The Element of **Possibility**™

Alcoa Corporation

Investor Presentation

February 2019

Alcoa

Important information

Cautionary statement regarding forward-looking statements

This presentation contains statements that relate to future events and expectations and as such constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include those containing such words as “anticipates,” “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) 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; (b) deterioration in global economic and financial market conditions generally; (c) unfavorable changes in the markets served by Alcoa Corporation; (d) the impact of changes in foreign currency exchange rates on costs and results; (e) increases in energy costs; (f) 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; (g) 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 operational and productivity improvements, cash sustainability, technology advancements, and other initiatives; (h) the inability to realize expected benefits, in each case as planned and by targeted completion dates, from acquisitions, divestitures, facility closures, curtailments, restarts, expansions, or joint ventures; (i) political, economic, trade, and regulatory risks in the countries in which Alcoa Corporation operates or sells products; (j) labor disputes or work stoppages; (k) the outcome of contingencies, including legal proceedings, government or regulatory investigations, and environmental remediation; (l) the impact of cyberattacks and potential information technology or data security breaches; and (m) the other risk factors discussed in Item 1A of Alcoa Corporation’s Form 10-K for the fiscal year ended December 31, 2017 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 discussed above and other risks in the market.

Any information contained in the following slides that has been previously publicly presented by Alcoa speaks as of the date that it was originally presented, as indicated. Alcoa is not updating or affirming any of such information as of today’s date. The provision of this information shall not imply that the information has not changed since it was originally presented.

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.

Financial presentation information

On January 1, 2018, Alcoa Corporation adopted guidance issued by the Financial Accounting Standards Board to the presentation of net periodic benefit cost related to pension and other postretirement benefit plans. This guidance requires the non-service cost components of net periodic benefit cost to be reported separately from the service cost component in an entity's income statement. Additionally, this guidance is required to be applied retrospectively. Accordingly, previously reported amounts for Cost of goods sold, Selling, general administrative, and other expenses, and Other expenses (income), net on Alcoa Corporation's consolidated income statement have been recast to reflect these changes. As a result, previously reported amounts for Adjusted EBITDA on both a consolidated basis and for each of the Company's three segments have been updated to reflect these changes. See the appendix for additional information.

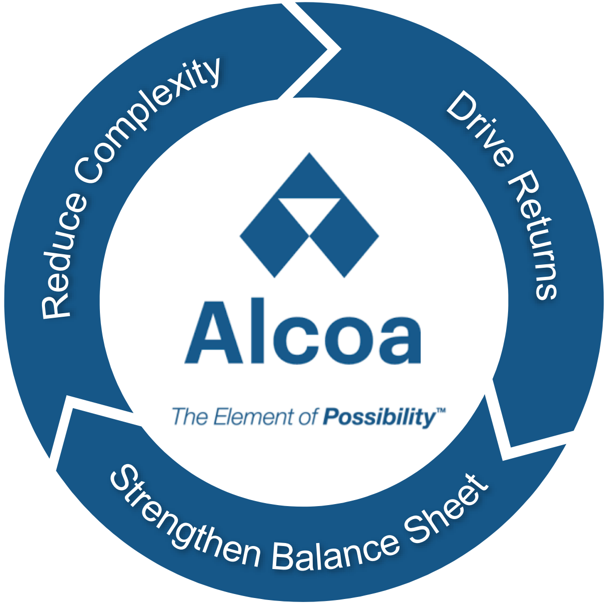
Glossary of terms

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

Alcoa is an aluminum industry leader

Company overview

Strategic priorities

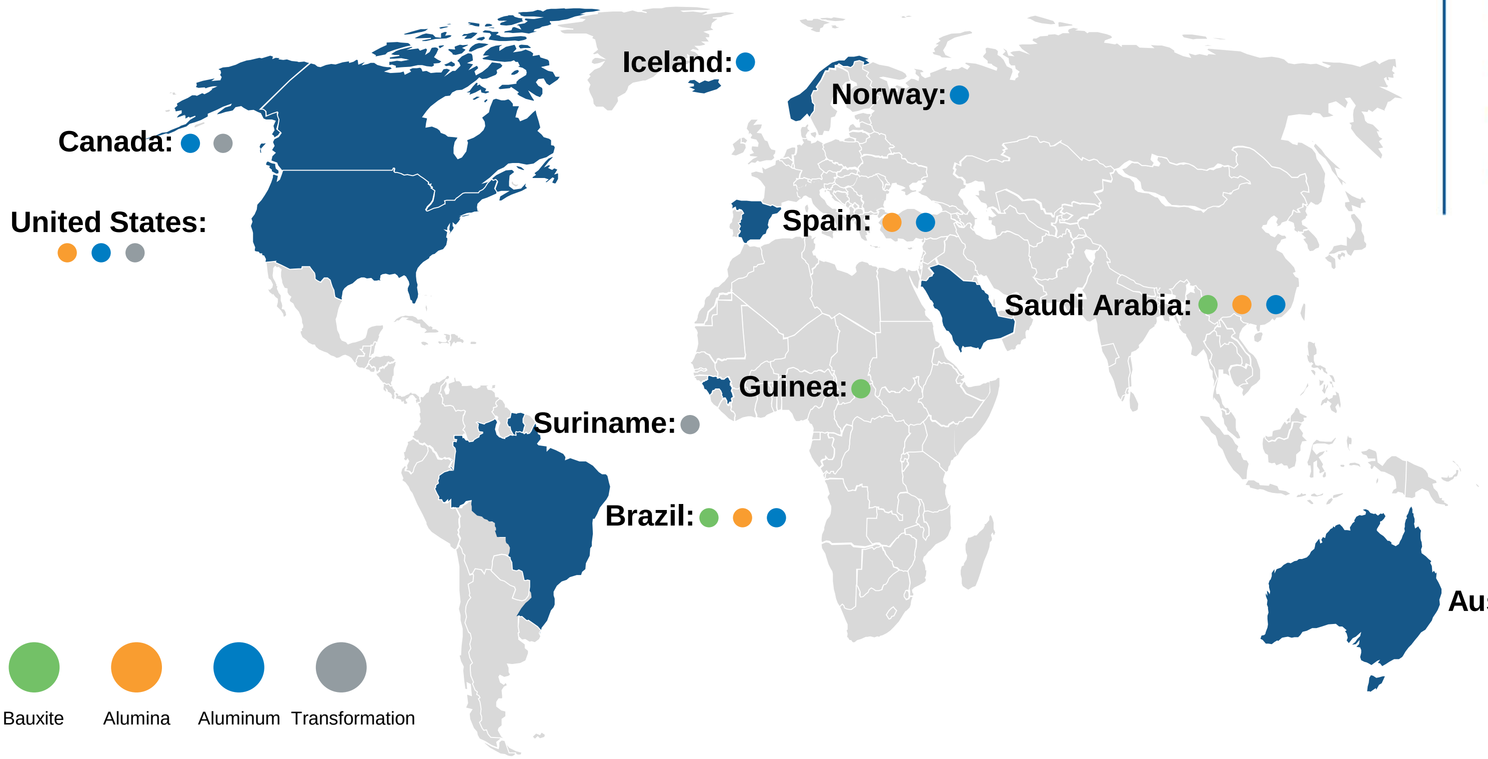


Keys to Alcoa

- Our values are the foundation of our business and license to operate around the world
- Global network of aluminum industry assets; low cost position in bauxite and alumina
- Strong financial profile; positioned to capture benefits in improving markets, or withstand challenging conditions

