

The Element of **Possibility™**

2nd Quarter Earnings

Alcoa Corporation

July 15, 2020



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 (including the Australian Taxation Office matter), 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, 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.

Roy Harvey

President and Chief Executive Officer



Operations and improvements continue amid pandemic



2Q20 Financial results and business review

2Q20 Financial results

- Net loss of \$197 million, or \$1.06 per share; excluding special items, adjusted net loss of \$4 million, or \$0.02 per share
- Adjusted EBITDA excluding special items of \$185 million
- Cash balance at \$965 million on June 30

Business review

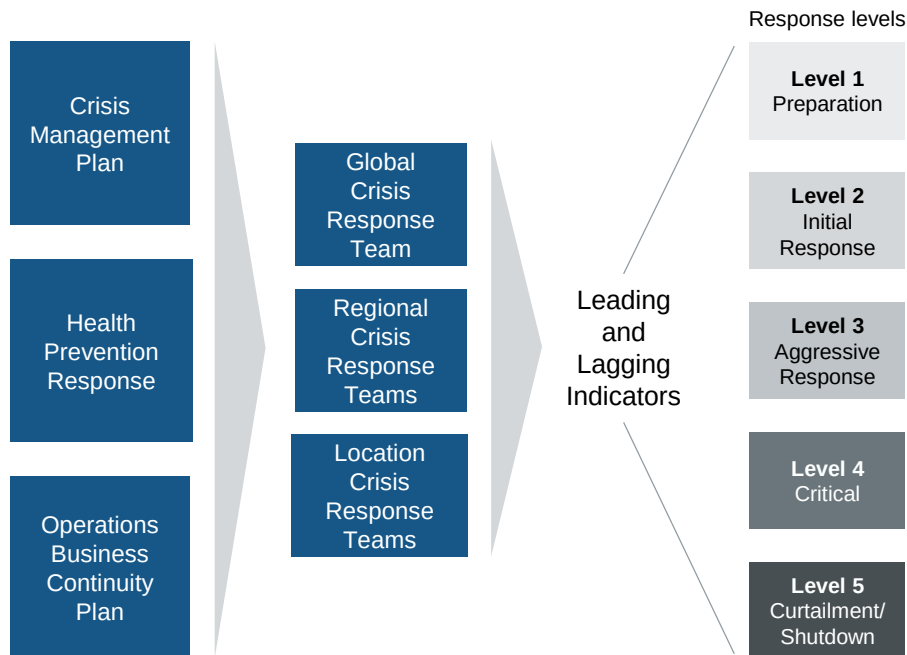
- No serious injuries in second quarter; maintaining comprehensive COVID-19 health and safety protocols, and supporting communities
- Sustained shipment levels; Bécancour restart ~90% complete
- Production records in Bauxite and Alumina segments
- Intalco curtailment announced; San Ciprián smelter consultations begun
- Enhanced liquidity; issued \$750 million of debt maturing 2027 on July 13
- Aluminum and alumina prices have increased from April lows

Path forward to assure health, safety, business continuity



COVID-19 crisis response framework and actions

COVID-19 crisis framework



Alcoa COVID-19 response

As of June 30, 474 (~2%) employees and contractors diagnosed with COVID-19, 97% have fully recovered

- Prioritizing health and safety of employees in alignment with public health regulations
- Supporting employees with COVID-19; minimizing risk of exposure for others
- Enhanced cleaning, hygiene and social distancing protocols remain in workplace
- Global travel suspension, work from home
- Alcoa Foundation donating \$4 million to fund community response activities at Alcoa operating locations

Operations running well; commercial activity picking up

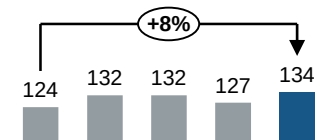


Segment operational and commercial update

Segment production and operational performance

Bauxite

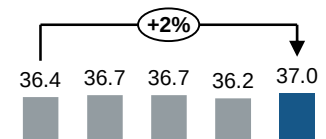
Average daily production, kdm



- Juruti quarterly shipments record
- First half and quarterly production records for Bauxite segment

Alumina

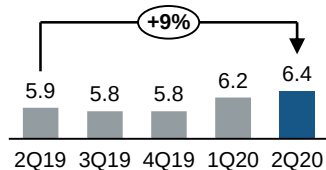
Average daily production, kmt



- Record quarterly production rate (tonnes per day) for Alumina segment
- First half production records at São Luís and Wagerup

Aluminum

Average daily production, kmt



- Bécancour restart ~90% complete; expected to reach full production in 3Q20
- Intalco curtailment underway

Commercial impacts

- Shipments and pricing largely unaffected
- Bauxite demand stable

- Stronger Chinese metal prices supporting smelter grade alumina imports into China

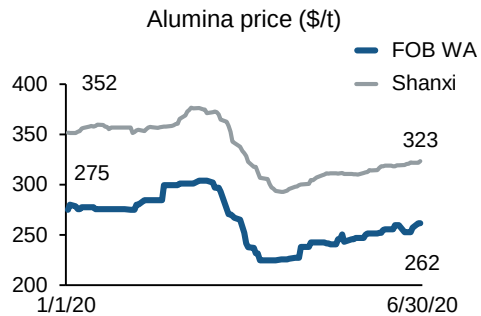
- Value-add product percentage of sales expected to be flat 3Q vs 2Q; foundry products showing some improvement
- Regional premiums improving on Section 232 tariff rumors and rising Chinese imports

Prices beginning recovery with inventory build slowing

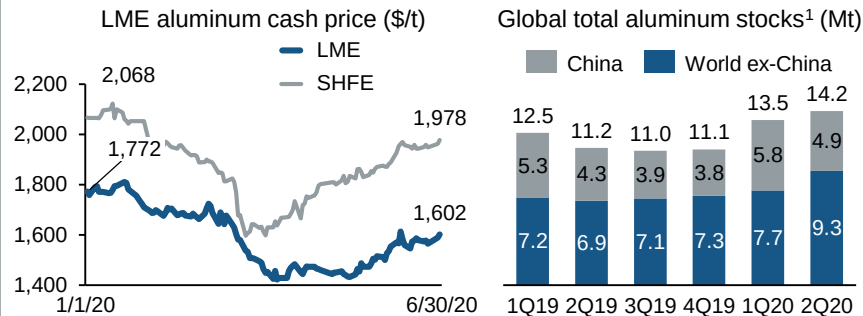
2020 market dynamics

Prices and Inventory

Alumina



Aluminum

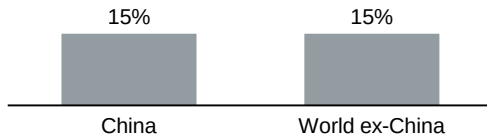


Industry Profitability

June 2020

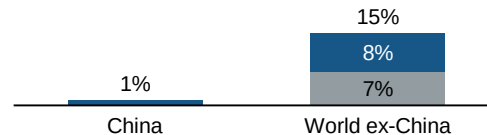
Refining production cash negative (\$/t)

