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3rd Quarter Earnings Conference

October 8, 2015

Important Information

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,” “intends,” “may,” “outlook,” “plans,” “projects,” “seeks,” “sees,” “should,” “targets,” “will,” “would,” or other words of similar meaning. All statements that reflect Alcoa’s 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 aluminum, supply/demand balances, and growth of the aerospace, automotive, and other end markets; statements regarding targeted financial results or operating performance; statements about Alcoa’s strategies, outlook, business and financial prospects, and the acceleration of Alcoa’s portfolio transformation; and statements regarding the separation transaction, including the future performance of Value-Add Company and Upstream Company if the separation is completed, the expected benefits of the separation, the expected timing of completion of the separation, and the expected qualification of the separation as a tax-free transaction. Forward-looking statements are not guarantees of future performance and are subject to risks, uncertainties, and changes in circumstances that are difficult to predict. Although Alcoa 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) uncertainties as to the timing of the separation and whether it will be completed; (b) the possibility that various closing conditions for the separation may not be satisfied; (c) failure of the separation to qualify for the expected tax treatment; (d) the possibility that any third-party consents required in connection with the separation will not be received; (e) the impact of the separation on the businesses of Alcoa; (f) the risk that the businesses will not be separated successfully or such separation may be more difficult, time-consuming or costly than expected, which could result in additional demands on Alcoa’s resources, systems, procedures and controls, disruption of its ongoing business and diversion of management’s attention from other business concerns; (g) material adverse changes in aluminum industry conditions; (h) deterioration in global economic and financial market conditions generally; (i) unfavorable changes in the markets served by Alcoa; (j) the impact of changes in foreign currency exchange rates on costs and results; (k) increases in energy costs; (l) the inability to achieve the level of revenue growth, cash generation, cost savings, improvement in profitability and margins, fiscal discipline, or strengthening of competitiveness and operations (including moving the Upstream Company’s alumina refining and aluminum smelting businesses down on the industry cost curves and increasing revenues and improving margins in the Value-Add Company’s businesses) anticipated from restructuring programs and productivity improvement, cash sustainability, technology advancements (including, without limitation, advanced aluminum alloys, Alcoa Micromill, and other materials and processes), and other initiatives; (m) Alcoa’s inability to realize expected benefits, in each case as planned and by targeted completion dates, from acquisitions, divestitures, facility closures, curtailments, or expansions, or international joint ventures; (n) political, economic, and regulatory risks in the countries in which Alcoa operates or sells products; (o) the outcome of contingencies, including legal proceedings, government or regulatory investigations, and environmental remediation; (p) the impact of cyber attacks and potential information technology or data security breaches; (q) the potential failure to retain key employees while the separation transaction is pending or after it is completed; (r) the risk that increased debt levels, deterioration in debt protection metrics, contraction in liquidity, or other factors could adversely affect the targeted credit ratings for Value-Add Company or Upstream Company; and (s) the other risk factors discussed in Alcoa’s Form 10-K for the year ended December 31, 2014, and other reports filed with the U.S. Securities and Exchange Commission (SEC). Alcoa 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.

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. These non-GAAP financial measures supplement our GAAP disclosures and should not be considered an alternative to the GAAP measure. 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. Alcoa has not provided a reconciliation of any forward-looking non-GAAP financial measures to the most directly comparable GAAP financial measures, due primarily to variability and difficulty in making accurate forecasts and projections, as not all of the information necessary for a quantitative reconciliation is available to Alcoa without unreasonable effort. Any reference to historical EBITDA means adjusted EBITDA, for which we have provided calculations and reconciliations in the Appendix.



