

*The Element of* **Possibility™**

# Investor Presentation

February 2020



## 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 and which may also affect Alcoa Corporation’s ability to obtain credit or financing upon acceptable terms; (c) unfavorable changes in the markets served by Alcoa Corporation; (d) the impact of changes in foreign currency exchange and tax rates on costs and results; (e) increases in energy costs or uncertainty of energy supply; (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, legal, and regulatory risks in the countries in which Alcoa Corporation operates or sells products; (j) labor disputes and/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, 2019 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.

***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

As of January 1, 2019, the Company changed its accounting method for valuing certain inventories from last-in, first-out (LIFO) to average cost. The effects of the change in accounting principle have been retrospectively applied to all prior periods presented. See Exhibit 99.2 to the Company's Form 8-K filed with the Securities and Exchange Commission (SEC) on April 17, 2019, which illustrates the effects of the change in accounting principle to 2018 interim and full year financial information.

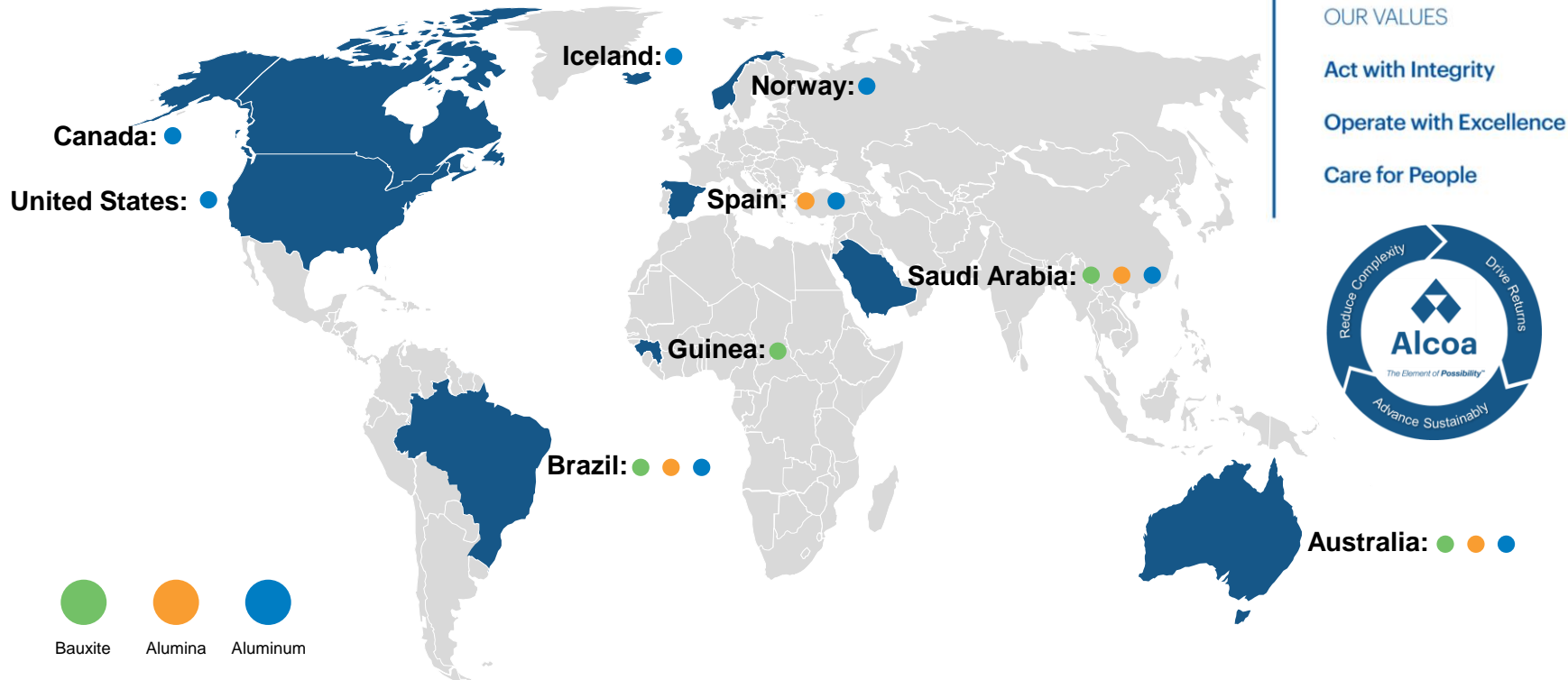
## Glossary of terms

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

# Alcoa: A global values-driven enterprise



## Global operations by business segment



# Key trends expected to drive aluminum demand growth

## Projected global demand trends and sector growth projections

### Demand trends

#### Developing economies of China and Asia

##### China and Asia continue to be key drivers of aluminum demand

- China targets shift to high-value manufacturing; China and Asia will see continued sector growth
- China and India expected to be 30%-40% of world GDP by 2030

#### Transportation

##### Increased demand from automotive/other transportation industries

- Focus on lightweight, corrosion resistant alloys
- Electric vehicles could be up to 25% of automotive market by 2030

#### Urbanization

##### Construction end-use demand increases

- 60% of global population to live in cities by 2030
- Energy efficient buildings become a growing demand driver

#### New materials & substitutes

##### Alloys with aluminum have broader applications

- Creation of new advanced materials
- Different metals and minerals needed to reach climate goals (aluminum, lithium, cobalt, graphite, etc.)

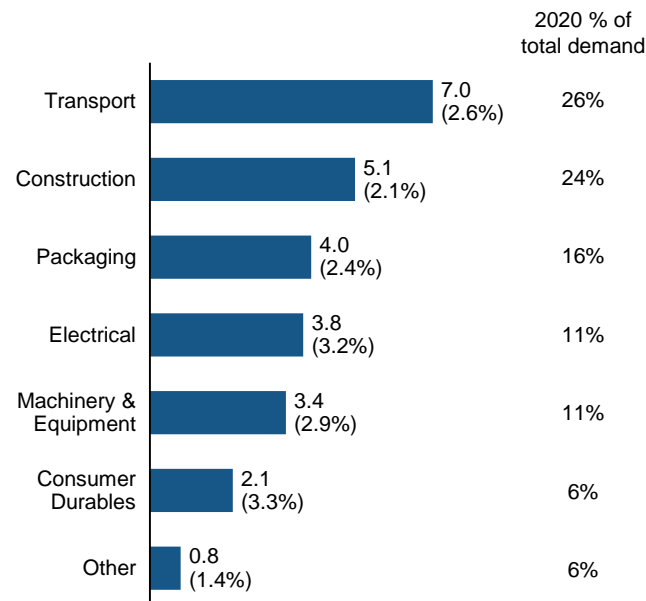
#### Sustainability

##### Preference for low carbon aluminum

- Energy and environmental concerns drive interest in alternative energy sources, low carbon products, and sustainable sourcing
- Consumer preference to drive aluminum packaging share gains

### Sector demand growth

#### 2020-2030 global semis demand growth in Mt (CAGR)



# Alcoa positioning as low cost, sustainable supplier

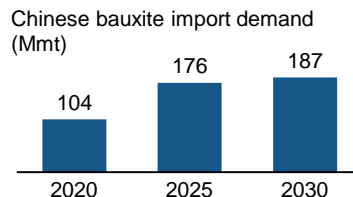


## Global supply trends and Alcoa position

### Bauxite

#### Supply trends

- ~90% of World ex-China (WxC) seaborne bauxite shipped to China
- Mining practices under sustainability scrutiny



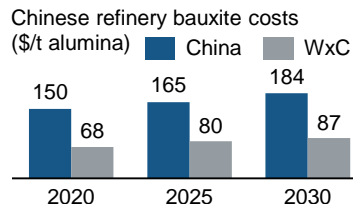
#### Alcoa position

##### High quality, low cost assets with global reach

- World's second largest miner, first quartile cost position
- World class mine rehabilitation, best-in-class mining methods in high biodiversity areas

### Alumina

- Seaborne bauxite raising Chinese refining costs
- Upstream residue management risk

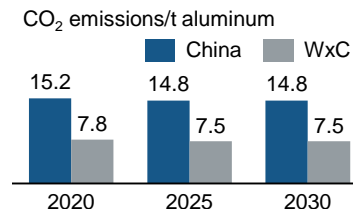


##### Low cost, integrated system with growth opportunities

- Largest refiner and largest long position, outside of China
- Lowest CO<sub>2</sub>e intensity refiner; sustainable residue management and press filtration

### Aluminum

- WxC likely to maintain per ton carbon footprint half China's
- Smelting capacity in China capped at 45MMt



