency impact	12.6	7.0	1.1	0.4	1.2	1.3	23.6
2Q20 currency avg.	0.66	5.38	1.39	1.10	141.37	10.04	
2Q20 currency impact	1.8	21.0	2.7	0.3	3.7	2.4	31.9
3Q20 currency avg.	0.71	5.38	1.33	1.17	137.70	9.14	
3Q20 currency impact	(32.6)	(0.1)	(3.7)	(8.1)	(1.2)	(3.9)	(49.6)
12/31/20 currency avg.	0.73	5.40	1.31	1.19	134.72	9.05	
4Q20 currency impact	(9.8)	0.9	(2.0)	(5.9)	(0.8)	(0.8)	(18.4)
Total 4Q20 EBITDA currency impact¹	(15.7)	(4.8)	(4.7)	(3.0)	(2.3)	2.4	(28.1)

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)

Items expected to impact Adjusted EBITDA for 1Q21

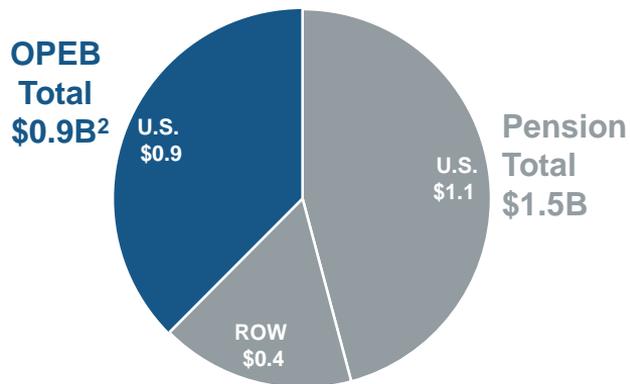
- Sequentially, Adjusted EBITDA in the Bauxite segment is expected to be ~\$45 million lower due to lower internal bauxite pricing, and an additional \$25 million lower due to lower earnings from minority owned mines and non-recurrence of favorable revenue true ups that occurred in 4Q20
- The Alumina segment expects the offsetting benefit of \$45 million from lower bauxite internal prices, partially offset by \$15 million of higher energy costs and seasonal maintenance costs
- In the Aluminum segment, alumina costs are estimated to be ~\$20 million higher sequentially and other items (excluding metal prices and currency) are expected to be unfavorable \$10 million sequentially
- Due to volatility in quarter end exchange rates, 4Q20 Adjusted EBITDA included an unfavorable balance sheet revaluation impact of \$11 million (with \$10 million negative sequential compared to 3Q20); impacts related to balance sheet revaluation are not incorporated into the currency sensitivities provided for Adjusted EBITDA
- Estimate intersegment profit elimination for every \$10/mt decrease in API prices to be a \$7 to \$9 million favorable impact based on comparison of the average prices of the last two months of each quarter; in the first quarter, we also expect related changes in intersegment inventories volumes and margins to add an additional \$10 million sequential benefit to the intersegment eliminations; consider intersegment eliminations as component of minority interest calculation
- In addition, the Company expects first quarter 2021 operational tax expense to approximate ~\$65 million based on recent pricing

Pension and OPEB summary



Net pension and OPEB liability and financial impacts

Net liability as of December 31, 2020¹



Pension funding status as of December 31, 2020

- U.S. ERISA ~82% (~93% including pre-funding balance)
- GAAP Worldwide ~77%

U.S. pension contributions currently not tax deductible

Estimated financial impacts, \$M

Expense impact	2021
Segment pension	\$20
Segment OPEB	5
Corporate pension & OPEB	-
Total adj. EBITDA impact	25
Non-operating	75
Special items ³ (curtailment/settlement)	22
Total expense impact	\$122

Cash flow impact	2021
Minimum required pension funding ⁴	\$255
OPEB payments	65
Total cash impact	\$320

1. The impact on the combined pension and OPEB liability of a 25 basis point change in the weighted average discount rate is approximately \$200 million.
2. Includes OPEB liabilities of approximately \$83 million related to the Warrick rolling mill sale; expected to close 1Q21. Recorded in Liabilities held for sale.
3. U.S. hourly medical plan to be remeasured due to the sale of the Warrick rolling mill expected to close 1Q21.
4. U.S. pension cash funding requirements are based on smoothed asset performance and 25-year average segment rates mandated by the IRS. Minimum required pension funding for 2021 does not include 2020 funding of \$197 million deferred to January 4, 2021 under the CARES Act and satisfied with pre-funding balance.