■ \$0-\$50 cash negative



Smelting production cash negative (\$/t)

■ \$0-\$100 cash negative ■ > \$100/t cash negative



Continuing near and long term improvement programs



Key strategic actions, 2020 programs, COVID-19 response

Key strategic actions (October 2019)

New operating model: Creating a leaner, more integrated, operator-centric Alcoa

Non-core asset sales: Generating additional cash through non-core asset sales

- Gum Springs treatment facility sale (January 2020)

Asset portfolio review: Positioning to succeed financially in an evolving sustainable world

- Point Comfort refinery closure (announced December 2019)
- Intalco smelter curtailment (announced April 2020)
- San Ciprián smelter consultation (May 2020)

2020 Programs (February 2020)

Leaner working capital: Lowering inventory, optimizing contract terms

- \$75-100 million

Productivity improvement: Lowering production costs through improved efficiencies and higher volumes

- ~\$100 million

COVID-19 response (March 2020)

Pension deferral: ~\$220 million of U.S. pension funding deferred to 2021 via the CARES Act

Capex reduction: \$100 million in 2020 to new target of \$375 million

Other spending cuts: \$60 million in 2020 from hiring, travel and other reductions, environmental/ARO deferrals

William Oplinger

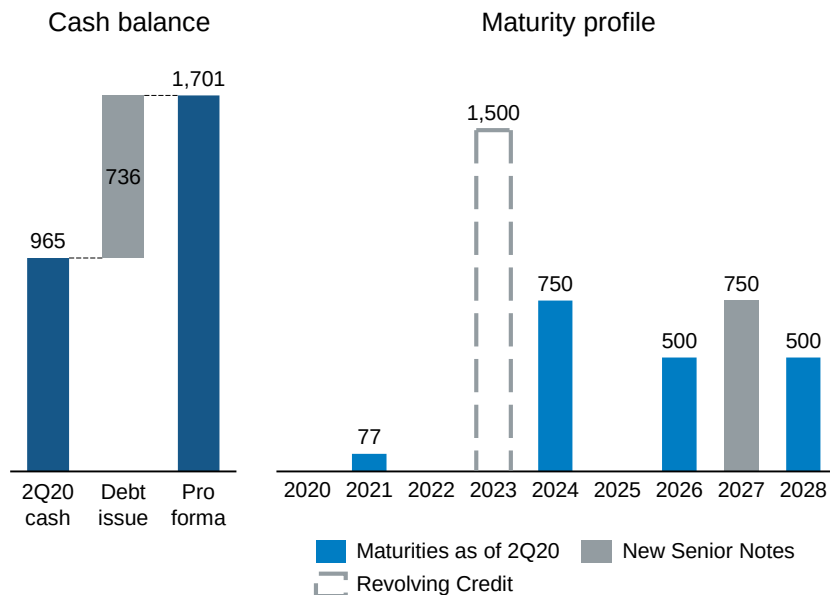
Executive Vice President and Chief Financial Officer



Debt issuance provides optionality in uncertain times

Liquidity position and rationale for debt issuance (\$M)

Pro forma cash and maturity profile



Reasons for debt issuance

On July 13, issued \$750 million aggregate principal amount of 5.5% senior notes due 2027

Cash proceeds provide increased liquidity and flexibility in the short term, as these major factors coincide:

- Signs of solid recovery in China, but timing of world ex-China economic recovery uncertain
- Strategic actions ongoing in 2020 include non-core asset sales and portfolio review; potentially sources, and uses, of cash
- Options to make other capital structure moves, including reducing nearer term maturities or pension de-risking actions if they generate stockholder value
- Reaffirming the basic tenets of our capital allocation framework including the mid-term proportional net debt target

Revenues, Adjusted EBITDA, reflect softer market



Quarterly income statement highlights

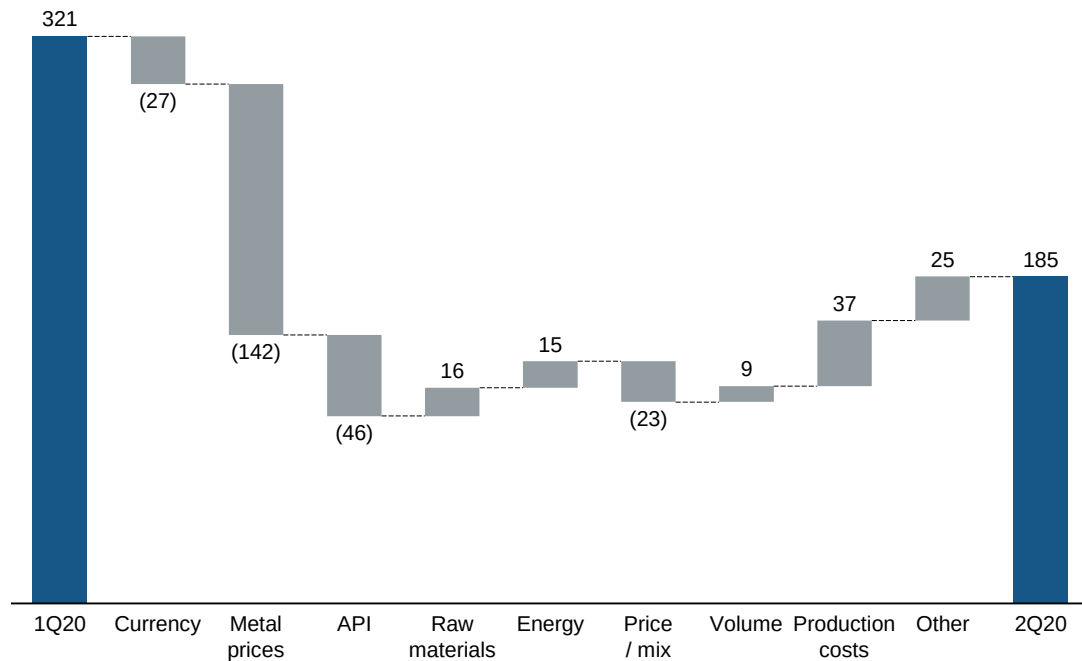
M, Except realized prices and per share amounts