Our values support our license to operate around the world

Global operations by business segment



OUR VALUES

Act with Integrity

Operate with Excellence

Care for People

Rigorous standard in place to manage tailings and residue

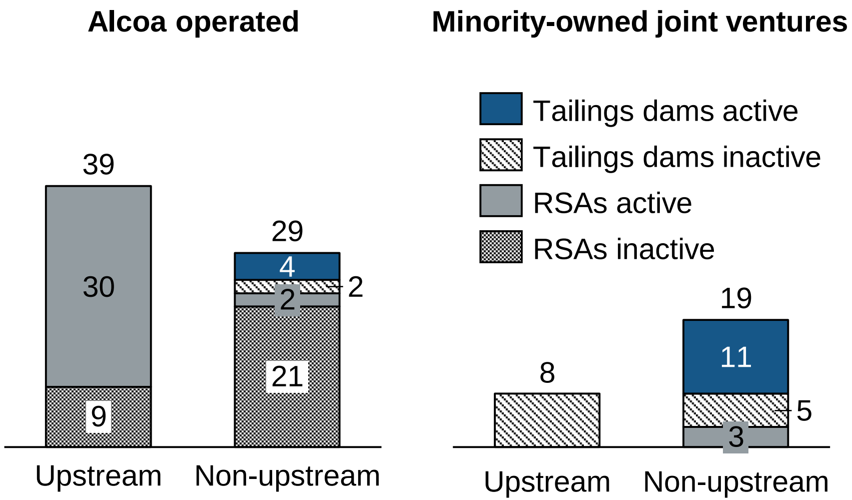
Industry leading standard established over 25 years ago; continuously improved and updated

Robust management process

- Governance structure with global oversight and clearly defined location responsibilities
- Annual independent, third party inspections of Alcoa operated and non-operated impoundments
- Facilities master planned, designed, engineered and constructed to high industry standards
- Operating practices meet or exceed Alcoa standards and local regulations
- Failure analysis and emergency response plans
- 2018 independent global review of impoundment management practices against external benchmarks
- Led industry improvements including dry stacking and filtration technologies
- Focused on progressively closing and rehabilitating inactive areas

Inventory of tailings dams & residue storage

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

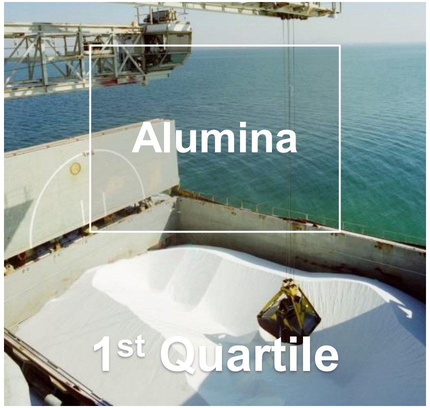


Note: Inventory does not include 90 Alcoa operated and 21 minority joint venture other impoundments such as hydroelectric dams, fresh water reservoirs, stormwater management, process water, process materials outside of bauxite residue and tailings, closed and remediated legacy location RSAs, and ash ponds.

Superior bauxite and alumina assets, solid smelter portfolio

2018 Cost curve and business position

- World’s second largest bauxite miner, with a first quartile cost position
- Long-lived assets with low-cost growth opportunities



- Largest alumina refiner and largest long position, outside of China
- Low cost, global network of refineries with a first quartile cost position

- Top 10 global aluminum smelter
- Segment includes Warrick rolling mill and Brazilian energy assets

Source for 2018 cost curve and business position: CRU and Alcoa analysis.

Projecting aluminum to remain in deficit in 2019

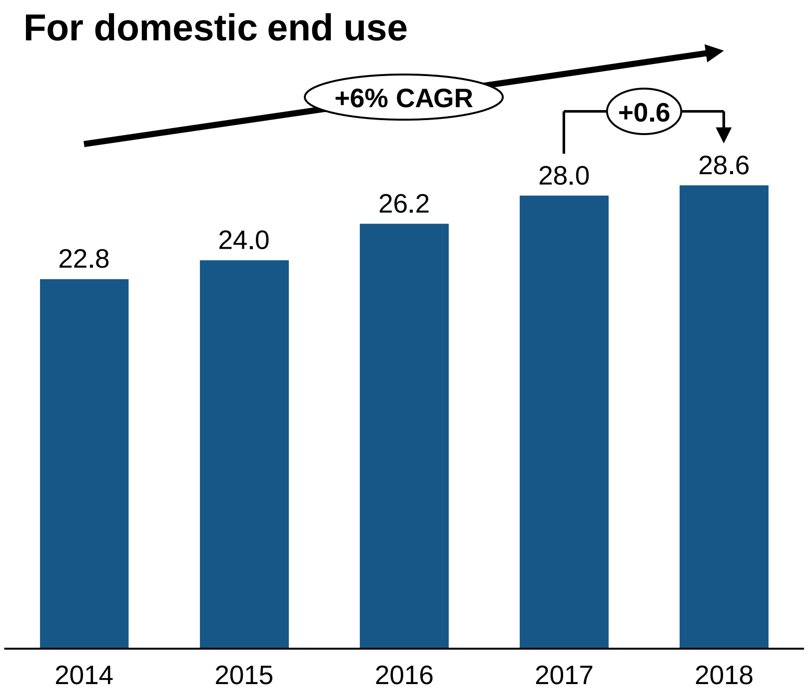
Final 2018 and projected 2019 global market balances