##### More profitable, sustainable fleet after portfolio review

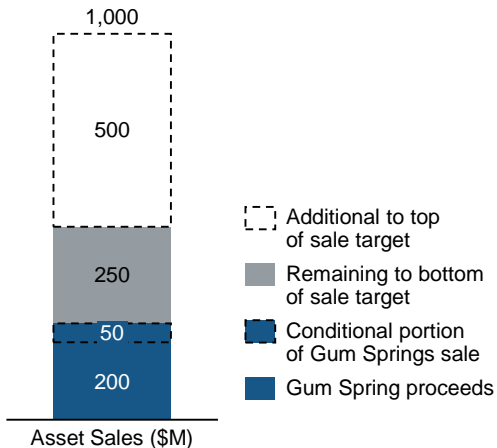
- 2<sup>nd</sup> quartile aluminum producer, targeting 1<sup>st</sup> quartile
- Low CO<sub>2</sub>e intensity producer, ~70% of production from renewable energy (targeting 85%), offering SUSTANA™ low carbon products

# Recent and ongoing progress to strengthen the Company

## Update on key actions

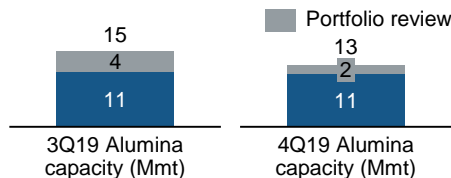
### Non-Core Asset Sales

- Target range of \$500 million to \$1 billion in cash proceeds
- Sold Gum Springs treatment facility on January 31, 2020

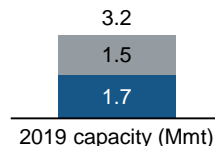


### Portfolio Review

- Alumina: Closed Point Comfort refinery on December 16, 2019



- Aluminum: To improve, close or sell 1.5Mt of smelting capacity



- Transformation: Transferred Afobaka dam to Suriname on December 31, 2019

### Sustainability

- Differentiating products through excellence in ESG-related metrics
  - Achieved ASI Chain of Custody certification; 80% of locations will be certified by end of 2020
  - SUSTANA™ brand to expand, complementing our low-carbon and recycled aluminum products
- Advancing social, governance practices in our communities
  - Enhancing social management system through active stakeholder engagement
  - Signed Reconciliation Plan with Indigenous People in Australia
- Reducing our footprint, developing break-through solutions
  - Zero net loss biodiversity on new projects; water management goals

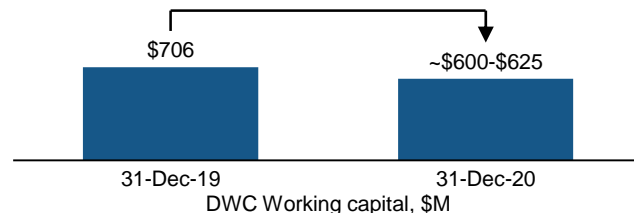
# Additional actions in 2020 expected to drive value



## Other actions and anticipated benefits in FY20

### Leaner working capital

Targeting working capital benefits of \$75-100 million to improve operating cash flow (based on current prices)



### Increased productivity

Improved cost and margin control of ~\$100 million through productivity program, specific actions

- Plant-specific operating efficiencies and volume increases
- ABI restart complete mid-year
- New operating model reducing overhead costs
- Modernized labor contracts to provide full year benefit

### Financial strength

Strengthened balance sheet and cash resources

- Cash balance of \$879 million at December 31, 2019
- Consolidated net debt of \$0.9 billion, with no major long term debt maturities until 2024
- Based on current assumptions, required pension and OPEB payments expected to decrease ~30% by 2023/2024



# A stronger, prepared Alcoa, acting on strategic priorities



## Strategic priorities



- **Reduce complexity**  
A portfolio and operating model that is **low cost**, competitive and resilient in a low price environment
- **Drive returns**  
Improve commercial capabilities, invest in targeted growth opportunities, increase **margin focus** across the value chain
- **Advance sustainably**  
Continue to strengthen the balance sheet, transform portfolio and leverage our industry-leading environmental and social standards for a **sustainable** future



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

*The Element of **Possibility***<sup>™</sup>



**Appendix:**  
4Q19 Financial Results and  
Other Information  
as presented on  
January 15, 2020



# Revenue off 5% as volume gain partially offsets price slip



## Quarterly income statement

*M, Except realized prices and per share amounts*

|   | 4Q18    | 3Q19     | 4Q19            |
|---|---------|----------|-----------------|
| Realized primary aluminum price (\$/mt)                         | \$2,358 | \$2,138  | <b>\$2,042</b>  |
| Realized alumina price (\$/mt)                                  | \$479   | \$324    | <b>\$291</b>    |
| Revenue   | \$3,344 | \$2,567  | <b>\$2,436</b>  |
| Cost of goods sold  | 2,513   | 2,120    | <b>2,048</b>    |
| SG&A and R&D expenses   | 66      | 73       | <b>68</b>       |
| Adjusted EBITDA   | 765     | 374      | <b>320</b>      |
| Depreciation, depletion and amortization                        | 174     | 184      | <b>183</b>      |
| Other expenses, net   | 32      | 27       | <b>44</b>       |
| Interest expense  | 31      | 30       | <b>31</b>       |
| Restructuring and other charges, net                            | 138     | 185      | <b>363</b>      |
| Provision for income taxes                                      | 163     | 95       | <b>54</b>       |
| Net income (loss)   | 227     | (147)    | <b>(355)</b>    |
| Less: Net income (loss) attributable to noncontrolling interest | 176     | 74       | <b>(52)</b>     |
| Net income (loss) attributable to Alcoa Corporation             | \$51    | \$(221)  | <b>\$(303)</b>  |
| Diluted earnings (loss) per share                               | \$0.27  | \$(1.19) | <b>\$(1.63)</b> |
| Diluted shares outstanding <sup>1</sup>                         | 188.2   | 185.6    | <b>185.6</b>    |

| Prior Year Change | Sequential Change |
|-------------------|-------------------|
| \$(316)           | \$(96)            |
| \$(188)           | \$(33)            |
| \$(908)           | \$(131)           |
| (465)             | (72)              |
| 2                 | (5)               |
| (445)             | (54)              |
| 9                 | (1)               |
| 12                | 17                |
| -                 | 1                 |
| 225               | 178               |
| (109)             | (41)              |
| (582)             | (208)             |
| (228)             | (126)             |
| \$(354)           | \$(82)            |
| \$(1.90)          | \$(0.44)          |
| (2.6)             | -                 |

1. For 3Q19 and 4Q19, share equivalents related to employee stock-based compensation were excluded from Diluted shares outstanding as impact was anti-dilutive given a net loss.

# Special items total \$246M, primarily Point Comfort closure



## Breakdown of special items by income statement classification – gross basis

| <i>M, Except per share amounts</i>                           | <b>4Q18</b> | <b>3Q19</b> | <b>4Q19</b>     | <b>Description of significant <u>4Q19</u> special items</b> |
|--|-------------|-------------|-----------------|---|
| Net income (loss) attributable to Alcoa Corporation          | \$51        | \$(221)     | <b>\$(303)</b>  |   |
| Diluted earnings (loss) per share                            | \$0.27      | \$(1.19)    | <b>\$(1.63)</b> |   |
| Special items  | \$82        | \$139       | <b>\$246</b>    |   |
| <i>Cost of goods sold</i>                                    | 4           | 14          | <b>26</b>       | <i>Bécancour restart costs</i>                              |
| <i>SG&amp;A and R&amp;D expenses</i>                         | 1           | -           | -               |   |
| <i>Restructuring and other charges, net</i>                  | 138         | 185         | <b>363</b>      | <i>Point Comfort refinery closure; pension/OPEB actions</i> |
| <i>Other expenses (income), net</i>                          | (3)         | (7)         | <b>(1)</b>      |   |
| <i>Provision for income taxes</i>                            | (40)        | (44)        | <b>(32)</b>     |   |
| <i>Noncontrolling interest</i>                               | (18)        | (9)         | <b>(110)</b>    |   |
| Adjusted net income (loss) attributable to Alcoa Corporation | \$133       | \$(82)      | <b>\$(57)</b>   |   |
| Adjusted diluted earnings (loss) per share                   | \$0.70      | \$(0.44)    | <b>\$(0.31)</b> |   |