	2Q19	1Q20	2Q20
Income statement highlights			
Revenue	\$2,711	\$2,381	\$2,148
Restructuring and other charges, net	\$370	\$2	\$37
Provision for income taxes	\$116	\$80	\$45
Net (loss) income attributable to Alcoa Corporation	\$(402)	\$80	\$(197)
Diluted (loss) earnings per share	\$(2.17)	\$0.43	\$(1.06)
Adjusted income statement highlights			
Adjusted EBITDA excluding special items	\$455	\$321	\$185
Provision for income taxes	\$94	\$66	\$(96)
Operational tax rate	46.5%	78.5%	178.3%
Adjusted net loss attributable to Alcoa Corporation	\$(2)	\$(42)	\$(4)
Adjusted diluted loss per share	\$(0.01)	\$(0.23)	\$(0.02)

Prior year change	Sequential change
\$ (563)	\$ (233)
\$ (333)	\$ 35
\$ (71)	\$ (35)
\$ 205	\$ (277)
\$ 1.11	\$ (1.49)
\$ (270)	\$ (136)
\$ (190)	\$ (162)
131.8% pts.	99.8% pts.
\$ (2)	\$ 38
\$ (0.01)	\$ 0.21

Lower market prices impact Adjusted EBITDA

Adjusted EBITDA excluding special items sequential changes, \$M

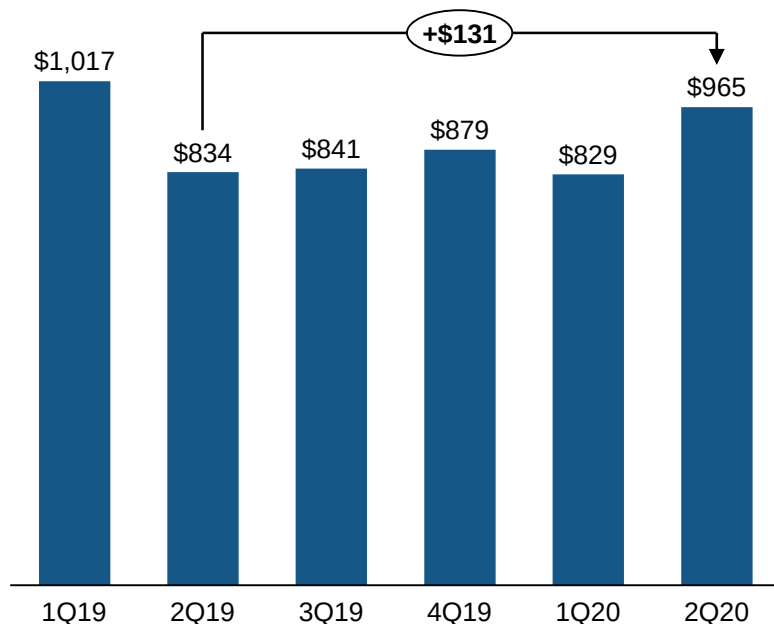


	1Q20	2Q20	Change
Bauxite	\$120	\$131	\$11
Alumina	193	88	(105)
Aluminum	62	(34)	(96)
Segment total	375	185	(190)
Transformation	(16)	(10)	6
Intersegment eliminations	(8)	30	38
Other corporate	(30)	(20)	10
Total	\$321	\$185	\$(136)

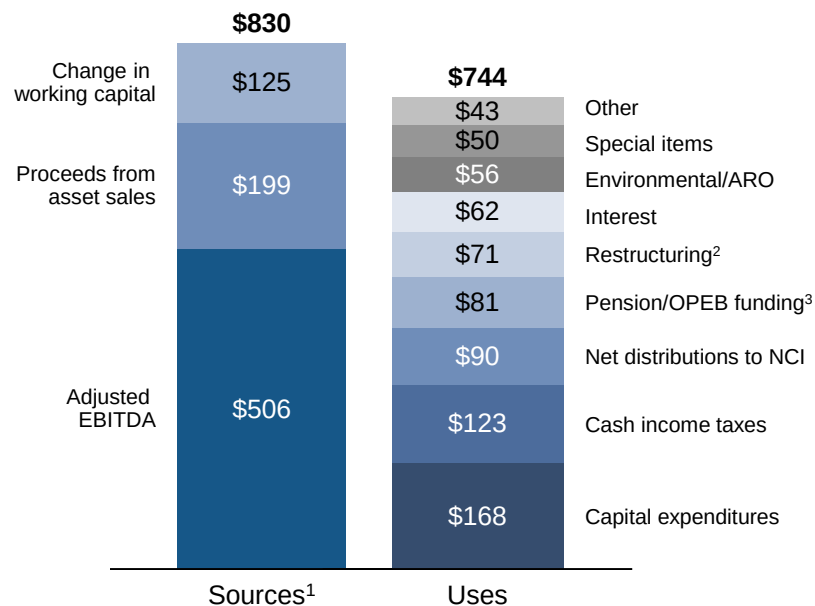
Cash balance improves to \$965 million

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) and proceeds from asset sales.

2. Restructuring includes payments related to divestiture of the Avilés and La Coruña facilities and severance related to implementing the new operating model.