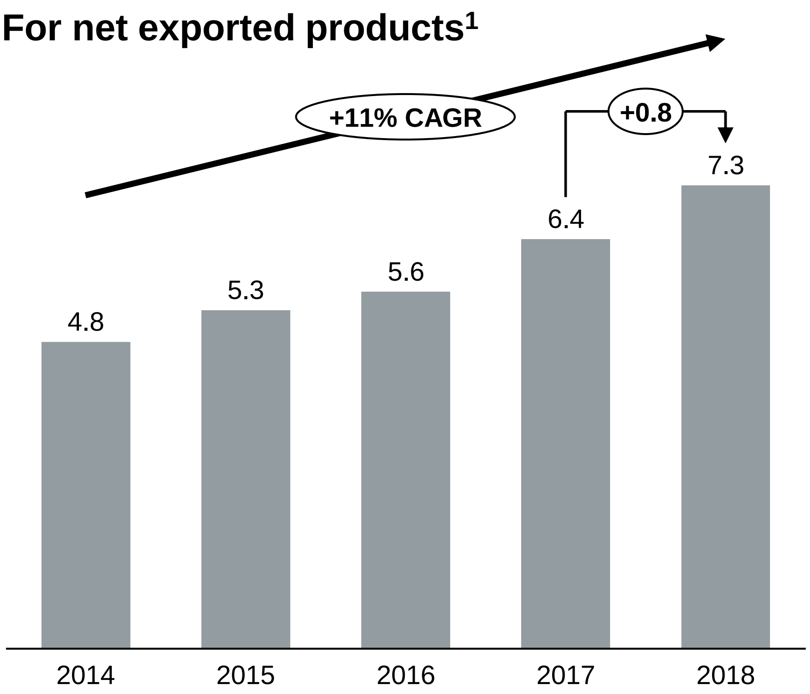
	Bauxite (3rd-party seaborne)	Alumina (smelter grade)	Aluminum (primary)
Final 2018 Balance	**Surplus**	**Deficit**	**Deficit**
2019 Outlook	**Surplus**	**Surplus**	**Deficit**
2019 Supply/Demand Balance, Mmt			
Global	**7 to 11; stockpile growth**	**0.2 to 1.0; surplus**	**-2.1 to -1.7; deficit**
China	-79 to -77; deficit	0.8 to 1.2; surplus	-0.2 to 0.0; approx. balanced
World ex-China	86 to 88; surplus	-0.6 to -0.2; approx. balanced	-1.9 to -1.7; deficit
2019 Notes	Higher Chinese imports from Guinea, Australia, and Indonesia	Higher supply from expansions; subdued Chinese demand	Demand growth, 2019 vs. 2018 • Global = 3.0% to 4.0% • China = 4.0% to 4.5% • World ex-China = 2.25% to 2.75%

Source: Alcoa analysis, CRU, Wood Mackenzie, CM Group, IAI, CNIA, NBS, Aladdiny, Bloomberg. Pre-trade balances.
As presented on January 16, 2019.

China export growth outpacing domestic end use growth

Chinese primary aluminum consumption, Mmt





Source: Alcoa analysis of CRU and TDM data.

1. Products includes semi-finished products, foil, fabricated products, and primary aluminum content in finished products.

Two years of progress; focused on further improvement

Alcoa Corporation progression over time

Separate	Strengthen	Succeed
▪ Earn separation during 2016 downturn ▪ Structure the new company as a cost-focused business to create stockholder value ▪ Commence operations as a standalone entity	▪ Deliver on strategic priorities ▪ Leverage favorable market conditions to address legacy items ▪ Begin stockholder returns ▪ Negotiate labor agreements that support long-term viability	▪ Maintain gains and increase strength ▪ Creep, grow, disrupt; partner of choice on new projects ▪ Provide consistent stockholder returns

November 1, 2016

Questions?

Alcoa Corporation

Appendix:
4Q18 Financial Results and Other Information as presented on January 16, 2019

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Revenue slightly lower sequentially, up 5% year-over-year

Quarterly income statement

M, Except realized prices and per share amounts	4Q17	3Q18	4Q18	Prior Year Change	Sequential Change
Realized primary aluminum price ($/mt)	$2,365	$2,465	**$2,358**	$(7)	$(107)
Realized alumina price ($/mt)	$406	$493	**$479**	$73	$(14)
Revenue	$3,174	$3,390	**$3,344**	$170	$(46)
Cost of goods sold	$2,339	$2,534	**$2,534**	$195	-
SG&A and R&D expenses	$78	$65	**$66**	$(12)	$1
Adjusted EBITDA	$757	$791	**$744**	$(13)	$(47)
Depreciation, depletion and amortization	$187	$173	**$174**	$(13)	$1
Other expenses, net	$30	$2	**$32**	$2	$30
Interest expense	$27	$33	**$31**	$4	$(2)
Restructuring and other charges	$297	$177	**$138**	$(159)	$(39)
Tax provision	$272	$251	**$157**	$(115)	$(94)
Net income (loss)	$(56)	$155	**$212**	$268	$57
Less: Net income attributable to noncontrolling interest	$140	$196	**$169**	$29	$(27)
Net income (loss) attributable to Alcoa Corporation	$(196)	$(41)	**$43**	$239	$84
Diluted earnings per share	$(1.06)	$(0.22)	**$0.23**	$1.29	$0.45
Diluted shares outstanding[1]	185.1	186.5	**188.2**	3.1	1.7

1. For 4Q17 and 3Q18, share equivalents related to employee stock-based compensation were excluded from Diluted shares outstanding as their impact was anti-dilutive since Alcoa Corporation generated a net loss.

Special items total $82M, driven by Brazil tax asset change

Breakdown of special items by income statement classification – gross basis

M, Except per share amounts	**4Q17**	**3Q18**	**4Q18**	**Description of significant 4Q18 special items**
Net income (loss) attributable to Alcoa Corporation	$(196)	$(41)	**$43**	
Diluted earnings per share	$(1.06)	$(0.22)	**$0.23**	
Special items	$391	$160	**$82**	
Cost of goods sold	*$39*	*$4*	***$4***	
SG&A	-	-	***$1***	
Restructuring and other charges	*$297*	*$177*	***$138***	*Brazil state VAT allowance*
Interest expense	-	-	**-**	
Other expenses / (income), net	*$(1)*	*$(8)*	***$(3)***	*Mark-to-market energy contracts*
Tax provision	*$68*	*$(13)*	***$(40)***	*Taxes on special items and discrete tax items*
Noncontrolling interest	*$(12)*	-	***$(18)***	*Partner share of special items*
Adjusted net income attributable to Alcoa Corporation	$195	$119	**$125**	
Adjusted diluted earnings per share	$1.04	$0.63	**$0.66**	

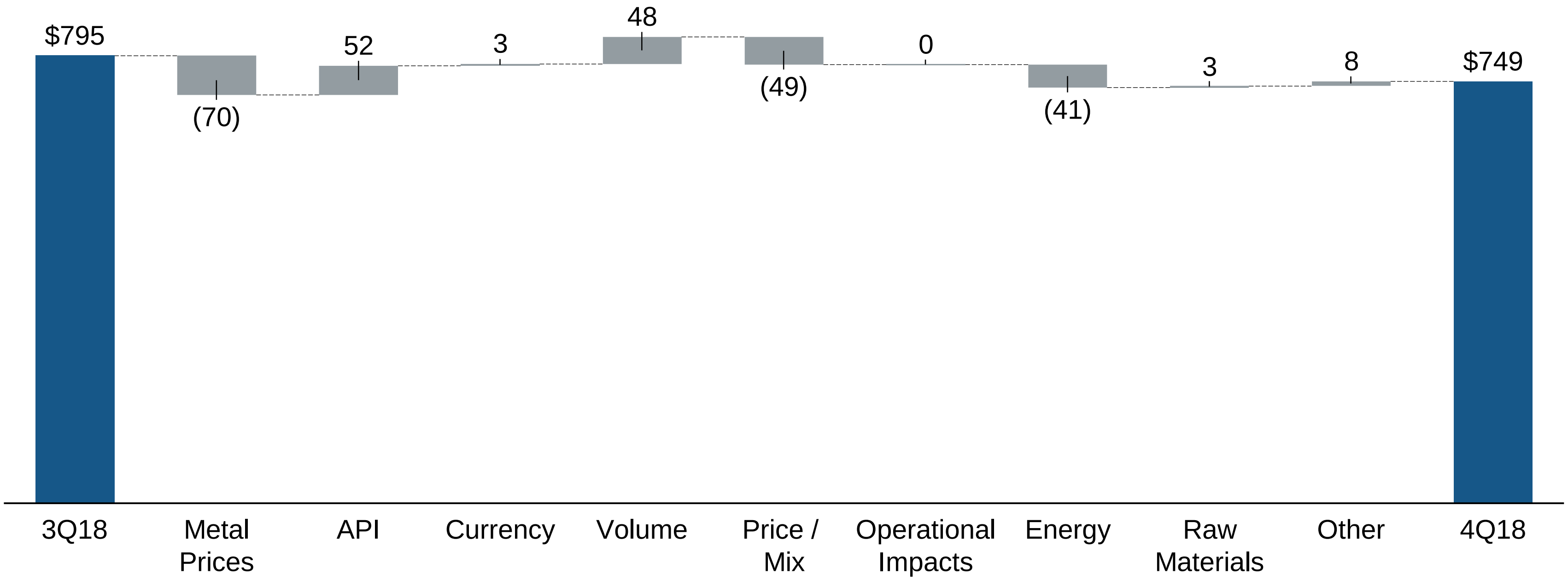
Adjusted net earnings $125 million; adjusted EPS $0.66