# Adjusted net loss \$57M, adjusted loss per share \$0.31



## Quarterly income statement excluding special items

*M, Except realized prices and per share amounts*

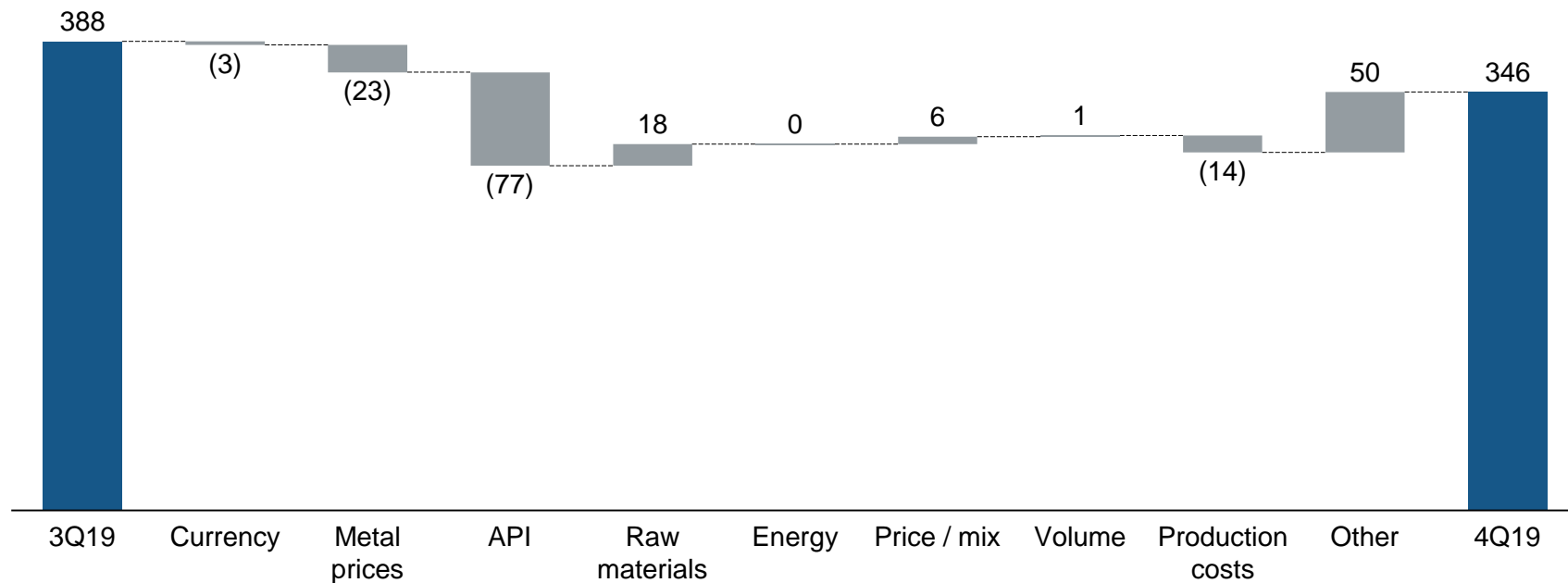
|   | 4Q18    | 3Q19     | 4Q19            |
|---|---------|----------|-----------------|
| Realized primary aluminum price (\$/mt)                           | \$2,358 | \$2,138  | <b>\$2,042</b>  |
| Realized alumina price (\$/mt)                                    | \$479   | \$324    | <b>\$291</b>    |
| Revenue   | \$3,344 | \$2,567  | <b>\$2,436</b>  |
| Cost of goods sold  | 2,509   | 2,106    | <b>2,022</b>    |
| COGS % of Revenue   | 75.0%   | 82.0%    | 83.0%           |
| SG&A and R&D expenses   | 65      | 73       | <b>68</b>       |
| SG&A and R&D % of Revenue   | 1.9%    | 2.8%     | 2.8%            |
| Adjusted EBITDA   | 770     | 388      | <b>346</b>      |
| Depreciation, depletion and amortization                          | 174     | 184      | <b>183</b>      |
| Other expenses, net   | 35      | 34       | <b>45</b>       |
| Interest expense  | 31      | 30       | <b>31</b>       |
| Provision for income taxes  | 203     | 139      | <b>86</b>       |
| Operational tax rate  | 38.4%   | 99.5%    | 99.5%           |
| Adjusted net income   | 327     | 1        | <b>1</b>        |
| Less: Adjusted net income attributable to noncontrolling interest | 194     | 83       | <b>58</b>       |
| Adjusted net income (loss) attributable to Alcoa Corporation      | \$133   | \$(82)   | <b>\$(57)</b>   |
| Adjusted diluted earnings (loss) per share                        | \$0.70  | \$(0.44) | <b>\$(0.31)</b> |
| Diluted shares outstanding <sup>1</sup>                           | 188.2   | 185.6    | <b>185.6</b>    |

| Prior Year Change | Sequential Change |
|-------------------|-------------------|
| \$(316)           | \$(96)            |
| \$(188)           | \$(33)            |
| \$(908)           | \$(131)           |
| (487)             | (84)              |
| 8.0% pts.         | 1.0% pts.         |
| 3                 | (5)               |
| 0.9% pts.         | 0.0% pts.         |
| (424)             | (42)              |
| 9                 | (1)               |
| 10                | 11                |
| -                 | 1                 |
| (117)             | (53)              |
| 61.1% pts.        | 0.0% pts.         |
| (326)             | -                 |
| (136)             | (25)              |
| \$(190)           | \$25              |
| \$(1.01)          | \$0.13            |
| (2.6)             | -                 |

1. For 3Q19 and 4Q19, share equivalents related to employee stock-based compensation were excluded from Diluted shares outstanding as impact was anti-dilutive given a net loss.

# Alumina and metal prices drive EBITDA change

## Adjusted EBITDA excluding special items sequential changes, \$M

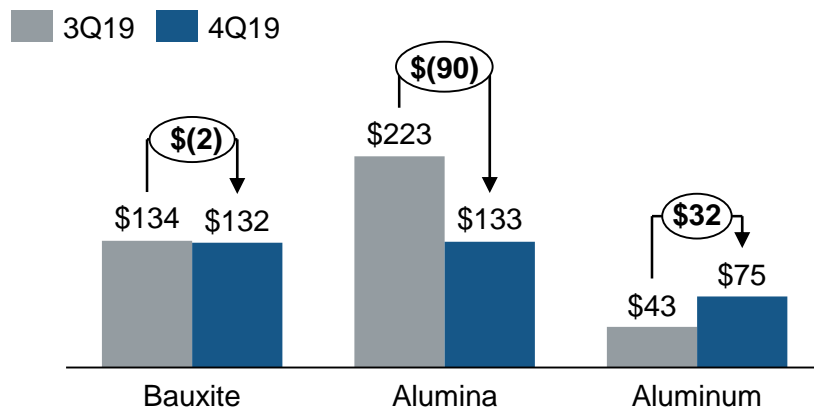


# Bauxite stable; market impacts Alumina; Aluminum gains



## Adjusted EBITDA excluding special items breakdown

### Segment information, \$M



### Total Adjusted EBITDA information, \$M

|                              | 3Q19         | 4Q19         | Change        |
|------------------------------|--------------|--------------|---------------|
| <b>Segment total</b>         | \$400        | \$340        | \$(60)        |
| Transformation               | (6)          | (6)          | -             |
| Intersegment eliminations    | 25           | 40           | 15            |
| Other corporate              | (31)         | (28)         | 3             |
| <b>Total Adjusted EBITDA</b> | <b>\$388</b> | <b>\$346</b> | <b>\$(42)</b> |

|                                   |            |            |            |
|-----------------------------------|------------|------------|------------|
| 4Q19 Segment Adj. EBITDA Margin % | 42.4%      | 12.7%      | 4.6%       |
| Change vs. 3Q19, Margin %         | +4.2% pts. | -6.9% pts. | +2.0% pts. |