3. Minimum required pension/all OPEB funding is reflected net of related expenses within Adjusted EBITDA.

Focus on balance sheet; modest pension impacts



Key financial metrics and pension/OPEB update

Key financial metrics

2Q20 Days working capital	1H20 Return on equity
24 Days	(2.3)%
1H20 Capital expenditures	Proportional adjusted net debt
\$168M	\$3.3B
1H20 Free cash flow less net NCI distributions	2Q20 Cash balance
\$(60)M	\$965M

Pension/OPEB update

Balance sheet impacts (remeasured at year end)

- Pension expected return on plan assets is 6.28%; preliminary actual returns were ~0% through June 30
- Discount rate for pension and OPEB liabilities down ~35 and ~60 basis points, respectively, from last plan remeasurement to June 30 (pension remeasurement April 30 due to Intalco curtailment, \$0.2 billion impact)

Funding requirements (current estimates)

- ~\$220 million CARES Act deferral of 2020 U.S. pension funding to January 1, 2021; nets to ~\$80 million FY20 pension funding
- U.S. pension pre-funding balance of ~\$380 million available for future funding requirements in FY21+
- OPEB cash requirements ~\$100 million in FY20

On target to achieve cash actions totaling ~\$900 million



Impacts of announced FY20 actions, before tax and noncontrolling interest, \$M

Cash actions					YTD
	Run rate	One time	Deferral	FY20	Comments
Key strategic actions					
New operating model	60			45	Savings at full run rate in 2Q20
Non-core asset sales		200		200	Asset sale program continuing
Portfolio review	35-100	(25)		10-75	Intalco, San Ciprián processes underway
2020 programs					
Leaner working capital		75-100		75-100	DWC working capital down \$138 since 12/31/19
Lower production costs	100			100	Volume driving current improvement
COVID-19 response					
Reduce capital expenditures		100		100	Spending at targeted rate
Defer environmental/ARO			25	25	Spending at targeted rate
Defer pension funding to 2021			220	220	Underway using CARES Act
Hiring, travel, other restrictions		20	15	35	Spending at targeted rate
Total	~225	~400	~260	~900	

2020 Outlook



FY20 Key metrics

Income statement excl. special items impacts		
	1H20	FY20 Outlook
Bauxite shipments (Mdmt)	24.3	48.0 – 49.0
Alumina shipments (Mmt)	6.8	13.6 – 13.7
Aluminum shipments (Mmt) ¹	1.5	2.9 – 3.0
Transformation (adj. EBITDA impacts)	\$(26)M	~ \$(75)M
Intersegment elims. (adj. EBITDA impacts)	\$22M	Varies
Other corporate (adj. EBITDA impacts)	\$(49)M	~ \$(90)M
Depreciation, depletion and amortization	\$322M	~ \$665M
Non-operating pension/OPEB expense	\$52M	~ \$100M
Interest expense	\$62M	~ \$150M
Operational tax rate ²	(97.7)%	Varies
Net income of noncontrolling interest	\$106M	40% of AWAC NI

Cash flow impacts		
	1H20	FY20 Outlook
Minimum required pension/all OPEB funding	\$103M	~ \$180M
Additional pension funding	\$4M	Will vary based on market conditions and cash availability
Discretionary debt repayment	\$0M	
Stock repurchases	\$0M	
Return-seeking capital expenditures ³	\$31M	~ \$35M
Sustaining capital expenditures ³	\$137M	~ \$340M
Payment of prior year income taxes ⁴	\$47M	~ \$50M
Current period cash taxes ²	\$76M	Varies
Environmental and ARO payments ⁵	\$56M	~ \$125M
Impact of restructuring and other charges	\$71M	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. Intalco curtailment reflected in outlook.
2. Estimate will vary with market conditions and jurisdictional profitability.
3. AWAC portion of FY20 Outlook: ~30% of return-seeking capital expenditures, and ~60% of sustaining capital expenditures.
4. Net of pending tax refunds.
5. As of June 30, 2020, the environmental remediation reserve balance was \$323M and the ARO liability was \$665M.

Roy Harvey

President and Chief Executive Officer



Operating well through pandemic; positioning for future



Key takeaways



- **Care and safety**
Protecting our employees and our operations throughout the COVID-19 pandemic
- **Strong operating performance**
YoY production increases across all segments; working capital improvements bolstering cash balance
- **Building our future**
Increased liquidity and flexibility driving continued progress on our strategic priorities



Drive results and deliver returns to stockholders over the long term

Appendix



Strengthening the Company, 2017-2019



Key actions

2017 – 2018

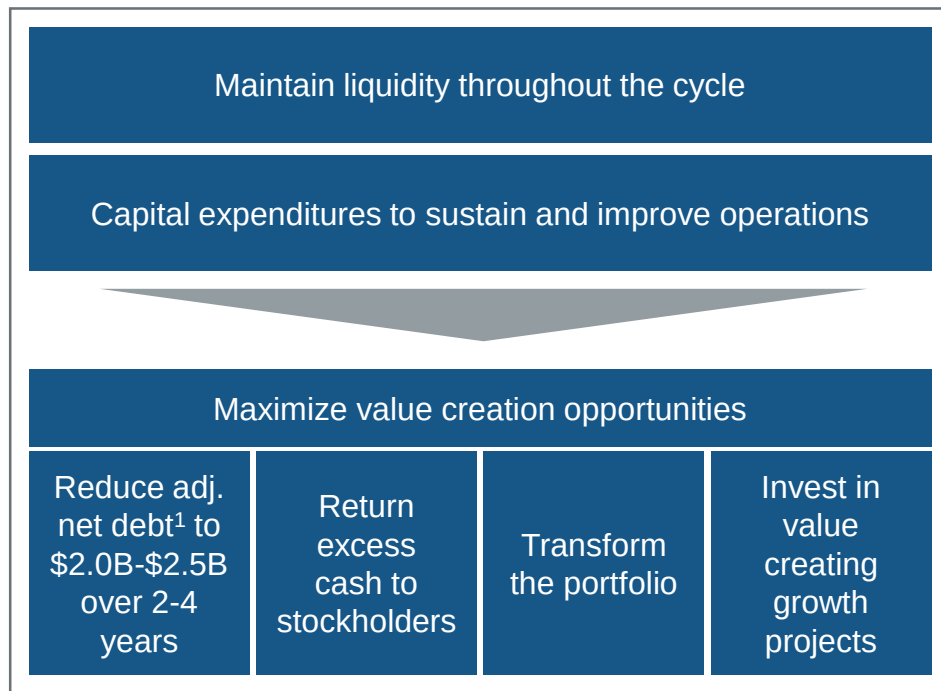
- Revitalized safety program; zero fatalities in 2018
- Restarted Portland smelter and Lake Charles calciner
- Streamlined business units to three, reduced administrative locations, relocated headquarters to Pittsburgh
- Set annual production records
- Terminated Rockdale power contract, closed site
- Restarted Warrick smelter
- Divested Portovesme smelter
- Launched ELYSIS™ joint venture
- Renegotiated revolving credit for more favorable terms
- Froze salaried pension plan as of January 1, 2021; prefunded pension with \$500 million debt issue
- Repurchased \$50 million in stock