Quarterly income statement excluding special items

M, Except realized prices and per share amounts	4Q17	3Q18	4Q18	Prior Year Change	Sequential Change
Realized primary aluminum price ($/mt)	$2,365	$2,465	**$2,358**	$(7)	$(107)
Realized alumina price ($/mt)	$406	$493	**$479**	$73	$(14)
Revenue	$3,174	$3,390	**$3,344**	$170	$(46)
Cost of goods sold	$2,300	$2,530	**$2,530**	$230	-
COGS % of Revenue	72.5%	74.6%	**75.7%**	3.2% pts.	1.1% pts.
SG&A and R&D expenses	$78	$65	**$65**	$(13)	-
SG&A and R&D % of Revenue	2.5%	1.9%	**1.9%**	(0.6)% pts.	-
Adjusted EBITDA	$796	$795	**$749**	$(47)	$(46)
Depreciation, depletion and amortization	$187	$173	**$174**	$(13)	$1
Other expenses, net	$31	$10	**$35**	$4	$25
Interest expense	$27	$33	**$31**	$4	$(2)
Tax provision	$204	$264	**$197**	$(7)	$(67)
Operational tax rate	37.1%	45.6%	**38.8%**	1.7% pts.	(6.8)% pts.
Adjusted net income	$347	$315	**$312**	$(35)	$(3)
Less: Net income attributable to noncontrolling interest	$152	$196	**$187**	$35	$(9)
Adjusted net income attributable to Alcoa Corporation	$195	$119	**$125**	$(70)	$6
Adjusted diluted earnings per share	$1.04	$0.63	**$0.66**	$(0.38)	$0.03
Diluted shares outstanding	188.0	188.7	**188.2**	0.2	(0.5)

Volume improves, but pricing lowers adjusted EBITDA

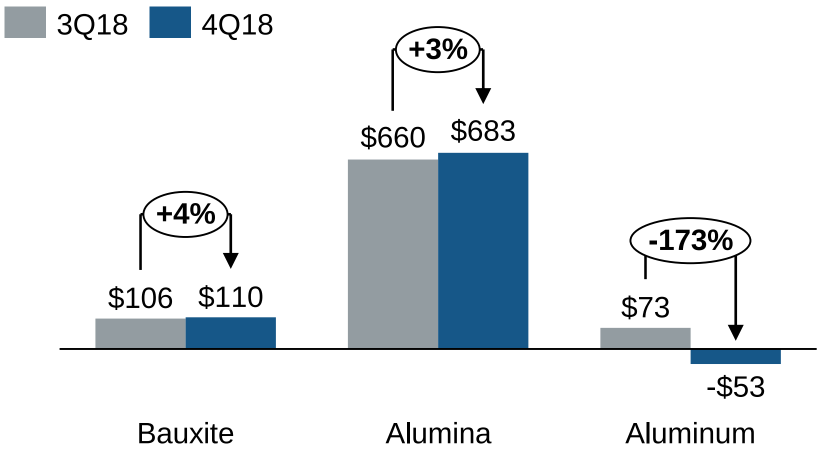
Adjusted EBITDA excluding special items sequential changes, $M



Bauxite and Alumina profits rise, while Aluminum offsets

Adjusted EBITDA excluding special items breakdown

Segment information, $M



	Bauxite	Alumina	Aluminum
4Q18 Segment Adj. EBITDA Margin %	33.8%	40.2%	-2.5%
Change vs. 3Q18, Margin %	-2.6% pts.	0.1% pts.	-5.8% pts.

Total Adjusted EBITDA information, $M

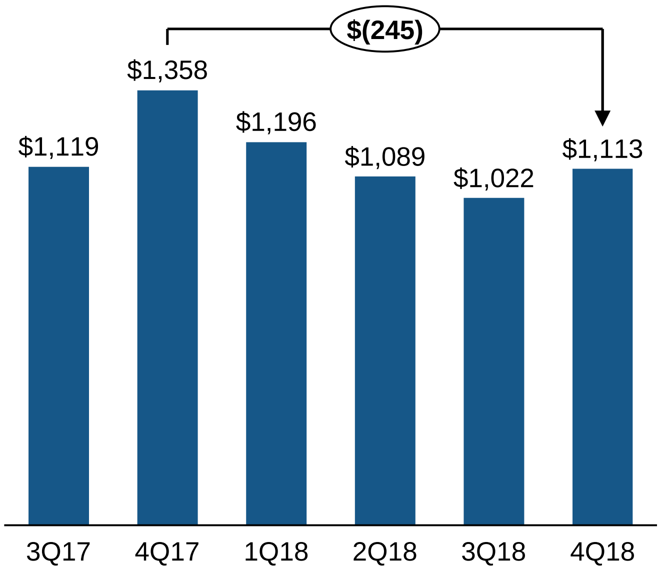
	3Q18	4Q18	Change
Segment total	$839	**$740**	$(99)
Transformation	1	**(1)**	(2)
Corporate inventory accounting[1]	(17)	**29**	46
Other corporate	(28)	**(19)**	9
Total Adjusted EBITDA	$795	**$749**	$(46)