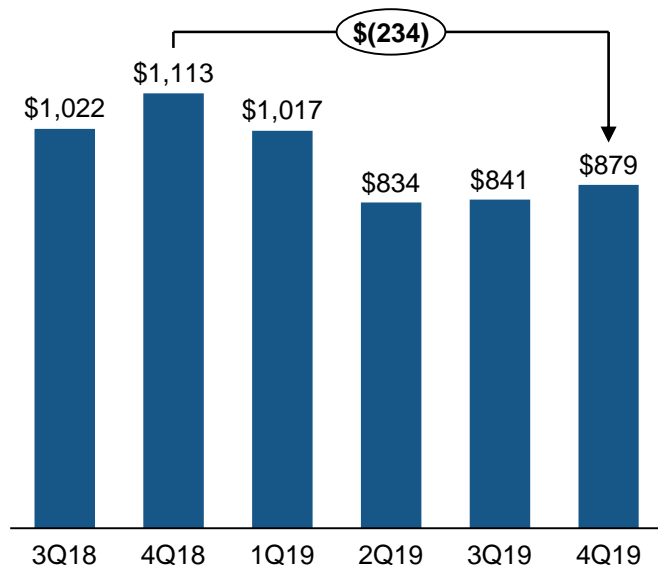


# Year-end cash balance at \$0.9 billion, stable

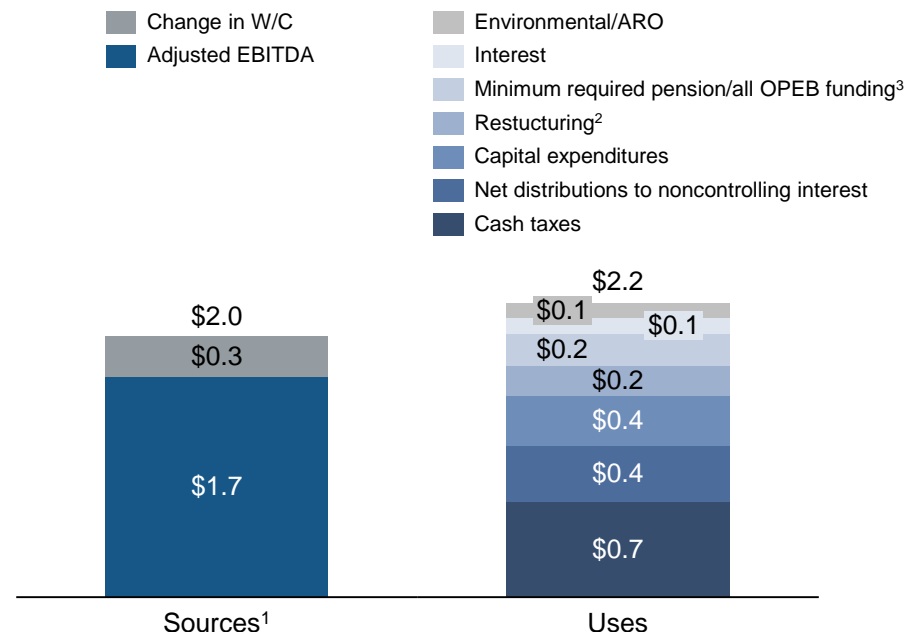


## Quarterly cash comparison and cash flow information

### Quarter ending cash balance, \$M



### 2019 Cash flow information, \$B



1. Sources defined as Adjusted EBITDA excluding special items plus changes in Working Capital (Accounts receivable, Inventories, Accounts payable)
2. Restructuring includes payments related to divestiture of Saudi rolling mill and 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.

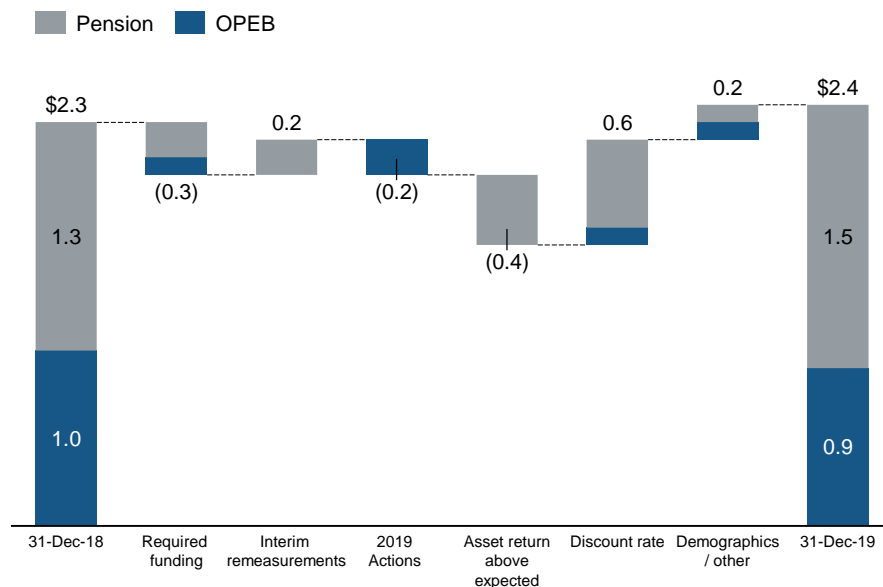
# Strong balance sheet management in 2019

## Key financial metrics and pension & OPEB bridge as of December 31, 2019

### Key metrics

|  |  |
|--|--|
| 4Q19 Days working capital                      | 2019 Return on capital                   |
| <b>27 Days</b>                                 | <b>4.2%</b>                              |
| FY19 Sustaining capital expenditures           | FY19 Return-seeking capital expenditures |
| <b>\$290M</b>                                  | <b>\$89M</b>                             |
| FY19 Free cash flow less net NCI distributions | Alcoa proportional adjusted net debt     |
| <b>\$(114)M</b>                                | <b>\$3.4B</b>                            |

### Pension & OPEB net liability bridge, \$B



# 2020 Outlook



## FY20 Key metrics

| Income statement excl. special items impacts |             |                       |
|--|-------------|-----------------------|
|  | FY19 Actual | FY20 Outlook          |
| Bauxite shipments (Mdmmt)                    | 47.6        | 48.0 – 49.0           |
| Alumina shipments (Mmt)                      | 13.5        | 13.6 – 13.7           |
| Aluminum shipments (Mmt)                     | 2.9         | 3.0 – 3.1             |
| Transformation (adj. EBITDA impacts)         | \$(7)M      | ~ \$(85)M             |
| Intersegment elims. (adj. EBITDA impacts)    | \$150M      | Varies                |
| Other corporate (adj. EBITDA impacts)        | \$(113)M    | ~ \$(100)M            |
| Depreciation, depletion and amortization     | \$713M      | ~ \$685M              |
| Non-operating pension/OPEB expense           | \$117M      | ~ \$100M              |
| Interest expense                             | \$121M      | ~ \$120M              |
| Operational tax rate <sup>1</sup>            | 67.9%       | ~ 70-80% <sup>1</sup> |
| Net income of noncontrolling interest        | \$391M      | 40% of AWAC NI        |

| Cash flow impacts                                |             |  |
|--|-------------|--|
|  | FY19 Actual | FY20 Outlook   |
| Minimum required pension/all OPEB funding        | \$292M      | ~ \$400M   |
| Additional pension funding                       | -           | Will vary based on market conditions and cash availability |
| Discretionary debt repayment                     | -           |  |
| Stock repurchases                                | -           |  |
| Return-seeking capital expenditures <sup>2</sup> | \$89M       | ~ \$75M  |
| Sustaining capital expenditures <sup>2</sup>     | \$290M      | ~ \$400M   |
| Payment of prior year income taxes               | \$351M      | ~ \$50M <sup>3</sup>                                       |
| Current period cash taxes                        | \$365M      | Varies <sup>1</sup>  |
| Environmental and ARO payments <sup>4</sup>      | \$107M      | ~ \$150M   |
| Impact of restructuring and other charges        | \$220M      | TBD  |

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

1. Estimate will vary with market conditions and jurisdictional profitability.
2. AWAC portion of FY20 Outlook: ~45% of return-seeking capital expenditures, and ~60% of sustaining capital expenditures.
3. Net of pending tax refunds.
4. As of December 31, 2019, the environmental remediation reserve balance was \$335M and the ARO liability was \$717M.

# Strengthening the Company, to date



## Key actions to date

### 2017 – 2018

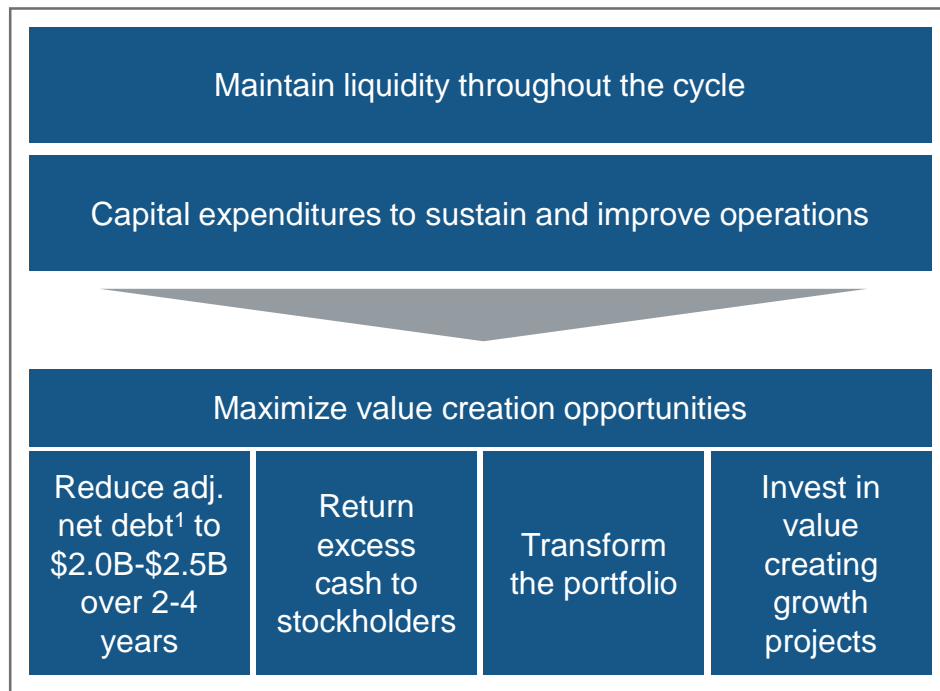
- Revitalized safety program; zero fatalities in 2018
- Restarted Portland smelter and Lake Charles calciner
- Streamlined business units to three, reduced administrative locations, relocated headquarters to Pittsburgh
- Set annual production records
- Terminated Rockdale power contract, closed site
- 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 ~\$400 million, return seeking capital of ~\$75 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