2019

- Continued solid safety performance; zero fatalities
- Set annual and quarterly production records
- Modernized labor contracts in Canada, U.S. and Australia
- Began restart of Bécancour smelter
- Initiated Deschambault smelter creep project
- Divested Avilés and La Coruña facilities, as well as minority interest in Saudi rolling mill
- Implemented new operating model
- Announced Point Comfort alumina refinery closure
- Agreed to sale of Gum Springs treatment facility
- Achieved four ASI certifications across value chain
- Joined International Council on Mining and Metals
- Finalized Suriname closure agreements; transferred dam
- Took further actions to reduce pension/OPEB net liability

Capital allocation framework

Capital allocation framework and considerations



- \$1 billion target for minimum cash balance
 - Sustaining capital expenditures of ~\$340 million, return seeking capital of ~\$35 million, per 2020 outlook
-
- Based on current discount rates and estimated asset returns, expect meeting adjusted net debt target solely through minimum required pension contributions
 - \$150 million available of existing \$200 million buyback authorization
 - Portfolio review and transformation over five 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

Quarterly income statement



Quarterly income statement

M, Except realized prices and per share amounts

	2Q19	1Q20	2Q20
Realized primary aluminum price (\$/mt)	\$2,167	\$1,988	\$1,694
Realized alumina price (\$/mt)	\$376	\$299	\$250
Revenue	\$2,711	\$2,381	\$2,148
Cost of goods sold	2,189	2,025	1,932
SG&A and R&D expenses	75	67	49
Adjusted EBITDA	447	289	167
Depreciation, depletion and amortization	174	170	152
Other expenses (income), net	50	(132)	51
Interest expense	30	30	32
Restructuring and other charges, net	370	2	37
Provision for income taxes	116	80	45
Net (loss) income	(293)	139	(150)
Less: Net income attributable to noncontrolling interest	109	59	47
Net (loss) income attributable to Alcoa Corporation	\$(402)	\$80	\$(197)
Diluted (loss) earnings per share	\$(2.17)	\$0.43	\$(1.06)
Diluted average shares ¹	185.5	186.6	185.9

Prior Year Change	Sequential Change
\$(473)	\$(294)
\$(126)	\$(49)
\$(563)	\$(233)
(257)	(93)
(26)	(18)
(280)	(122)
(22)	(18)
1	183
2	2
(333)	35
(71)	(35)
143	(289)
(62)	(12)
\$205	\$(277)
\$1.11	\$(1.49)
0.4	(0.7)

- For 2Q19 and 2Q20, share equivalents related to employee stock-based compensation were excluded from Diluted average shares as the impact was anti-dilutive given a net loss attributable to Alcoa Corporation.

Breakdown of special items by income statement classification – gross basis

<i>M, Except per share amounts</i>	2Q19	1Q20	2Q20	Description of significant <u>2Q20</u> special items
Net (loss) income attributable to Alcoa Corporation	\$(402)	\$80	\$(197)	
Diluted (loss) earnings per share	\$(2.17)	\$0.43	\$(1.06)	
Special items	\$400	\$(122)	\$193	
<i>Cost of goods sold</i>	8	32	17	Bécancour restart costs
<i>SG&A and R&D expenses</i>	-	-	1	
<i>Restructuring and other charges, net</i>	370	2	37	Intalco smelter curtailment and take or pay contracts at idled facilities
<i>Other expenses (income), net</i>	-	(169)	(3)	
<i>Provision for income taxes</i>	22	14	141	Interim tax impacts
<i>Noncontrolling interest</i>	-	(1)	-	
Adjusted net loss attributable to Alcoa Corporation	\$(2)	\$(42)	\$(4)	
Adjusted diluted loss per share	\$(0.01)	\$(0.23)	\$(0.02)	

Quarterly income statement excluding special items



Quarterly income statement excluding special items

<i>M, Except realized prices and per share amounts</i>	2Q19	1Q20	2Q20	Prior Year Change	Sequential Change
Realized primary aluminum price (\$/mt)	\$2,167	\$1,988	\$1,694	\$(473)	\$(294)
Realized alumina price (\$/mt)	\$376	\$299	\$250	\$(126)	\$(49)
Revenue	\$2,711	\$2,381	\$2,148	\$(563)	\$(233)
Cost of goods sold	2,181	1,993	1,915	(266)	(78)
COGS % of Revenue	80.5%	83.7%	89.2%	8.7% pts.	5.5% pts.
SG&A and R&D expenses	75	67	48	(27)	(19)
SG&A and R&D % of Revenue	2.8%	2.8%	2.2%	(0.6)% pts.	(0.6)% pts.
Adjusted EBITDA	455	321	185	(270)	(136)
Depreciation, depletion and amortization	174	170	152	(22)	(18)
Other expenses, net	50	37	54	4	17
Interest expense	30	30	32	2	2
Provision for income taxes	94	66	(96)	(190)	(162)
Operational tax rate	46.5%	78.5%	178.3%	131.8% pts.	99.8% pts.
Adjusted net income	107	18	43	(64)	25
Less: Adjusted net income attributable to noncontrolling interest	109	60	47	(62)	(13)
Adjusted net loss attributable to Alcoa Corporation	\$(2)	\$(42)	\$(4)	\$(2)	\$38
Adjusted diluted loss per share	\$(0.01)	\$(0.23)	\$(0.02)	\$(0.01)	\$0.21
Diluted average shares ¹	185.5	185.7	185.9	0.4	0.2

- 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.

2Q20 Financial summary



Three months ending June 30, 2020, excluding special items

\$M	Bauxite	Alumina	Aluminum ^{3,4}	Transformation	Intersegment eliminations	Other corporate	Alcoa Corporation
Total revenue	\$311	\$892	\$1,477	\$4	\$(536)	-	\$2,148
Third-party revenue	\$66	\$603	\$1,475	\$4	-	-	\$2,148
Adjusted EBITDA ¹	\$131	\$88	\$(34)	\$(10)	\$30	\$(20)	\$185
<i>Adjusted EBITDA margin %</i>	<i>42.1%</i>	<i>9.9%</i>	<i>(2.3)%</i>				<i>8.6%</i>
Depreciation, depletion and amortization	\$30	\$37	\$79	-	-	\$6	\$152
Other (income) expenses, net ²	-	\$8	\$12	-	-	\$34	\$54
Interest expense							\$32
Provision for income taxes							\$(96)
Adjusted net income							\$43
Net income attributable to noncontrolling interest							\$47
Adjusted net loss attributable to Alcoa Corp.							\$(4)

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, \$277M and \$2M, respectively.
4. Third-party energy sales volume, revenue and adjusted EBITDA in Brazil were 970 GWh, \$14M and \$2M, respectively.