Investments summary



Investments listing and income statement location

Investee	Country	Nature of Investment ⁴	Ownership Interest	Carrying Value as of December 30, 2020	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™				\$559M	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				\$492M	COGS
Total investments				\$1,051M	

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 goals from 2019 Sustainability Report

Safety	Zero fatalities and serious injuries (life-threatening, life-altering injury or illness)	Waste	From a 2015 baseline, reduce landfilled waste 15% by 2025 and 25% by 2030
Diversity & Inclusion	Attain an inclusive 'everyone culture' that reflects the diversity of the communities in which we operate	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
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	Greenhouse gas emissions	Align our greenhouse gas (direct + indirect) emissions reduction targets with the 2°C decarbonization path by reducing greenhouse gas intensity by 30% by 2025, and 50% by 2030 from a 2015 baseline
Bauxite residue	From a 2015 baseline, reduce bauxite residue land requirements per metric ton of alumina produced by 15% by 2030	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

Rigorous standard in place to manage tailings and residue



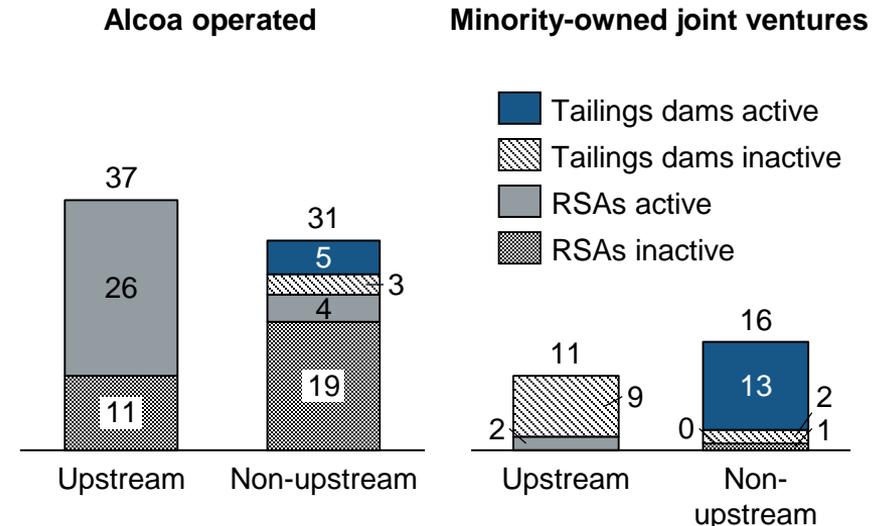
Tailings and residue impoundments management process and inventory

Robust and ongoing management process

- Established industry-leading standards over 25 years ago; global impoundment policy in place; impoundment database annual update effective June 30, 2020
- Governance structure with global oversight; all Alcoa standards externally benchmarked, updated and deployed
- Independent annual third-party inspections of Alcoa operated impoundments progressing as planned
- Impoundment facilities master planned, engineered, constructed, operated, maintained, closed and rehabilitated in accordance with global standards
- Alcoa has led industry improvements including residue dry stacking and filtration technologies (Kwinana and Pinjarra alumina refineries) and studying options at other locations
- International Council on Mining and Metals (ICMM) member; planning deployment of the new Global Industry Standard for Tailings Management (GISTM)

Inventory of tailings dams & residue storage¹

- No Alcoa operated upstream bauxite tailings dams
- 37 Alcoa operated upstream residue storage areas (RSAs)



1. Information as of June 2020. Inventory does not include 97 Alcoa operated and 15 minority joint venture other impoundments such as hydroelectric dams, fresh water reservoirs, stormwater management, process water, ash ponds, process materials outside of bauxite residue, and tailings, closed and remediated legacy location RSAs.