# FY19 Income statement information



## Annual income statement

| <i>M, Except realized prices and per share amounts</i>   | <b>Reported</b> | <b>Special items</b> | <b>Adjusted excl.<br/>special items</b> |
|--|-----------------|----------------------|---|
| Realized primary aluminum price (\$/mt)                  | \$2,141         |                      | \$2,141                                 |
| Realized alumina price (\$/mt)                           | \$343           |                      | \$343                                   |
| Revenue  | \$10,433        |                      | \$10,433                                |
| Cost of goods sold                                       | 8,537           | \$(65)               | 8,472                                   |
| COGS % revenue   | 81.8%           |                      | 81.2%                                   |
| SG&A and R&D expenses                                    | 307             | (2)                  | 305                                     |
| SG&A and R&D % revenue                                   | 2.9%            |                      | 2.9%                                    |
| Adjusted EBITDA  | 1,589           | 67                   | 1,656                                   |
| Depreciation, depletion and amortization                 | 713             |                      | 713                                     |
| Other expenses / (income), net                           | 162             | 17                   | 179                                     |
| Interest expense   | 121             |                      | 121                                     |
| Restructuring and other charges, net                     | 1,031           | (1,031)              | -                                       |
| Provision for income taxes                               | 415             | 21                   | 436                                     |
| Tax rate   | -94.9%          |                      | 67.9%                                   |
| Net (loss) income  | (853)           | 1,060                | 207                                     |
| Less: Net income attributable to noncontrolling interest | 272             | 119                  | 391                                     |
| Net (loss) income attributable to Alcoa Corporation      | \$(1,125)       | \$941                | \$(184)                                 |
| Diluted (loss) earnings per share                        | \$(6.07)        | \$5.08               | \$(0.99)                                |
| Diluted shares outstanding                               | 185.5           |                      | 185.5                                   |

# FY19 Financial information

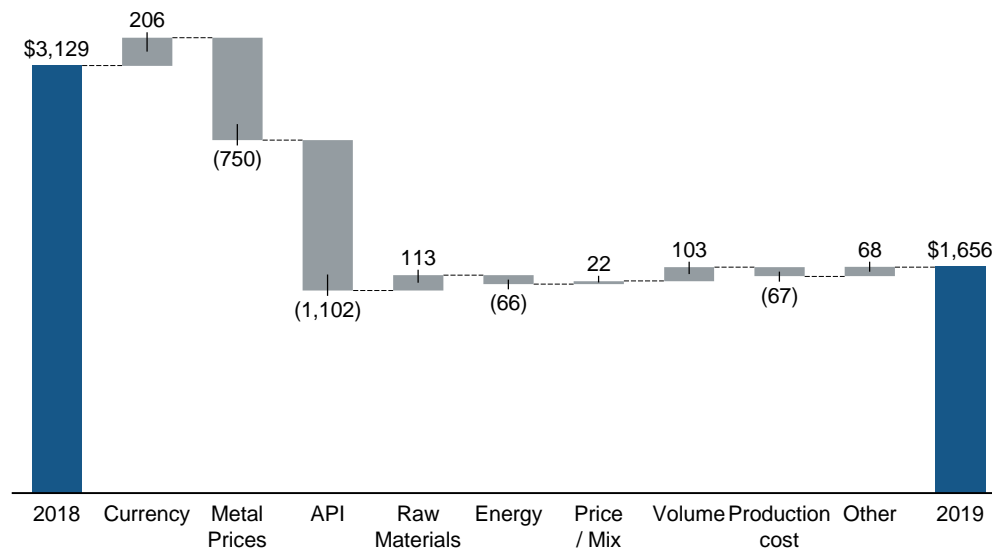


## FY19 Highlights and annual change impacts

### Full year financial highlights

|  | FY19      | vs. FY18  |
|--|-----------|-----------|
| Realized primary aluminum price (\$/mt)      | \$2,141   | \$(343)   |
| Realized alumina price (\$/mt)               | \$343     | \$(112)   |
| Revenue, \$M                                 | \$10,433  | \$(2,970) |
| Adjusted EBITDA excl. special items, \$M     | \$1,656   | \$(1,473) |
| Net loss attributable to Alcoa, \$M          | \$(1,125) | \$(1,375) |
| Adjusted net loss attributable to Alcoa, \$M | \$(184)   | \$(882)   |
| Adjusted EPS, \$ per share                   | \$(0.99)  | \$(4.69)  |

### Adjusted EBITDA excl. special items bridge, \$M



# 4Q19 Financial summary



## Three months ending December 31, 2019, excluding special items

| \$M  | Bauxite      | Alumina      | Aluminum <sup>3,4</sup> | Transformation | Intersegment eliminations | Other corporate | Alcoa Corporation |
|--|--------------|--------------|-------------------------|----------------|---------------------------|-----------------|-------------------|
| Total revenue                                      | \$311        | \$1,048      | \$1,640                 | \$21           | \$(584)                   | -               | \$2,436           |
| Third-party revenue                                | \$65         | \$718        | \$1,634                 | \$19           | -                         | -               | \$2,436           |
| Adjusted EBITDA <sup>1</sup>                       | \$132        | \$133        | \$75                    | \$(6)          | \$40                      | \$(28)          | \$346             |
| <i>Adjusted EBITDA margin %</i>                    | <i>42.4%</i> | <i>12.7%</i> | <i>4.6%</i>             |                |                           |                 | <i>14.2%</i>      |
| Depreciation, depletion and amortization           | \$30         | \$57         | \$84                    | \$1            | -                         | \$11            | \$183             |
| Other expenses, net <sup>2</sup>                   | -            | \$9          | \$5                     | -              | -                         | \$31            | \$45              |
| Interest expense                                   |              |              |                         |                |                           |                 | \$31              |
| Provision for income taxes                         |              |              |                         |                |                           |                 | \$86              |
| Adjusted net income                                |              |              |                         |                |                           |                 | \$1               |
| Net income attributable to noncontrolling interest |              |              |                         |                |                           |                 | \$58              |
| Adjusted net loss attributable to Alcoa Corp.      |              |              |                         |                |                           |                 | \$(57)            |

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, \$295M and \$23M, respectively.
4. Third-party energy sales volume, revenue and adjusted EBITDA in Brazil were 897 GWh, \$43M and \$27M, respectively.