1. Includes intercompany eliminations, and impact from both LIFO and metal price lag.

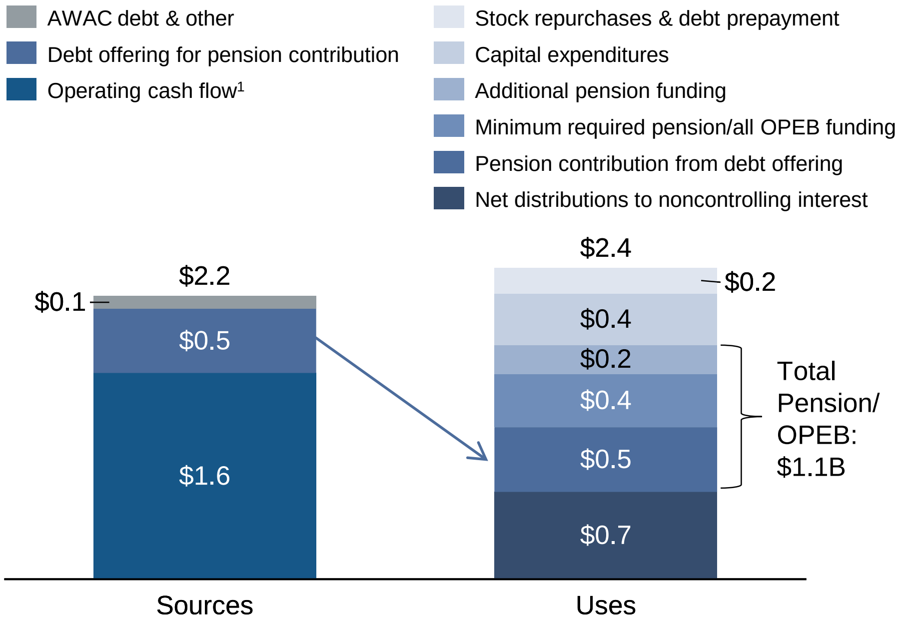
2018 Cash flow used to improve financial position

Quarterly cash comparison and cash flow information

Quarter ending cash balance, $M



2018 Cash flow information, $B



1. Operating cash flow defined as cash flow from operations plus $1.1B for pension & OPEB funding.

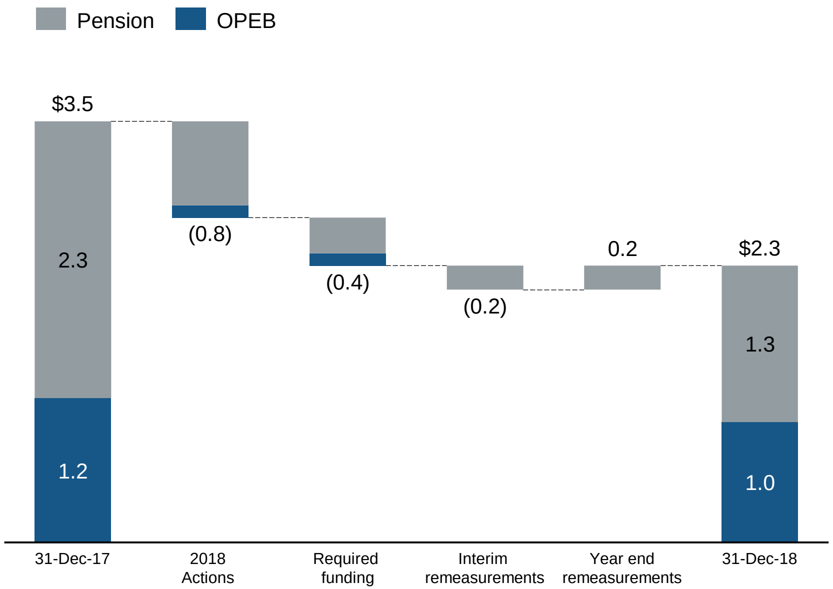
Pension/OPEB net liability reduced by $1.2 billion in 2018

Key financial metrics as of December 31, 2018

Key metrics

Cash	4Q18 Days working capital
$1.1B	22 Days
FY18 Capital expenditures[1]	**FY18 Return on capital**
$399M	11.9%
Net debt-to-FY18 Adjusted EBITDA	**Pension & OPEB net liability**
0.2x	$2.3B

Pension & OPEB net liability bridge, $B



1. $92M in return-seeking capital expenditures and $307M in sustaining capital expenditures.

2018 framework complete; multiyear framework in place

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Capital allocation framework and update

✔ 2018 Framework

Maintain liquidity
Greater than $1B cash balance

Sustain the operations
~$300M in sustaining capital expenditures

Drive value creation
~$150M in return-seeking capital expenditures

Optimize liabilities
~$300M plus 50% excess cash above $1B

Return cash to stockholders
50% excess cash above $1B

New multiyear framework

Maintain liquidity throughout the cycle

Sustain and improve operations

- Reduce adjusted net debt[1] to $2.0B-$2.5B over 3-5 years
- Return excess cash to stockholders
- Invest in value creating growth projects

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

2019 Outlook

FY19 Key metrics

Income statement excl. special items impacts

	FY18 Actual	FY19 Outlook
Bauxite shipments (Mdmt)	46.9	47.0 – 48.0
Alumina shipments (Mmt)	13.6	13.6 – 13.7
Aluminum shipments (Mmt)	3.3	2.8 – 2.9
Transformation (adj. EBITDA impacts)	$(3)M	$(10) – $(20)M
Corporate inventory (adj. EBITDA impacts)	$11M	Varies[1]
Other corporate (adj. EBITDA impacts)	$(110)M	~ $(130)M
Depreciation, depletion and amortization	$733M	~ $700M
Non-operating pension/OPEB expense	$139M	~ $115M
Interest expense	$119M	~ $120M
Operational tax rate[2]	37.6%	~ 45 – 55%[2]
Net income of noncontrolling interest	$675M	40% of AWAC NI

Cash flow impacts

	FY18 Actual	FY19 Outlook
Minimum required pension/all OPEB funding	$412M	~ $300M
Additional pension funding	$725M	Will vary based on market conditions and cash availability
Discretionary debt repayment	$122M	
Stock repurchases	$50M	
Return-seeking capital expenditures[3]	$92M	~ $150M
Sustaining capital expenditures[3]	$307M	~ $300M
Payment of prior period income taxes	$157M	~ $360M
DOJ / SEC (final payment January 2018)	$74M	-
Environmental and ARO payments[4]	$105M	$110 – $120M
Impact of restructuring and other charges	$103M	TBD

Note: Additional market sensitivities and business information included in appendix.

1. In 2019, Alcoa Corporation plans to stop using the LIFO method of inventory accounting, and metal price lag will be included in the Aluminum segment results. The only remaining component of Corporate inventory accounting will be intercompany profit elimination which will vary with changes in market prices and inventory levels.
2. Estimate will vary with market conditions and jurisdictional profitability.
3. AWAC portion of FY19 Outlook: ~70% of return-seeking capital expenditures, and ~50% of sustaining capital expenditures
4. As of December 30, 2018, the environmental remediation reserve balance was $280M and the ARO liability was $651M.