2Q20 Adjusted EBITDA drivers by segment



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

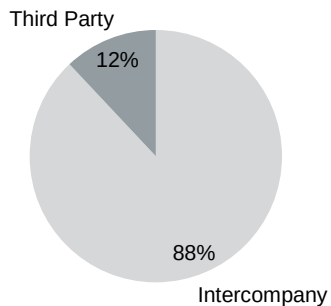
Segment	Adj. EBITDA 1Q20	Currency	Metal prices	API	Raw materials	Energy	Price/mix	Volume	Production costs	Other	Adj. EBITDA 2Q20
Bauxite	\$120	2	0	0	0	2	(2)	9	(2)	2	\$131
Alumina	\$193	(29)	0	(82)	10	3	(7)	1	4	(5)	\$88
Aluminum	\$62	0	(144)	10	6	10	(14)	(1)	35	2	\$(34)
Segment Total	\$375	(27)	(144)	(72)	16	15	(23)	9	37	(1)	\$185

Aluminum value chain

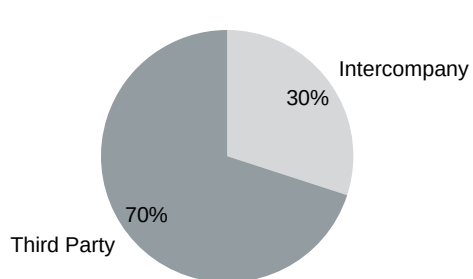
1H20 Alcoa product shipments by segment



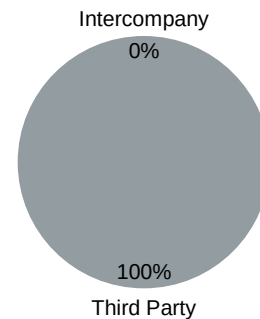
24.3 Mdmt shipments



6.8 Mmt shipments



1.5 Mmt shipments

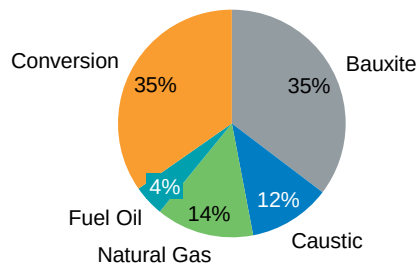


Composition of alumina and aluminum production costs



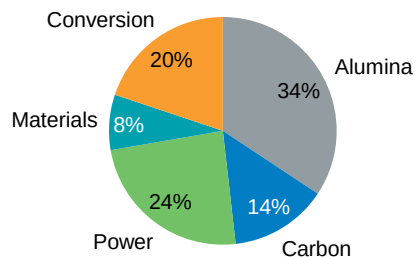
Alcoa 2Q20 production cash costs

Alumina refining



Input Cost	Inventory Flow	Pricing Convention	FY20 Annual Cost Sensitivity
Caustic Soda	5 - 6 Months	Quarterly, Spot	\$10M per \$10/dmt
Natural Gas ¹	N/A	N/A	N/A
Fuel Oil	1 - 2 Months	Prior Month	\$3M per \$1/barrel

Aluminum smelting



Input Cost	Inventory Flow	Pricing Convention	FY20 Annual Cost Sensitivity
Alumina	~2 Months	API on a 6-8 month average	\$39M 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

1. Australia is priced on a 16 quarter rolling average.

2020 Business information



Estimated annual Adjusted EBITDA sensitivities

\$M						AUD	BRL	CAD	EUR	ISK	NOK
Segment	LME + \$100/mt	API + \$10/mt	Midwest + \$100/mt	Europe + \$100/mt	Japan + \$100/mt	+ 0.01 0.66 ¹	+ 0.10 5.38 ¹	+ 0.01 1.39 ¹	+ 0.01 1.10 ¹	+ 10 141.37 ¹	+ 0.10 10.04 ¹
Bauxite						(4)	3				
Alumina		119				(18)	8		(1)		
Aluminum	219	(47)	141	86	27	0	(2)	2	(3)	11	2
Total	219	72	141	86	27	(22)	9	2	(4)	11	2

Pricing conventions

Segment	3 rd -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; flat rolled aluminum 30-day lag - Brazilian hydroelectric sales at market prices

Regional premium breakdown

Regional premiums	% of 2020 Primary aluminum shipments
Midwest	~50%
Rotterdam Duty Paid	~40%
CIF Japan	~10%

1. Average 2Q20 exchange rates

With large currency moves, revaluations can have impacts



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

Balance sheet revaluation impact

	AUD	BRL	CAD	EUR	ISK	NOK	Total
9/30/19 currencies	0.68	4.16	1.33	1.09	124.11	9.08	
12/31/19 currencies	0.70	4.05	1.31	1.12	121.38	8.82	
4Q19 revaluation	(4.9)	(1.8)	(0.9)	1.2	0.4	1.5	(4.5)
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
1Q20 sequential impact	25.8	11.9	5.3	(0.7)	2.7	(3.2)	41.8
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 revaluation sequential impact	(40.9)	(8.2)	(6.0)	(1.0)	(2.5)	0.7	(58.0)

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 EBITDA 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 sequential impact	1.8	21.0	2.7	0.3	3.7	2.4	31.9
Total 2Q20 EBITDA currency impact ¹	(39.3)	13.0	(3.4)	(0.8)	1.3	3.1	(26.7)

Totals may not tie due to rounding

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

Additional business considerations



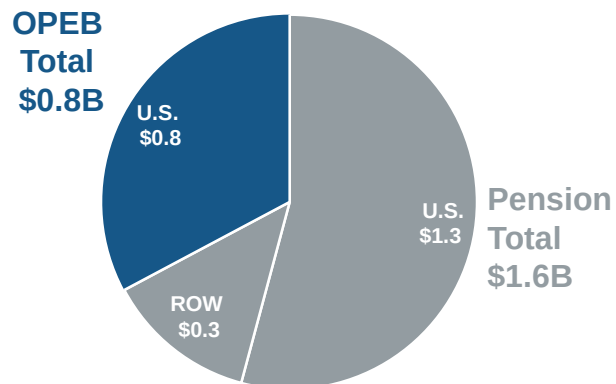
Items expected to impact adjusted EBITDA for 3Q20