# 4Q19 Adjusted EBITDA drivers by segment

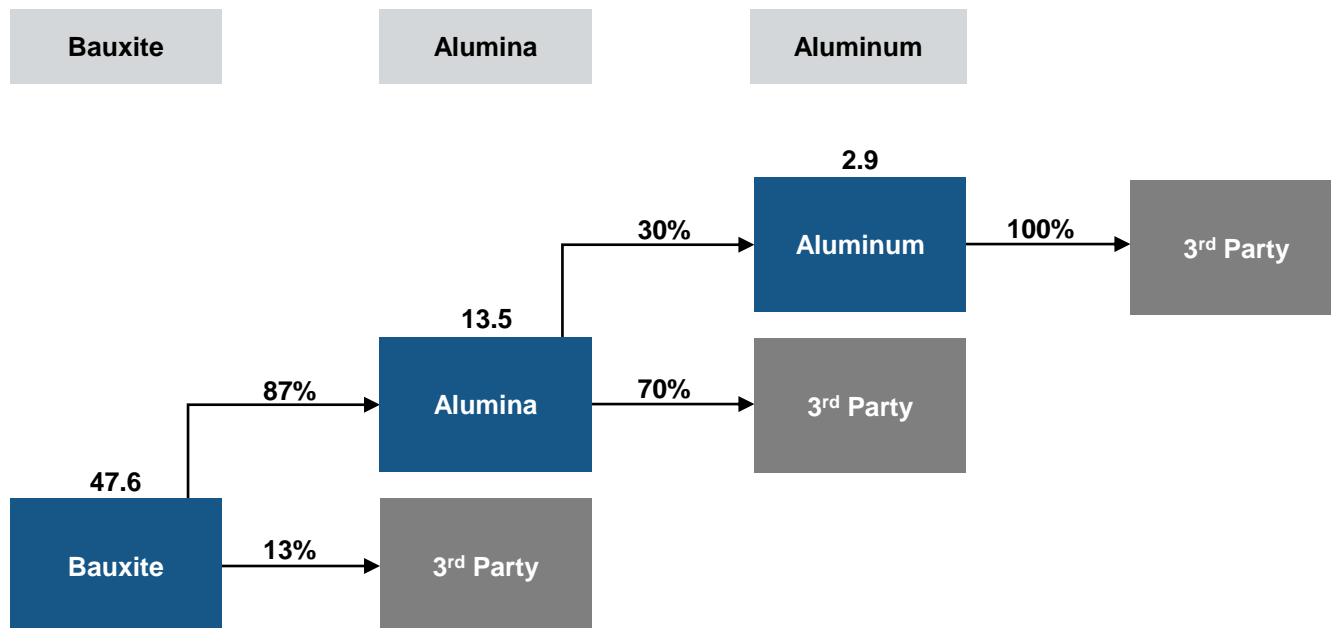


## Adjusted EBITDA excl. special items sequential changes by segment, \$M

| Segment                  | Adj.<br>EBITDA<br>3Q19 | Currency   | Metal<br>prices | API         | Raw<br>materials | Energy   | Price/mix | Volume   | Production<br>costs | Other      | Adj.<br>EBITDA<br>4Q19 |
|--------------------------|------------------------|------------|-----------------|-------------|------------------|----------|-----------|----------|---------------------|------------|------------------------|
| Bauxite                  | \$134                  | 1          | -               | -           | -                | -        | 9         | (1)      | (9)                 | (2)        | \$132                  |
| Alumina                  | \$223                  | (8)        | -               | (91)        | 6                | (7)      | 7         | 1        | -                   | 2          | \$133                  |
| Aluminum                 | \$43                   | 4          | (21)            | 51          | 12               | 7        | (10)      | 1        | (5)                 | (7)        | \$75                   |
| <b>Segment<br/>Total</b> | <b>\$400</b>           | <b>(3)</b> | <b>(21)</b>     | <b>(40)</b> | <b>18</b>        | <b>0</b> | <b>6</b>  | <b>1</b> | <b>(14)</b>         | <b>(7)</b> | <b>\$340</b>           |

# Aluminum value chain

FY19 Alcoa product shipments by segment, as of December 31, 2019, Mmt

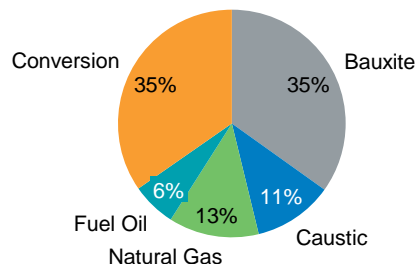


# Composition of alumina and aluminum production costs



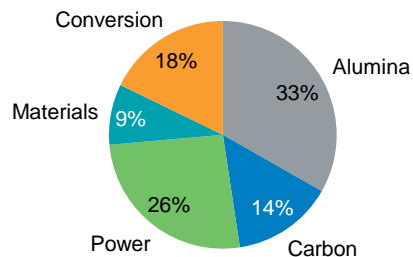
## Alcoa 4Q19 production cash costs

### Alumina refining



| Input Cost               | Inventory Flow | Pricing Convention | FY19 Annual Cost Sensitivity |
|--------------------------|----------------|--------------------|------------------------------|
| Caustic Soda             | 5 - 6 Months   | Quarterly          | \$10M per \$10/dmt           |
| Natural Gas <sup>1</sup> | 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            | FY19 Annual Cost Sensitivity |
|----------------|----------------|-------------------------------|------------------------------|
| Alumina        | ~2 Months      | API                           | \$39M 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 | \$1.8M per \$10/mt           |

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

# 2020 Business information



## Estimated annual Adjusted EBITDA sensitivities

| \$M      |                   |                  |                       |                      |                     | AUD<br>+ 0.01<br>USD/AUD | BRL<br>+ 0.10<br>BRL/USD | CAD<br>+ 0.01<br>CAD/USD | EUR<br>+ 0.01<br>USD/EUR | ISK<br>+ 10<br>ISK/USD | NOK<br>+ 0.10<br>NOK/USD |
|----------|-------------------|------------------|-----------------------|----------------------|---------------------|--------------------------|--------------------------|--------------------------|--------------------------|------------------------|--------------------------|
| Segment  | LME<br>+ \$100/mt | API<br>+ \$10/mt | Midwest<br>+ \$100/mt | Europe<br>+ \$100/mt | Japan<br>+ \$100/mt |                          |                          |                          |                          |                        |                          |
| 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 <sup>rd</sup> -Party Revenue   |
|----------|--|
| Bauxite  | <ul style="list-style-type: none"> <li>Negotiated prices</li> </ul>  |
| Alumina  | <ul style="list-style-type: none"> <li>~95% of third-party smelter grade alumina priced on API/spot</li> <li>API based on prior month average of spot prices</li> </ul>  |
| Aluminum | <ul style="list-style-type: none"> <li>LME + Regional Premium + Product Premium</li> <li>Primary aluminum 15-day lag; flat rolled aluminum 30-day lag</li> <li>Brazilian hydroelectric sales at market prices</li> </ul> |

## Regional premium breakdown

| Regional premiums   | % of 2019<br>Primary aluminum shipments |
|---------------------|---|
| Midwest             | ~50%                                    |
| Rotterdam Duty Paid | ~40%                                    |
| CIF Japan           | ~10%                                    |

# Additional business considerations



## Items expected to impact adjusted EBITDA for 1Q20

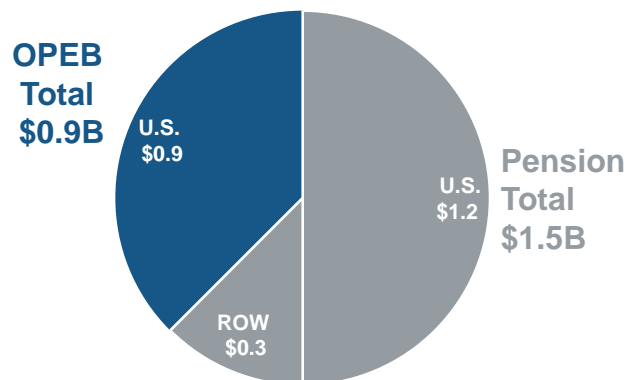
- In the Bauxite segment, Adjusted EBITDA is expected to be \$35 million lower, primarily due to lower sales prices and seasonally lower volumes
- In the Alumina segment, lower bauxite, energy and caustic costs are expected to offset unfavorable mix of sales contracts, and lower volume and higher operating costs due to seasonal overhauls and maintenance in the Western Australia refinery system; additionally, portfolio decisions result in \$5 million sequential benefit
- In the Aluminum segment
  - Lower alumina prices flowing into the Aluminum segment in 4Q19 are estimated to produce sequential benefit of approximately \$10 million in the first quarter
  - Benefits from Bécancour restart and lower raw materials costs are expected to be more than offset by higher energy costs in Europe, lower shipments of rolled products and price and mix impacts in North America, yielding an expected \$5 to \$10 million sequential decline
- 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
- Based on current market prices, the operational tax rate for the quarter is expected to be ~75%

# Pension and OPEB summary



## Net pension and OPEB liability and financial impacts

### Net liability as of December 31, 2019<sup>1</sup>



### Pension funding status as of December 31, 2019

- U.S. ERISA ~80%
- GAAP Worldwide ~76%

**U.S. pension contributions currently not tax deductible**

### Estimated financial impacts, \$M

| Expense impact                         | 2020         |
|--|--------------|
| Segment pension                        | \$50         |
| Segment OPEB                           | 5            |
| Corporate pension & OPEB               | 5            |
| <b>Total adj. EBITDA impact</b>        | <b>60</b>    |
| Non-operating                          | 100          |
| Special items (curtailment/settlement) | -            |
| <b>Total expense impact</b>            | <b>\$160</b> |

| Cash flow impact                 | 2020         |
|----------------------------------|--------------|
| Minimum required pension funding | \$300        |
| OPEB payments                    | 100          |
| <b>Total cash impact</b>         | <b>\$400</b> |

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.