4Q18 Financial summary

Three months ending December 31, 2018, excluding special items

$M	Bauxite	Alumina	Aluminum[4,5]	Transformation	Corporate inventory accounting	Other corporate	Alcoa Corporation
Total revenue[1]	$325	$1,699	$2,111	$25	$(817)	$1	$3,344
Third-party revenue	$80	$1,132	$2,107	$24	-	$1	$3,344
Adjusted EBITDA[2]	$110	$683	$(53)	$(1)	$29	$(19)	$749
Adjusted EBITDA margin %	*33.8%*	*40.2%*	*-2.5%*				*22.4%*
Depreciation, depletion and amortization	$28	$47	$89	$4	-	$6	$174
Other expenses / (income), net[3]	-	$(9)	$25	-	-	$19	$35
Interest expense							$31
Provision for income taxes							$197
Adjusted net income							$312
Net income attributable to noncontrolling interest							$187
Adjusted net income attributable to Alcoa Corp.							$125

1. Intersegment eliminations included in Corporate inventory accounting.
2. 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.
3. Amounts for Alumina and Aluminum represent the Company's proportionate share of earnings from its equity investment in the Saudi Arabian joint venture.
4. Flat-rolled aluminum shipments, revenue and adjusted EBITDA were 0.14 Mmt, $466M and $24M, respectively.
5. Third-party energy sales volume, revenue and adjusted EBITDA in Brazil were 1,019 GWh, $41M and $20M, respectively.

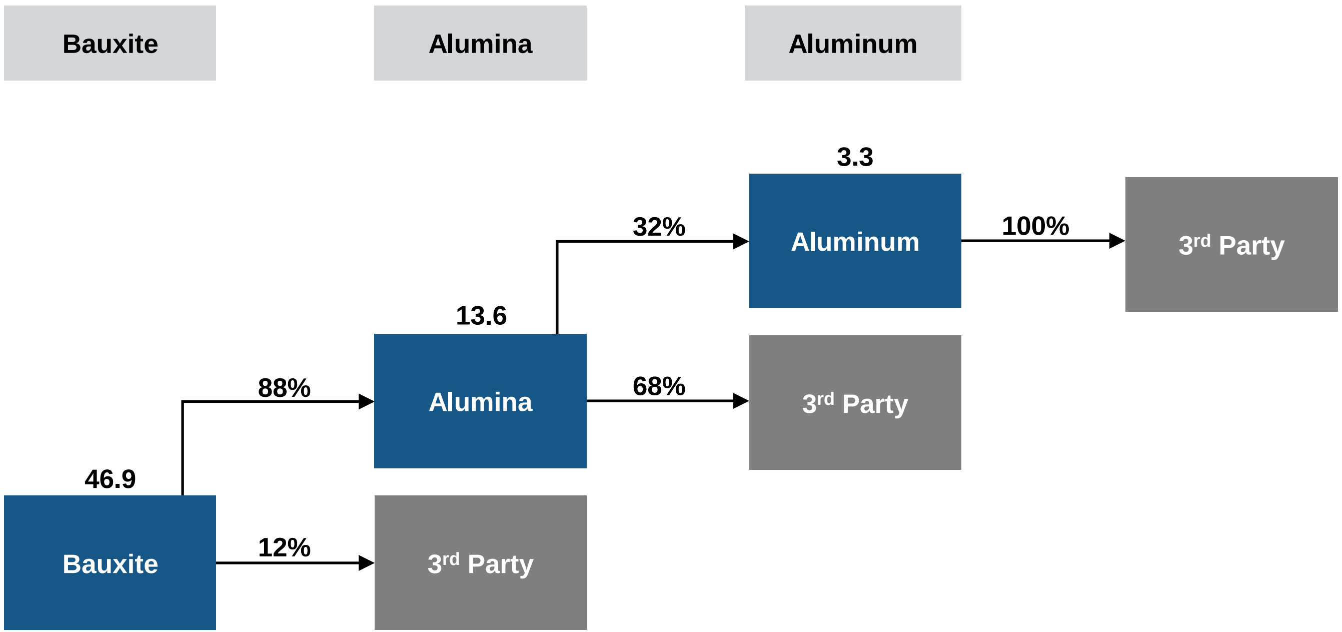
4Q18 Adjusted EBITDA drivers by segment

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

Segment	Adj. EBITDA 3Q18	Metal Prices	API	Currency	Volume	Price/Mix	Op. Impacts	Energy	Raw Materials	Other	Adj. EBITDA 4Q18
Bauxite	$106	-	-	(2)	9	(1)	(2)	(1)	-	1	$110
Alumina	$660	-	23	(3)	35	(49)	4	6	2	5	$683
Aluminum	$73	(78)	(21)	8	4	1	(2)	(46)	1	7	$(53)
Segment Total	**$839**	**(78)**	**2**	**3**	**48**	**(49)**	**-**	**(41)**	**3**	**13**	**$740**

Aluminum value chain

2018 Alcoa product shipments by segment, Mmt



Composition of alumina and aluminum production costs

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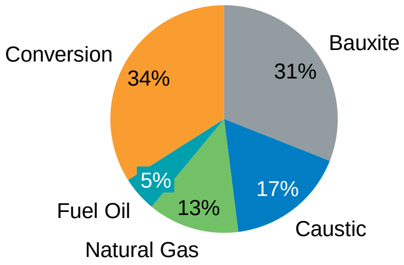
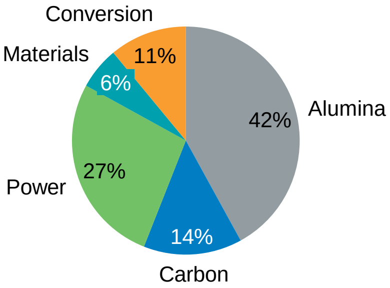
Alcoa 4Q18 production cash costs

Alumina refining



Input Cost	Inventory Flow	Pricing Convention	FY19 Annual Cost Sensitivity
Caustic Soda	5 - 6 Months	Quarterly	$10M per $10/dmt
Natural Gas[1]	N/A	N/A	N/A
Fuel Oil	1 - 2 Months	Prior Month	$3M per $1/bbl

Aluminum smelting



Input Cost	Inventory Flow	Pricing Convention	FY19 Annual Cost Sensitivity
Alumina	~2 Months	API[2]	$41M per $10/mt
Petroleum Coke	1 - 2 Months	Spot, Quarterly & Semi-annual	$7M per $10/mt
Coal Tar Pitch	1 - 2 Months	Spot, Quarterly & Semi-annual	$1.9M per $10/mt

1. Australia is priced on a 16 quarter rolling average.
2. Smelter alumina cost approximates four month rolling average of spot alumina prices on a three month lag.

2019 Business information

Estimated annual Adjusted EBITDA sensitivities

$M Segment	LME + $100/mt	API + $10/mt	Midwest + $100/mt	Europe + $100/mt	Japan + $100/mt	AUD + 0.01 USD/AUD	BRL + 0.10 BRL/USD	CAD + 0.01 CAD/USD	EUR + 0.01 USD/EUR	ISK + 10 ISK/USD	NOK + 0.10 NOK/USD
Bauxite						(4)	3				
Alumina		120				(19)	9		(1)		
Aluminum	202	(38)	118	99	24	(1)		2	(5)	7	3
Total	202	82	118	99	24	(24)	12	2	(6)	7	3

Pricing conventions

Segment	3rd-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 2019 Primary aluminum shipments
Midwest[1]	~50%
Rotterdam Duty Paid	~40%
CIF Japan	~10%

1. ~95% of non-U.S. sourced Midwest sales are subject to U.S. tariffs or sold duty unpaid.