Production and capacity information



Alcoa Corporation annual consolidated amounts as of December 31, 2020

Bauxite production, Mdmt

Mine	Country	2020 Production
Darling Range	Australia	34.8
Juruti	Brazil	6.1
Poços de Caldas	Brazil	0.2
Trombetas (MRN)	Brazil	2.1
Boké (CBG)	Guinea	3.6
Al Ba'itha ¹	Saudi Arabia	1.2
Total		48.0

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
<i>Ras Al Khair¹</i>	<i>Saudi Arabia</i>	<i>452</i>	<i>-</i>

Aluminum smelting, kmt

Facility	Country	Capacity	Curtailed
Portland	Australia	197	30
São Luís (Alumar)	Brazil	268	268
Baie Comeau	Canada	280	-
Bécancour ²	Canada	310	-
Deschambault	Canada	260	-
Fjarðaál	Iceland	344	-
Lista	Norway	94	-
Mosjøen	Norway	188	-
San Ciprián	Spain	228	-
Intalco ³	U.S.	279	279
Massena West	U.S.	130	-
Warrick	U.S.	269	108
Wenatchee	U.S.	146	146
Total		2,993	831
<i>Ras Al Khair¹</i>	<i>Saudi Arabia</i>	<i>186</i>	<i>-</i>

1. The Company's proportionate share of earnings from its equity investment in the Saudi Arabian joint venture does not impact adjusted EBITDA.
2. As of September 30, 2020, the Bécancour smelter has fully restarted the curtailed smelting capacity.
3. The curtailment of the remaining 230,000 metric tons of smelting capacity at Intalco was completed as of the third quarter of 2020.

Valuation framework



Valuation framework key considerations

FY20
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	\$495M
	+	Alumina	ii. Ownership in certain mines and refineries outside the JV	\$497M
	+	Aluminum	Economic value using market multiple of: i. Smelters, casthouses, rolling mill, and energy assets ii. Smelters and casthouses restart optionality	\$325M
	-	Non-segment expenses (income)	Economic value using market multiple of: i. Net corporate expenses and Transformation	\$166M
	=	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 ^{1,2}	Book value of debt of \$2.5B (\$2.5B, >95% Alcoa), pension & OPEB net liabilities of \$2.4B (\$2.4B, >95% Alcoa; U.S. contributions not tax deductible), environmental & ARO liabilities of \$0.8B (\$1.1B, ~75% Alcoa)	
	+	Cash & equity investments ¹	Cash position of \$1.4B (\$1.6B, ~90% Alcoa) plus carrying value of investments in the Ma'aden joint venture and ELYSIS™ of \$0.5B (\$0.6B, ~85% Alcoa)	
	=	Equity value		

- Dollar amounts reflect Alcoa Corporation's consolidated balance sheet values as of December 31, 2020. The "Alcoa" percentages exclude amounts attributable to Alcoa Corporation's partner in the AWAC JV.
- Includes OPEB liabilities of approximately \$83 million related to the Warrick rolling mill sale; expected to close 1Q21. Recorded in Liabilities held for sale.