# Investments summary



## Investments listing and income statement location

| Investee   | Country      | Nature of Investment <sup>4</sup> | Ownership Interest | Carrying Value as of December 31, 2019 | Income Statement Location of Equity Earnings |
|--|--------------|-----------------------------------|--------------------|--|--|
| ELYSIS™ Limited Partnership                      | Canada       | Aluminum smelting technology      | 48.235%            |  |  |
| Ma'aden Aluminium Company <sup>1</sup>           | Saudi Arabia | Aluminum smelter                  | 25.1%              |  |  |
| Ma'aden Bauxite and Alumina Company <sup>1</sup> | Saudi Arabia | Bauxite mine and Alumina refinery | 25.1% <sup>5</sup> |  |  |
| <b>Subtotal Ma'aden and ELYSIS™</b>              |              |                                   |                    | <b>\$603M</b>                          | <b>Other expenses / (income), net</b>        |
| Consorcio Serra do Facão                         | Brazil       | Hydroelectric generation facility | 34.97%             |  |  |
| Energetica Barra Grande S.A.                     | Brazil       | Hydroelectric generation facility | 42.18%             |  |  |
| Halco Mining, Inc. <sup>2</sup>                  | Guinea       | Bauxite mine                      | 45.0% <sup>5</sup> |  |  |
| Manicouagan Power Limited Partnership            | Canada       | Hydroelectric generation facility | 40.0%              |  |  |
| Mineração Rio do Norte S.A. (MRN)                | Brazil       | Bauxite mine                      | 18.2% <sup>5</sup> |  |  |
| Pechiney Reynolds Quebec, Inc. <sup>3</sup>      | Canada       | Aluminum smelter                  | 50.0%              |  |  |
| <b>Subtotal other</b>                            |              |                                   |                    | <b>\$510M</b>                          | <b>COGS</b>                                  |
| <b>Total investments</b>                         |              |                                   |                    | <b>\$1,113M</b>                        |  |

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



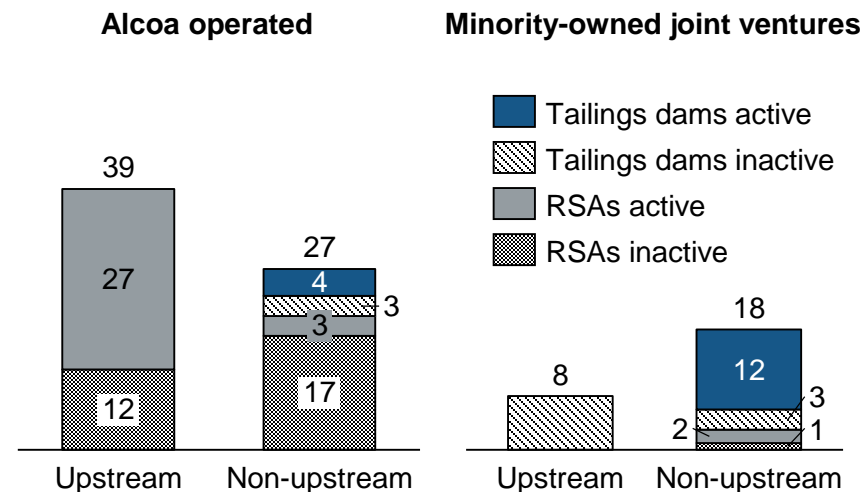
Industry leading standard established over 25 years ago; continuously improved and updated

## 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 94 Alcoa operated and 17 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. Inventory totals have changed slightly from those included in recent Alcoa presentations, following an internal review to standardize definitions and ensure reporting consistency.



# Production and capacity information



## Alcoa Corporation annual consolidated amounts as of December 31, 2019

### Bauxite production, Mdmt

| Mine                    | Country      | 2019<br>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 <sup>1</sup> | Saudi Arabia | 1.2                |
| <b>Total</b>            |              | <b>47.4</b>        |

### 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         | -          |
| <b>Total<sup>2</sup></b>        |                     | <b>12,759</b> | <b>214</b> |
| <i>Ras Al Khair<sup>1</sup></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 <sup>3</sup>          | Canada              | 310          | 165        |
| Deschambault                    | Canada              | 260          | -          |
| Fjarðará                        | Iceland             | 344          | -          |
| Lista                           | Norway              | 94           | -          |
| Mosjøen                         | Norway              | 188          | -          |
| San Ciprián                     | Spain               | 228          | -          |
| Intalco                         | U.S.                | 279          | 49         |
| Massena West                    | U.S.                | 130          | -          |
| Warrick                         | U.S.                | 269          | 108        |
| Wenatchee                       | U.S.                | 146          | 146        |
| <b>Total</b>                    |                     | <b>2,993</b> | <b>766</b> |
| <i>Ras Al Khair<sup>1</sup></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 December 16, 2019, Alcoa announced the closure of the Point Comfort refinery reducing 2.3 million metric tons of annual alumina capacity.
3. On July 2, 2019, Alcoa announced that the Bécancour smelter plans to begin restart efforts for curtailed smelting capacity on July 26, after members of the United Steelworkers union in Québec, Canada approved a six-year labor agreement.

# Valuation framework



## Valuation framework key considerations

FY19  
Adj. EBITDA excl.  
special items

|                     |                          |  |   |   |
|---------------------|--------------------------|--|---|---|
| Business Operations | +                        | Bauxite                                | Economic value using market multiple of:<br>i. AWAC joint venture, minus small portions of AWAC JV in Aluminum and Transformation   | \$504M  |
|                     | +                        | Alumina                                | ii. Ownership in certain mines and refineries outside the JV  | \$1,097M  |
|                     | +                        | Aluminum                               | Economic value using market multiple of:<br>i. Smelters, casthouses, rolling mill, and energy assets<br>ii. Smelters and casthouses restart optionality   | \$25M   |
|                     | -                        | Non-segment expenses (income)          | Economic value using market multiple of:<br>i. Net corporate expenses and Transformation  | \$(30)M   |
|                     | =                        | 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 <sup>1</sup>    | Book value of debt of \$1.8B (\$1.8B, >95% Alcoa), pension & OPEB net liabilities of \$2.3B (\$2.4B, >95% Alcoa; U.S. contributions not tax deductible), environmental & ARO liabilities of \$0.8B (\$1.1B, ~80% Alcoa) |   |
| +                   |                          | Cash & equity investments <sup>1</sup> | Cash position of \$0.7B (\$0.9B, ~80% Alcoa) plus carrying value of investments in the Ma'aden joint venture and ELYSIS™ of \$0.5B (\$0.6B, ~80% Alcoa)   |   |
| =                   |                          | Equity value                           |   |   |

1. Dollar amounts reflect Alcoa Corporation's consolidated balance sheet values as of December 31, 2019. The "Alcoa" percentages exclude amounts attributable to Alcoa Corporation's partner in the AWAC JV.

# Adjusted EBITDA reconciliation



| <i>\$M</i>   | 1Q18         | 2Q18         | 3Q18         | 4Q18         | FY18           | 1Q19           | 2Q19           | 3Q19           | 4Q19           | FY19             |
|--|--------------|--------------|--------------|--------------|----------------|----------------|----------------|----------------|----------------|------------------|
| <b>Net income (loss) attributable to Alcoa</b>       | <b>\$195</b> | <b>\$10</b>  | <b>\$(6)</b> | <b>\$51</b>  | <b>\$250</b>   | <b>\$(199)</b> | <b>\$(402)</b> | <b>\$(221)</b> | <b>\$(303)</b> | <b>\$(1,125)</b> |
| Add:   |              |              |              |              |                |                |                |                |                |                  |
| Net income attributable to noncontrolling interest   | 145          | 121          | 201          | 176          | 643            | 141            | 109            | 74             | (52)           | 272              |
| Provision for income taxes                           | 151          | 158          | 260          | 163          | 732            | 150            | 116            | 95             | 54             | 415              |
| Other expenses, net                                  | 21           | 9            | 2            | 32           | 64             | 41             | 50             | 27             | 44             | 162              |
| Interest expense                                     | 26           | 32           | 33           | 31           | 122            | 30             | 30             | 30             | 31             | 121              |
| Restructuring and other charges, net                 | (19)         | 231          | 177          | 138          | 527            | 113            | 370            | 185            | 363            | 1,031            |
| Depreciation, depletion and amortization             | 194          | 192          | 173          | 174          | 733            | 172            | 174            | 184            | 183            | 713              |
| <b>Adjusted EBITDA</b>                               | <b>713</b>   | <b>753</b>   | <b>840</b>   | <b>765</b>   | <b>3,071</b>   | <b>448</b>     | <b>447</b>     | <b>374</b>     | <b>320</b>     | <b>1,589</b>     |
| Special items before tax and noncontrolling interest | 19           | 30           | 4            | 5            | 58             | 19             | 8              | 14             | 26             | 67               |
| <b>Adjusted EBITDA excl. special items</b>           | <b>\$732</b> | <b>\$783</b> | <b>\$844</b> | <b>\$770</b> | <b>\$3,129</b> | <b>\$467</b>   | <b>\$455</b>   | <b>\$388</b>   | <b>\$346</b>   | <b>\$1,656</b>   |