Additional business considerations

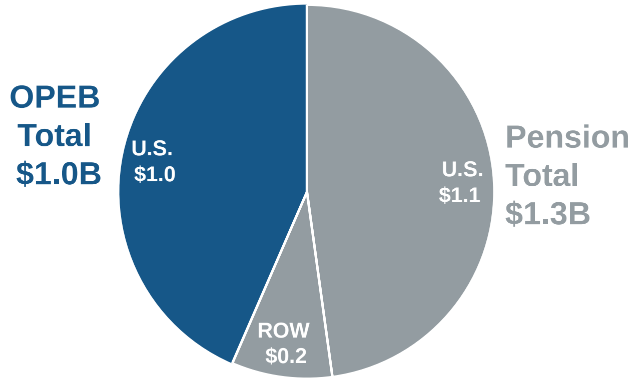
Important items for 2019

- Expect improvement in Alumina operational stability and higher year on year refinery production
- Anticipate sequential recovery of approximately two-thirds of 4Q18 Alumina price/mix decline in 1Q19: ~$30 million
- Sequentially lower alumina prices flowing into the Aluminum segment in 1Q19 estimated at $40 million to $45 million
- Increased pot relining and other maintenance activity expected to drive unfavorable sequential operational impacts in Aluminum in 1Q19: ~$(30 million)
- Quarterly decline anticipated in flat rolled aluminum in 1Q19: ~$(15 million). Expiration of the Tennessee tolling agreement should have negligible adjusted EBITDA impact for the year
- Expecting favorable impacts from current spot prices for raw materials to be offset by higher energy costs in 1Q19 and partially offset for the entire year
- Estimate intercompany profit elimination for every $10/mt decrease in API prices to be a $8 to $10 million favorable impact on Adjusted EBITDA based on comparison of the average prices of the last two months of each quarter

Pension and OPEB summary

Net pension and OPEB liability and financial impacts

Net liability as of December 31, 2018[1]



Pension funding status as of December 31, 2018

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

U.S. pension contributions currently not tax deductible

Estimated financial impacts, $M

Expense impact	2019
Segment pension	$45
Segment OPEB	$5
Corporate pension & OPEB	$5
Total adj. EBITDA impact	**$55**
Non-operating	$115
Special items (curtailment/settlement)	-
Total expense impact	**$170**

Cash flow impact	2019
Minimum required pension funding	$190
OPEB payments	$110
Total cash impact	**$300**

1. The impact on the combined pension and OPEB liability of a 25 basis point change in the weighted average discount rate is approximately $160M.

Investments summary

Alcoa

Investee	Country	Nature of Investment[4]	Ownership Interest	Carrying Value as of December 31, 2018	Income Statement Location of Equity Earnings
Elysis Limited Partnership	Canada	Aluminum smelting technology	48.235%		
Ma'aden Aluminum 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]		
Ma'aden Rolling Company[1]	Saudi Arabia	Aluminum rolling mill	25.1%		
Subtotal Ma'aden and Elysis				***$874M***	***Other expenses / (income), 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%[5]		
Manicouagan Power Limited Partnership	Canada	Hydroelectric generation facility	40%		
Mineração Rio do Norte S.A. (MRN)	Brazil	Bauxite mine	18.2%[5]		
Pechiney Reynolds Quebec, Inc.[3]	Canada	Aluminum smelter	50%		
Subtotal other				***$486M***	***COGS***
Total investments				**$1,360M**	

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, aluminum smelter, and rolling mill) 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.

Production and capacity information

Alcoa Corporation annual consolidated amounts as of December 31, 2018

Bauxite production, Mdmt

Mine	Country	2018 Production
Darling Range	Australia	33.6
Juruti	Brazil	5.7
Poços de Caldas	Brazil	0.4
Trombetas (MRN)	Brazil	2.3
Boké (CBG)	Guinea	2.7
Al Ba'itha[1]	Saudi Arabia	1.1
Total		**45.8**

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	-
Point Comfort	U.S.	2,305	2,305
Total		**15,064**	**2,519**
Ras Al Khair[1]	*Saudi Arabia*	*452*	-

Aluminum smelting, kmt

Facility	Country	Capacity	Curtailed
Portland	Australia	197	30
São Luís (Alumar)	Brazil	268	268
Baie Comeau	Canada	280	-
Bécancour	Canada	310	259
Deschambault	Canada	260	-
Fjarðaál	Iceland	344	-
Lista	Norway	94	-
Mosjøen	Norway	188	-
Avilés	Spain	93	32
La Coruña	Spain	87	24
San Ciprián	Spain	228	-
Intalco	U.S.	279	49
Massena West	U.S.	130	-
Warrick	U.S.	269	108
Wenatchee	U.S.	146	146
Total		**3,173**	**916**
Ras Al Khair[1]	*Saudi Arabia*	*186*	-

1. The Company's proportionate share of earnings from its equity investment in the Saudi Arabian joint venture does not impact adjusted EBITDA.

Valuation framework

Valuation framework key considerations

				FY18 Adj. EBITDA excl. special items
Business Operations	+	Bauxite	Economic value using market multiple of: i. AWAC joint venture, minus small portions of AWAC JV in Aluminum and Transformation ii. Ownership in certain mines and refineries outside the JV	$426M
	+	Alumina		$2,373M
	+	Aluminum	Economic value using market multiple of: i. Smelters, casthouses, rolling mill, and energy assets ii. Smelters and casthouses restart optionality	$404M
	-	Non-segment expenses	Economic value using market multiple of: i. Net corporate expenses and Transformation	$102M
	=	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	Book value of debt of $1.8B ($1.8B, >95% Alcoa)[1], pension & OPEB net liabilities of $2.3B ($2.3B, >95% Alcoa; U.S. contributions not tax deductible)[1], environmental & ARO liabilities of $0.7B ($0.9B, ~80% Alcoa)[1]	
	+	Cash & equity investments	Cash position of $0.8B ($1.1B, ~70% Alcoa)[1] plus carrying value of investments in the Ma´aden joint venture and Elysis of $0.8B ($0.9B, ~90% Alcoa)[1]	
	=	Equity value		

1. Dollar amounts reflect Alcoa Corporation's consolidated balance sheet values as of December 31, 2018. The "Alcoa" percentages exclude amounts attributable to Alcoa Corporation's partner in the AWAC JV.

Adjusted EBITDA reconciliation

$M	4Q17	FY17	1Q18	2Q18	3Q18	4Q18	FY18
Net income (loss) attributable to Alcoa Corporation	**$(196)**	**$217**	**$150**	**$75**	**$(41)**	**$43**	**$227**
Add:							
Net income attributable to noncontrolling interest	140	342	124	155	196	169	644
Provision for income taxes	272	600	138	180	251	157	726
Other expenses, net	30	27	21	9	2	32	64
Interest expense	27	104	26	32	33	31	122
Restructuring and other charges	297	309	(19)	231	177	138	527
Depreciation, depletion and amortization	187	750	194	192	173	174	733
Adjusted EBITDA	**757**	**2,349**	**634**	**874**	**791**	**744**	**3,043**
Special items before tax and noncontrolling interest	39	88	19	30	4	5	58
Adjusted EBITDA excl. special items	**$796**	**$2,437**	**$653**	**$904**	**$795**	**$749**	**$3,101**

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.