Adjusted EBITDA reconciliation



<i>\$M</i>	1Q19	2Q19	3Q19	4Q19	FY19	1Q20	2Q20	3Q20	4Q20	FY20
Net (loss) income attributable to Alcoa	\$(199)	\$(402)	\$(221)	\$(303)	\$(1,125)	\$80	\$(197)	\$(49)	\$(4)	\$(170)
Add:										
Net income (loss) attributable to noncontrolling interest	141	109	74	(52)	272	59	47	29	21	156
Provision for income taxes	150	116	95	54	415	80	45	42	20	187
Other expenses (income), net	41	50	27	44	162	(132)	51	45	44	8
Interest expense	30	30	30	31	121	30	32	41	43	146
Restructuring and other charges, net	113	370	185	363	1,031	2	37	5	60	104
Depreciation, depletion and amortization	172	174	184	183	713	170	152	161	170	653
Adjusted EBITDA	448	447	374	320	1,589	289	167	274	354	1,084
Special items before tax and noncontrolling interest	19	8	14	26	67	32	18	10	7	67
Adjusted EBITDA excl. special items	\$467	\$455	\$388	\$346	\$1,656	\$321	\$185	\$284	\$361	\$1,151

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.

Operational tax reconciliation



\$M	1Q19	2Q19	3Q19	4Q19	FY19	1Q20	2Q20	3Q20	4Q20	FY20
Provision for income taxes	\$150	\$116	\$95	\$54	\$415	\$80	\$45	\$42	\$20	\$187
Tax on special items	1	10	12	9	32	8	1	3	1	13
Discrete tax items	-	(1)	(8)	(2)	(11)	(1)	-	2	25	26
Interim tax impacts ¹	(34)	(31)	40	25	-	(21)	(142)	182	(19)	-
Operational tax provision	\$117	\$94	\$139	\$86	\$436	\$66	(\$96)	\$229	\$27	\$226
Operational tax rate	54.5%	46.5%	99.5%	99.5%	67.9%	78.5%	178.3%	540.6%	25.3%	129.7%

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;
- Discrete tax items (generally unusual or infrequently occurring items, changes in law, items associated with uncertain tax positions, or effects of measurement-period adjustments); and
- Interim tax impacts required under GAAP which have the effect of smoothing tax provisioned across quarters.

¹ Beginning in the first quarter of 2021, the Company will revise the way our operational tax provision is calculated on an interim basis. The operational tax provision will begin to include the interim tax impacts required under GAAP that have 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



<i>\$M</i>	1Q19	2Q19	3Q19	4Q19	1Q20	2Q20	3Q20	4Q20
Cash provided from (used for) operations	\$168	\$82	\$174	\$262	\$(90)	\$288	\$158	\$38
Capital expenditures	(69)	(89)	(87)	(134)	(91)	(77)	(74)	(111)
Free cash flow	99	(7)	87	128	(181)	211	84	(73)
Contributions from noncontrolling interest	20	1	20	10	-	16	8	-
Distributions to noncontrolling interest	(214)	(72)	(102)	(84)	(31)	(75)	(46)	(55)
Free cash flow less net distributions to noncontrolling interest	\$(95)	\$(78)	\$5	\$54	\$(212)	\$152	\$46	\$(128)

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.

Net Debt reconciliation



\$M	<u>FY18</u>			<u>FY19</u>			<u>FY20</u>		
	Cons.	NCI	Alcoa Prop.	Cons.	NCI	Alcoa Prop.	Cons.	NCI	Alcoa Prop.
Short-term borrowings	\$-	\$-	\$-	\$-	\$-	\$-	\$77	\$31	\$46
Long-term debt due within one year	1	-	1	1	-	1	2	-	2
Long-term debt, less amount due within one year	1,801	34	1,767	1,799	31	1,768	2,463	-	2,463
Total debt	1,802	34	1,768	1,800	31	1,769	2,542	31	2,511
Less: Cash and cash equivalents	1,113	296	817	879	167	712	1,607	176	1,431
Net debt	689	(262)	951	921	(136)	1,057	935	(145)	1,080
Plus: Net pension / OPEB liability	2,327	28	2,299	2,330	40	2,290	2,426 ¹	54	2,372 ¹
Adjusted net debt	\$3,016	\$(234)	\$3,250	\$3,251	\$(96)	\$3,347	\$3,361	\$(91)	\$3,452

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. Adjusted net debt is also a non-GAAP financial measure. Management believes that this additional measure is meaningful to investors because it provides further insight into Alcoa Corporation's leverage position by including the Company's net pension/OPEB liability.