- In the Bauxite segment, Adjusted EBITDA is expected to be ~\$5 million lower, primarily due to lower export volume
- In the Alumina segment, expecting ~\$15 million lower due to higher energy costs from Western Australia gas contract commencing in June, partially offset by higher sales volume due to timing of shipments and lower costs
- In the Aluminum segment:
 - Lower alumina costs are estimated to provide a sequential benefit of ~\$10 million
 - Other items (excluding metal prices and foreign currency) expected to be flat sequentially
- Due to volatility in quarter end exchange rates, 2Q20 adjusted EBITDA included an unfavorable balance sheet revaluation impact of \$21 million and \$58 million sequential decline compared to 1Q20; currency changes related to balance sheet revaluation are not incorporated into the currency sensitivities provided for EBITDA
- Estimate intercompany profit elimination for every \$10/mt decrease in API prices to be a \$8 to \$10 million favorable impact based on comparison of the average prices of the last two months of each quarter; consider intersegment eliminations as component of minority interest calculation
- The Company expects third quarter 2020 operational tax expense to approximate \$150 million, based on recent pricing. Alcoa's operational tax rate can fluctuate significantly in the current economic environment, even with modest change in the tax expense.

Pension and OPEB summary

Net pension and OPEB liability and financial impacts

Net liability as of June 30, 2020¹



Pension funding status as of December 31, 2019

- U.S. ERISA ~80%
- GAAP Worldwide ~77%

U.S. pension contributions currently not tax deductible

1. The impact on the combined pension and OPEB liability of a 25 basis point change in the weighted average discount rate is approximately \$175 million.
2. Certain Canadian pension plans remeasured as of January 31, 2020 due to announced benefit freeze. U.S. hourly pension and retiree life plans remeasured as of April 30, 2020 due to the Intalco curtailment.
3. U.S. pension cash funding requirements are based on smoothed asset performance and 25-year average segment rates mandated by the IRS. The COVID-19 stimulus allows 2020 pension funding of approximately \$220 million to be deferred to January 1, 2021.

Estimated financial impacts, \$M

Expense impact	2020
Segment pension	\$50
Segment OPEB	5
Corporate pension & OPEB	5
Total adj. EBITDA impact	60
Non-operating	110
Special items ² (curtailment/settlement)	2
Total expense impact	\$172

Cash flow impact	2020
Minimum required pension funding ³	\$80
OPEB payments	100
Total cash impact	\$180

Investments summary



Investments listing and income statement location

Investee	Country	Nature of Investment ⁴	Ownership Interest	Carrying Value as of June 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™				\$564M	Other (income) 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				\$473M	COGS
Total investments				\$1,037M	

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.

Rigorous standard in place to manage tailings and residue



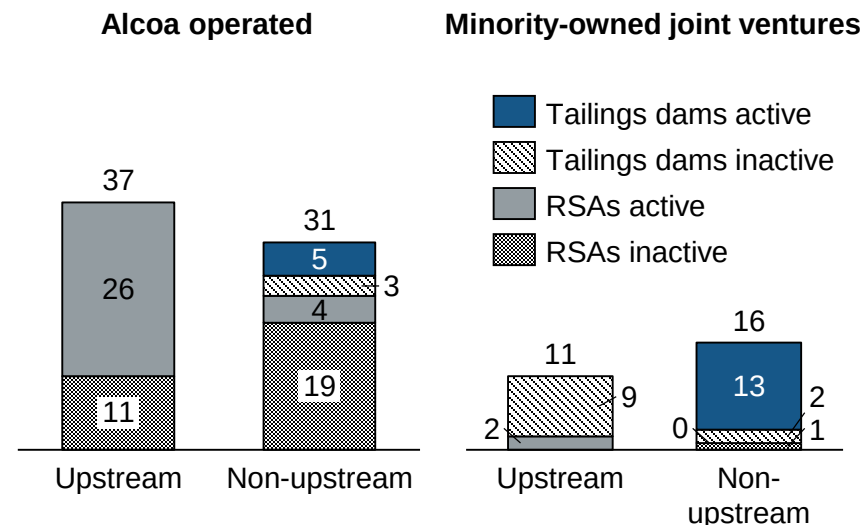
Tailings and residue impoundments management process and inventory

Robust and ongoing management process

- Established industry-leading standards over 25 years ago; global impoundment policy in place; 2019 impoundment database most recently updated as of June 30, 2020
- Governance structure with global oversight; all Alcoa standards externally benchmarked and updated in 1Q20
- Completed 2019 third-party inspections of Alcoa operated impoundments, proposed actions tracked; non-operated facilities also tracked. 2020 inspections progressing
- 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; engaged in developing the Global Tailings Standard (GTS) and planning for implementation in 3Q20

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 June 30, 2020

Bauxite production, Mdmt

Mine	Country	2019 Production
Darling Range	Australia	34.7
Juruti	Brazil	6.0
Poços de Caldas	Brazil	0.3
Trombetas (MRN)	Brazil	2.2
Boké (CBG)	Guinea	3.0
Al Ba'itha ¹	Saudi Arabia	1.2
Total		47.4

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	25
Deschambault	Canada	260	-
Fjarðaál	Iceland	344	-
Lista	Norway	94	-
Mosjøen	Norway	188	-
San Ciprián	Spain	228	-
Intalco ³	U.S.	279	209
Massena West	U.S.	130	-
Warrick	U.S.	269	108
Wenatchee	U.S.	146	146
Total		2,993	650
<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. On July 26, 2019, the Bécancour smelter began the restart of curtailed smelting capacity.
3. On April 22, 2020, Alcoa announced curtailment of the remaining 230,000 metric tons of smelting capacity at Intalco; expected completion third quarter of 2020.

Valuation framework



Valuation framework key considerations

LTM ending
6/30/2020
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	\$517M
	+	Alumina	ii. Ownership in certain mines and refineries outside the JV	\$637M
	+	Aluminum	Economic value using market multiple of: i. Smelters, casthouses, rolling mill, and energy assets ii. Smelters and casthouses restart optionality	\$146M
	-	Non-segment expenses (income)	Economic value using market multiple of: i. Net corporate expenses and Transformation	\$60M
	=	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 \$2.4B (\$2.4B, >95% Alcoa; U.S. contributions not tax deductible), environmental & ARO liabilities of \$0.8B (\$1.0B, ~80% Alcoa)	
	+	Cash & equity investments ¹	Cash position of \$0.8B (\$1.0B, ~85% Alcoa) plus carrying value of investments in the Ma'aden joint venture and ELYSIS™ of \$0.5B (\$0.6B, ~85% Alcoa)	
	=	Equity value		

1. Dollar amounts reflect Alcoa Corporation's consolidated balance sheet values as of June 30, 2020. The "Alcoa" percentages exclude amounts attributable to Alcoa Corporation's partner in the AWAC JV.