Special items detail, net of tax and noncontrolling interest

$M	**4Q17**	**3Q18**	**4Q18**	**FY18**	**P&L classification**
Special items	$391	$160	$82	$448	
Warrick smelter restart costs	29	1	1	20	Cost of goods sold
Bécancour lockout related costs	3	2	2	8	Cost of goods sold
Contractor arbitration loss	-	-	-	15	Cost of goods sold
Rockdale inventory write-down	6	-	-	-	Cost of goods sold
Spain collective dismissal costs	-	-	1	1	SG&A and R&D expenses
Contractor arbitration loss	-	-	-	2	Interest expense
Mark-to-market energy contracts	2	(7)	(4)	(22)	Other expenses / (income), net
Gain on asset sales	(2)	-	-	-	Other expenses / (income), net
Pension related actions	1	230	10	365	Restructuring and other charges
OPEB related actions	-	(56)	1	(83)	Restructuring and other charges
Brazil state VAT allowance	-	-	50	50	Restructuring and other charges
Rockdale power contract	293	-	-	-	Restructuring and other charges
Other restructuring related items	(4)	2	14	86	Restructuring and other charges
Income tax items	63	(12)	7	6	Tax provision

Free Cash Flow reconciliation

$M	**4Q17**	**1Q18**	**2Q18**[1]	**3Q18**	**4Q18**
Cash from operations	$455	$55	$(430)	$288	$535
Capital expenditures	(150)	(74)	(95)	(82)	(148)
Free cash flow	$305	$(19)	$(525)	$206	$387

Free Cash Flow is a non-GAAP financial measure. Management believes that this measure is meaningful to investors because management reviews cash flows generated from operations after taking into consideration capital expenditures, which are both necessary to maintain and expand Alcoa Corporation's asset base and expected to generate future cash flows from operations. It is important to note that Free Cash Flow does not represent the residual cash flow available for discretionary expenditures since other non-discretionary expenditures, such as mandatory debt service requirements, are not deducted from the measure.

1. Cash from operations for the quarter ended June 30, 2018 includes a $500 million cash outflow for discretionary contributions made to three of Alcoa Corporation's U.S. defined benefit pension plans. The $500 million was funded with the gross proceeds of 6.125% Senior notes due 2028 issued in May 2018.

Net Debt reconciliation

$M	FY16 Cons.	FY16 NCI	FY16 Alcoa Prop.	FY17 Cons.	FY17 NCI	FY17 Alcoa Prop.	FY18 Cons.	FY18 NCI	FY18 Alcoa Prop.
Short-term borrowings	$1	$-	$1	$8	$-	$8	$-	$-	$-
Long-term debt due within one year	21	-	21	16	-	16	1	-	1
Long-term debt, less amount due within one year	1,424	1	1,423	1,388	7	1,381	1,801	34	1,767
Total debt[1]	1,446	1	1,445	1,412	7	1,405	1,802	34	1,768
Less: Cash and cash equivalents	853	100	753	1,358	252	1,106	1,113	296	817
Net debt	**593**	**(99)**	**692**	**54**	**(245)**	**299**	**689**	**(262)**	**951**
Plus: Net pension / OPEB liability	3,104	44	3,060	3,498	26	3,472	2,330	23	2,307
Adjusted net debt	**$3,697**	**$(55)**	**$3,752**	**$3,552**	**$(219)**	**$3,771**	**$3,019**	**$(239)**	**$3,258**

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. Total debt as of December 31, 2018 includes $500 aggregate principal amount of 6.125% senior notes due 2028 issued in May 2018, the gross proceeds of which were used to make discretionary contributions to three of Alcoa Corporation's U.S. defined benefit pension plans.

Days Working Capital

$M	**1Q17**	**2Q17**	**3Q17**	**4Q17**	**1Q18**	**2Q18**	**3Q18**	**4Q18**
Receivables from customers	$708	$789	$840	$811	$814	$1,025	$1,017	$830
Add: Inventories	1,294	1,287	1,323	1,453	1,630	1,668	1,666	1,644
Less: Accounts payable, trade	1,434	1,508	1,618	1,898	1,813	1,752	1,711	1,663
DWC working capital	$568	$568	$545	$366	$631	$941	$972	$811
Sales	$2,655	$2,859	$2,964	$3,174	$3,090	$3,579	$3,390	$3,344
Number of days in the quarter	90	91	92	92	90	91	92	92
Days Working Capital[1]	19	18	17	11	18	24	26	22

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

Return on Capital

Reconciliation and calculation information

$M	FY17	FY18
Numerator:		
Net income attributable to Alcoa Corporation	217	227
Add: Net income attributable to noncontrolling interest	342	644
Add: Provision for income taxes	600	726
Profit before taxes (PBT)	**1,159**	**1,597**
Add: Interest expense	104	122
Less: Interest income	13	18
Add: Special items[1]	300	563
ROC earnings before taxes	**1,550**	**2,264**
ROC earnings after fixed tax rate of 35%	**1,008**	**1,472**
Denominator[2]:		
Total assets	17,177	16,436
Less: Cash, cash equivalents, restricted cash and short-term investments	1,071	1,111
Less: Current liabilities	2,812	2,978
Add: Long-term debt due within one year and short-term borrowings	23	9
Average capital base[2]	**13,317**	**12,356**
ROC	**7.6%**	**11.9%**

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

$$\text{FY17 ROC \%} = \frac{(\$1{,}159 + \$91 + \$300) \times (1 - 0.35)}{(\$17{,}177 - \$1{,}071 - \$2{,}812 + \$23)} \times 100 = 7.6\%$$

$$\text{FY18 ROC \%} = \frac{(\$1{,}597 + \$104 + \$563) \times (1 - 0.35)}{(\$16{,}436 - \$1{,}111 - \$2{,}978 + \$9)} \times 100 = 11.9\%$$

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

Glossary of terms

Abbreviations listed in alphanumeric order

Abbreviation	Description
% pts	Percentage points
1Q##	Three months ending March 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
Approx.	Approximately
ARO	Asset retirement obligations
AUD	Australian dollar
AWAC	Alcoa World Alumina and Chemicals
B	Billion
bbl	Barrel
BRL	Brazilian real
CAD	Canadian dollar
CAGR	Compound annual growth rate
CIF	Cost, insurance and freight
COGS	Cost of goods sold
dmt	Dry metric ton
Cons.	Consolidated
DOJ	Department of Justice
DWC	Days working capital
EBITDA	Earnings before interest, taxes, depreciation and amortization
EPS	Earnings per share
ERISA	Employee Retirement Income Security Act of 1974
EUR	Euro
Est.	Estimated
excl. or ex.	Excluding
FOB	Free on board

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	Thousand metric tons
LIFO	Last in first out method of inventory accounting
LME	London Metal Exchange
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
Op.	Operational
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
VAT	Value Added Tax

The Element of **Possibility**™

Alcoa