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  | 4Q18 | 3Q19  | 4Q19  | Income statement classification      |
|--|------|-------|-------|--------------------------------------|
| Special items                                    | \$82 | \$139 | \$246 |                                      |
| USW master agreement negotiation                 | -    | 2     | -     | Cost of goods sold                   |
| Bécancour lockout and restart costs              | 2    | 9     | 16    | Cost of goods sold                   |
| Point Comfort refinery closure                   | -    | -     | 2     | Cost of goods sold                   |
| Warrick smelter restart costs                    | 1    | -     | -     | Cost of goods sold                   |
| Spain collective dismissal and divestiture costs | 1    | -     | -     | SG&A and R&D expenses                |
| Mark-to-market energy contracts                  | (4)  | -     | (1)   | Other expenses / (income), net       |
| Gain on asset sales                              | -    | (7)   | -     | Other expenses / (income), net       |
| Point Comfort refinery closure                   | -    | -     | 173   | Restructuring and other charges, net |
| Suriname hydroelectric dam transfer              | -    | -     | 6     | Restructuring and other charges, net |
| Spain collective dismissal and divestiture costs | -    | 134   | (7)   | Restructuring and other charges, net |
| Brazil state VAT valuation allowance             | 50   | -     | -     | Restructuring and other charges, net |
| New operating model                              | -    | 26    | -     | Restructuring and other charges, net |
| Pension/OPEB related actions                     | 11   | 2     | 74    | Restructuring and other charges, net |
| Baie Comeau rod mill exit                        | 4    | -     | -     | Restructuring and other charges, net |
| Take or pay contracts at idled facilities        | 5    | 3     | 8     | Restructuring and other charges, net |
| Other restructuring related items                | 5    | 2     | 1     | Restructuring and other charges, net |
| Discrete tax items and interim tax impacts       | 7    | (32)  | (26)  | Provision for income taxes           |

# Free Cash Flow reconciliation



| \$M   | 1Q18           | 2Q18 <sup>1</sup> | 3Q18        | 4Q18         | 1Q19          | 2Q19          | 3Q19       | 4Q19        |
|---|----------------|-------------------|-------------|--------------|---------------|---------------|------------|-------------|
| Cash from operations  | \$55           | \$(430)           | \$288       | \$535        | \$168         | \$82          | \$174      | \$262       |
| Capital expenditures  | (74)           | (95)              | (82)        | (148)        | (69)          | (89)          | (87)       | (134)       |
| <b>Free cash flow</b>   | <b>(19)</b>    | <b>(525)</b>      | <b>206</b>  | <b>387</b>   | <b>99</b>     | <b>(7)</b>    | <b>87</b>  | <b>128</b>  |
| Contributions from noncontrolling interest                              | 53             | 56                | -           | 40           | 20            | 1             | 20         | 10          |
| Distributions to noncontrolling interest                                | (267)          | (118)             | (181)       | (261)        | (214)         | (72)          | (102)      | (84)        |
| <b>Free cash flow less net distributions to noncontrolling interest</b> | <b>\$(233)</b> | <b>\$(587)</b>    | <b>\$25</b> | <b>\$166</b> | <b>\$(95)</b> | <b>\$(78)</b> | <b>\$5</b> | <b>\$54</b> |

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

1. Cash 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   | <u>FY17</u>    |                |                | <u>FY18</u>    |                |                | <u>FY19</u>    |               |                |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|----------------|
|   | Cons.          | NCI            | Alcoa Prop.    | Cons.          | NCI            | Alcoa Prop.    | Cons.          | NCI           | Alcoa Prop.    |
| Short-term borrowings                           | \$8            | \$-            | \$8            | \$-            | \$-            | \$-            | \$-            | \$-           | \$-            |
| Long-term debt due within one year              | 16             | -              | 16             | 1              | -              | 1              | 1              | -             | 1              |
| Long-term debt, less amount due within one year | 1,388          | 7              | 1,381          | 1,801          | 34             | 1,767          | 1,799          | 31            | 1,768          |
| Total debt <sup>1</sup>                         | 1,412          | 7              | 1,405          | 1,802          | 34             | 1,768          | 1,800          | 31            | 1,769          |
| Less: Cash and cash equivalents                 | 1,358          | 252            | 1,106          | 1,113          | 296            | 817            | 879            | 167           | 712            |
| <b>Net debt</b>                                 | <b>54</b>      | <b>(245)</b>   | <b>299</b>     | <b>689</b>     | <b>(262)</b>   | <b>951</b>     | <b>921</b>     | <b>(136)</b>  | <b>1,057</b>   |
| Plus: Net pension / OPEB liability              | 3,498          | 26             | 3,472          | 2,327          | 28             | 2,299          | 2,367          | 39            | 2,328          |
| <b>Adjusted net debt</b>                        | <b>\$3,552</b> | <b>\$(219)</b> | <b>\$3,771</b> | <b>\$3,016</b> | <b>\$(234)</b> | <b>\$3,250</b> | <b>\$3,288</b> | <b>\$(97)</b> | <b>\$3,385</b> |

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 and 2019 includes \$500 million 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

| <i>\$M</i>                              | <b>1Q18</b> | <b>2Q18</b> | <b>3Q18</b> | <b>4Q18</b> | <b>1Q19</b> | <b>2Q19</b> | <b>3Q19</b> | <b>4Q19</b> |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Receivables from customers              | \$814       | \$1,025     | \$1,017     | \$830       | \$758       | \$684       | \$596       | \$546       |
| Add: Inventories                        | 1,855       | 1,772       | 1,819       | 1,819       | 1,799       | 1,767       | 1,649       | 1,644       |
| Less: Accounts payable, trade           | 1,813       | 1,752       | 1,711       | 1,663       | 1,503       | 1,523       | 1,418       | 1,484       |
| DWC working capital                     | \$856       | \$1,045     | \$1,125     | \$986       | \$1,054     | \$928       | \$827       | \$706       |
| Sales                                   | \$3,090     | \$3,579     | \$3,390     | \$3,344     | \$2,719     | \$2,711     | \$2,567     | \$2,436     |
| Number of days in the quarter           | 90          | 91          | 92          | 92          | 90          | 91          | 92          | 92          |
| <b>Days Working Capital<sup>1</sup></b> | <b>25</b>   | <b>27</b>   | <b>31</b>   | <b>27</b>   | <b>35</b>   | <b>31</b>   | <b>30</b>   | <b>27</b>   |

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

# Annualized Return on Capital (ROC)



## Reconciliation and calculation information

| \$M  | 2018            | 2019            |
|--|-----------------|-----------------|
| <i>Numerator:</i>  |                 |                 |
| Net income (loss) attributable to Alcoa Corporation                      | \$250           | \$(1,125)       |
| Add: Net income attributable to noncontrolling interest                  | 643             | 272             |
| Add: Provision for income taxes  | 732             | 415             |
| <b>Profit before taxes (PBT)</b>   | <b>1,625</b>    | <b>(438)</b>    |
| Add: Interest expense  | 122             | 121             |
| Less: Interest income  | 18              | 18              |
| Add: Special items <sup>1</sup>  | 563             | 1,082           |
| <b>ROC earnings before taxes</b>   | <b>\$2,292</b>  | <b>\$747</b>    |
| <b>ROC earnings after fixed tax rate of 35%</b>                          | <b>\$1,490</b>  | <b>\$485</b>    |
| <i>Denominator, average calculated using quarter-ending balances:</i>    |                 |                 |
| Total assets   | \$16,621        | \$15,154        |
| Less: Cash, cash equivalents, restricted cash and short-term investments | 1,111           | 897             |
| Less: Current liabilities  | 2,978           | 2,588           |
| Add: Long-term debt due within one year and short-term borrowings        | 9               | 1               |
| <b>Average capital base</b>  | <b>\$12,541</b> | <b>\$11,670</b> |
| <b>ROC</b>   | <b>11.9%</b>    | <b>4.2%</b>     |

$$\text{ROC \%} = \frac{(\text{PBT} + \text{net interest}^2 + \text{special items}^1) \times (1 - \text{fixed tax rate}^3)}{(\text{Total assets} - \text{cash}^4 - \text{current liabilities} + \text{short-term debt})} \times 100$$

$$\text{2018 ROC \%} = \frac{(\$1,625 + \$104 + \$563) \times (1 - 0.35)}{(\$16,621 - \$1,111 - \$2,978 + \$9)} \times 100 = 11.9\%$$

$$\text{2019 ROC \%} = \frac{(-\$438 + \$103 + \$1,082) \times (1 - 0.35)}{(\$15,154 - \$897 - \$2,588 + \$1)} \times 100 = 4.2\%$$

1. Special items exclude interest expense, income taxes, and noncontrolling interest.
2. Interest expense less interest income.
3. Fixed tax rate of 35%.
4. 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 <sub>2</sub> 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          | Thousand metric tons   |
| 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***<sup>™</sup>