Adjusted EBITDA reconciliation



\$M	1Q19	2Q19	3Q19	4Q19	FY19	1Q20	2Q20	LTM
Net (loss) income attributable to Alcoa	\$(199)	\$(402)	\$(221)	\$(303)	\$(1,125)	\$80	\$(197)	\$(641)
Add:								
Net income (loss) attributable to noncontrolling interest	141	109	74	(52)	272	59	47	128
Provision for income taxes	150	116	95	54	415	80	45	274
Other expenses (income), net	41	50	27	44	162	(132)	51	(10)
Interest expense	30	30	30	31	121	30	32	123
Restructuring and other charges, net	113	370	185	363	1,031	2	37	587
Depreciation, depletion and amortization	172	174	184	183	713	170	152	689
Adjusted EBITDA	448	447	374	320	1,589	289	167	1,150
Special items before tax and noncontrolling interest	19	8	14	26	67	32	18	90
Adjusted EBITDA excl. special items	\$467	\$455	\$388	\$346	\$1,656	\$321	\$185	\$1,240

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.

Free Cash Flow reconciliation



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

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>4Q19</u>			<u>1Q20</u>			<u>2Q20</u>		
	Cons.	NCI	Alcoa Prop.	Cons.	NCI	Alcoa Prop.	Cons.	NCI	Alcoa Prop.
Short-term borrowings	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Long-term debt due within one year	1	-	1	1	-	1	1	-	1
Long-term debt, less amount due within one year	1,799	31	1,768	1,801	31	1,770	1,800	31	1,769
Total debt	1,800	31	1,769	1,802	31	1,771	1,801	31	1,770
Less: Cash and cash equivalents	879	167	712	829	139	690	965	157	808
Net debt	921	(136)	1,057	973	(108)	1,081	836	(126)	962
Plus: Net pension / OPEB liability	2,330	40	2,290	2,265	40	2,225	2,393	38	2,355
Adjusted net debt	\$3,251	\$(96)	\$3,347	\$3,238	\$(68)	\$3,306	\$3,229	\$(88)	\$3,317

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.

Days Working Capital



\$M	1Q19	2Q19	3Q19	4Q19	1Q20	2Q20
Receivables from customers	\$758	\$684	\$596	\$546	\$570	\$402
Add: Inventories	1,799	1,767	1,649	1,644	1,509	1,419
Less: Accounts payable, trade	1,503	1,523	1,418	1,484	1,276	1,253
DWC working capital	\$1,054	\$928	\$827	\$706	\$803	\$568
Sales	\$2,719	\$2,711	\$2,567	\$2,436	\$2,381	\$2,148
Number of days in the quarter	90	91	92	92	91	91
Days Working Capital¹	35	31	30	27	31	24

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

Annualized Return on Equity (ROE)



Reconciliation and calculation information

\$M	1H19	1H20
<i>Numerator:</i>		
Net (loss) income attributable to Alcoa Corporation	\$(601)	\$(117)
Add: Special items ¹	556	71
ROE Adjusted Net Income YTD	\$(45)	\$(46)
ROE Adj. Net Income multiplied by two	\$(90)	\$(92)
<i>Denominator²:</i>		
Total assets	\$15,652	\$13,475
Less: Total Liabilities	8,681	7,908
Less: Noncontrolling Interest	1,945	1,578
Shareholders' Equity	\$5,026	\$3,989
ROE	-1.8%	-2.3%

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

$$\begin{aligned} \text{1H19 ROE \%} &= \frac{(-\$601 + \$556) \times 2}{(\$15,652 - \$8,681 - \$1,945)} \times 100 = -1.8\% \\ \text{1H20 ROE \%} &= \frac{(-\$117 + \$71) \times 2}{(\$13,468 - \$7,901 - \$1,578)} \times 100 = -2.3\% \end{aligned}$$

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

\$M	1H19	1H20
<i>Numerator:</i>		
Net (loss) income attributable to Alcoa Corporation	\$(601)	\$(117)
Add: Net income attributable to noncontrolling interest	250	106
Add: Provision for income taxes	266	125
Profit before taxes (PBT)	(85)	114
Add: Interest expense	60	62
Less: Interest income	10	4
Add: Special items ¹	501	(83)
ROC earnings before taxes	\$466	\$89
ROC earnings before taxes multiplied by two	\$932	\$178
ROC earnings after fixed tax rate of 35%	\$606	\$116
<i>Denominator²:</i>		
Total assets	\$15,653	\$13,475
Less: Cash, cash equivalents, restricted cash and short-term investments	930	901
Less: Current liabilities	2,667	2,232
Add: Long-term debt due within one year and short-term borrowings	1	1
Capital Base²	\$12,057	\$10,343
ROC	5.0%	1.1%

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

$$\begin{aligned} \text{1H19 ROC \%} &= \frac{((- \$85 + \$50 + \$501) \times 2) \times (1 - 0.35)}{(\$15,653 - \$930 - \$2,667 + \$1)} \times 100 = 5.0\% \end{aligned}$$

$$\begin{aligned} \text{1H20 ROC \%} &= \frac{((\$114 + \$58 - \$83) \times 2) \times (1 - 0.35)}{(\$13,468 - \$901 - \$2,225 + \$2)} \times 100 = 1.1\% \end{aligned}$$

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.

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 ₂ e	Carbon dioxide equivalent
COGS	Cost of goods sold
Cons.	Consolidated
DoC	Days of consumption
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
FY##	Twelve months ending December 31
GAAP	Accounting principles generally accepted in the United States of America
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
N/A	Not applicable
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
ROC	Return on capital
ROW	Rest of world
SEC	Securities and Exchange Commission
SG&A	Selling, general administrative and other
TBD	To be determined
U.S.	United States of America
USD	United States dollar
USW	United Steelworkers
YTD	Year to date

*The Element of **Possibility***[™]