1. Includes OPEB liabilities of approximately \$83 million related to the Warrick rolling mill sale; expected to close 1Q21. Recorded in Liabilities held for sale.

Days Working Capital



<i>\$M</i>	1Q19	2Q19	3Q19	4Q19	1Q20	2Q20	3Q20	4Q20
Receivables from customers	\$758	\$684	\$596	\$546	\$570	\$402	\$516	\$471
Add: Inventories	1,799	1,767	1,649	1,644	1,509	1,419	1,398	1,398
Add: Net DWC working capital held for sale ²	–	–	–	–	–	–	–	129
Less: Accounts payable, trade	1,503	1,523	1,418	1,484	1,276	1,253	1,360	1,403
DWC working capital	\$1,054	\$928	\$827	\$706	\$803	\$568	\$554	\$595
Sales	\$2,719	\$2,711	\$2,567	\$2,436	\$2,381	\$2,148	\$2,365	\$2,392
Number of days in the quarter	90	91	92	92	91	91	92	92
Days Working Capital¹	35	31	30	27	31	24	22	23

1. Days Working Capital = DWC working capital divided by (Sales / number of days in the quarter).

2. Includes net working capital related to the Warrick rolling mill sale; expected to close 1Q21. Recorded in Assets and Liabilities held for sale.

Annualized Return on Equity (ROE)



Reconciliation and calculation information

<i>\$M</i>	2019	2020
<i>Numerator:</i>		
Net loss attributable to Alcoa Corporation	\$(1,125)	\$(170)
Add: Special items ¹	941	(45)
ROE Adjusted Net loss YTD	\$(184)	\$(215)
<i>Denominator²:</i>		
Total assets	\$15,152	\$14,009
Less: Total Liabilities	8,592	8,723
Less: Noncontrolling Interest	1,884	1,621
Shareholders' Equity	\$4,676	\$3,665
ROE	-3.9%	-5.9%

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

$$\begin{aligned}
 \text{2019 YTD ROE \%} &= \frac{(-\$1,125 + \$941)}{(\$15,152 - \$8,592 - \$1,884)} \times 100 = -3.9\% \\
 \text{2020 YTD ROE \%} &= \frac{(-\$170 - \$45)}{(\$14,009 - \$8,723 - \$1,621)} \times 100 = -5.9\%
 \end{aligned}$$

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

Annualized Return on Capital (ROC)



Reconciliation and calculation information

<i>\$M</i>	2019	2020
<i>Numerator:</i>		
Net loss attributable to Alcoa Corporation	\$(1,125)	\$(170)
Add: Net income attributable to noncontrolling interest	272	156
Add: Provision for income taxes	415	187
Profit before taxes (PBT)	(438)	173
Add: Interest expense	121	146
Less: Interest income	18	7
Add: Special items ¹	1,082	1
ROC earnings before taxes	\$747	\$313
ROC earnings after fixed tax rate of 35%	\$485	\$204
<i>Denominator²:</i>		
Total assets	\$15,152	\$14,009
Less: Cash, cash equivalents, restricted cash and short-term investments	897	1,287
Less: Current liabilities ⁶	2,588	2,352
Add: Long-term debt due within one year and short-term borrowings	1	21
Capital Base²	\$11,668	\$10,391
ROC	4.2%	2.0%

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

$$\text{2019 YTD ROC \%} = \frac{(-\$438 + \$103 + \$1,082) \times (1 - 0.35)}{(\$15,152 - \$897 - \$2,588 + \$1)} \times 100 = 4.2\%$$

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

1. Special items exclude interest expense, income taxes, and noncontrolling interest.
2. Denominator calculated using average of 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.
6. 2020 adjusted to exclude approximately \$91 million for previously noncurrent liabilities related to the Warrick rolling mill sale; expected to close 1Q21. Recorded in current Liabilities held for sale.

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 ₂ e	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	Year to date

*The Element of **Possibility***[™]