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Klaus Kleinfeld

Chairman and Chief Executive Officer

October 8, 2015

Strong Value Creation Focus - Managing through Headwinds

3Q 2015 Overview

Strengthening Businesses Against Market Headwinds

- **\$5.6B revenue:** 21% **decline** YoY from **divestitures, closures and market headwinds**, partially offset by 10% **increase** from **aerospace and automotive growth, acquisitions and Alumina sales**
- \$109 million¹ adjusted net income and **\$698 million¹ EBITDA:**
*Strong **productivity, solid value-add profitability, and Alumina strength***
 - **Value-add:** \$3.4B revenue, \$257 million ATOI and \$508 million adjusted EBITDA
 - *Engineered Products and Solutions: Record revenue of \$1.4B; YoY **aerospace revenue up 39%***
 - *Global Rolled Products: YoY **auto sheet revenue up 133%***
 - **Upstream:** \$2.2B revenue, \$153 million ATOI and \$379 million adjusted EBITDA
 - **Best Alumina profitability** 3Q YTD ATOI result **since 2007**, offset by *Primary Metals as Midwest transaction price declined 27% YTD*
- **Productivity Gains: \$287 million YoY and YTD of \$849 million** across all segments
- **Free Cash Flow: \$152 million;** Cash from Operations of \$420 million; **Cash on Hand: \$1.7B**

Successful Transformation – Launching Two Companies

- **Culminating multi-year transformation: Creates two distinct industry leaders**
 - *Value-Add Co: **Premier Provider** of high performance multi-material products in growth markets*
 - *Upstream Co: **Attractive Portfolio** in bauxite, alumina, energy, aluminum, casting*
- **Completed RTI acquisition, growing titanium offerings and advanced manufacturing technologies**
 - On track for financial targets and driving contract wins
- **Signed two significant multi-year aero contracts**
 - ~\$1.1B Multi-year agreement with Lockheed to provide 100% of titanium milled products for F-35
 - ~\$1B Multi-year agreement with Airbus for multi-material superalloy fastening systems
- **Advanced commercialization of Micromill™ revolutionary technology**
 - **Reached joint development agreement with Ford; shipments** for 2016 F-150 starting in **Q415**
 - **Executed Letter of Intent with Danieli Group to license technology worldwide**

¹ Reported earnings of \$44 million in 3Q15. EBITDA includes \$52 million of special items.
See appendix for adjusted earnings and EBITDA reconciliations.



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William Oplinger

Executive Vice President and Chief Financial Officer

October 8, 2015

Income Statement Summary

\$ Millions, except aluminum prices and per-share amounts

| | 3Q14 | 2Q15 | 3Q15 | Prior Year Change | Sequential Change |
|---|----------------|----------------|----------------|-------------------|-------------------|
| Realized Aluminum Price (\$/MT) | \$2,538 | \$2,180 | \$1,901 | (\$637) | (\$279) |
| Revenue | \$6,239 | \$5,897 | \$5,573 | (\$666) | (\$324) |
| Cost of Goods Sold | \$4,904 | \$4,663 | \$4,559 | (\$345) | (\$104) |
| COGS % Revenue | 78.6% | 79.1% | 81.8% | 3.2 % pts. | 2.7 % pts. |
| Selling, General Administrative, Other | \$243 | \$224 | \$261 | \$18 | \$37 |
| SGA % Revenue | 3.9% | 3.8% | 4.7% | 0.8 % pts. | 0.9 % pts. |
| Other Expenses (Income), Net | \$23 | - | (\$15) | (\$38) | (\$15) |
| Restructuring and Other Charges | \$209 | \$217 | \$66 | (\$143) | (\$151) |
| Effective Tax Rate | 60.3% | 26.6% | 48.6% | (11.7 % pts.) | 22.0 % pts. |
| EBITDA | \$1,035 | \$942 | \$698 | (\$337) | (\$244) |
| Net Income | \$149 | \$140 | \$44 | (\$105) | (\$96) |
| Net Income per Diluted Share | \$0.12 | \$0.10 | \$0.02 | (\$0.10) | (\$0.08) |
| Income excl. Special Items | \$370 | \$250 | \$109 | (\$261) | (\$141) |
| Income per Diluted Share excl. Special Items | \$0.31 | \$0.19 | \$0.07 | (\$0.24) | (\$0.12) |

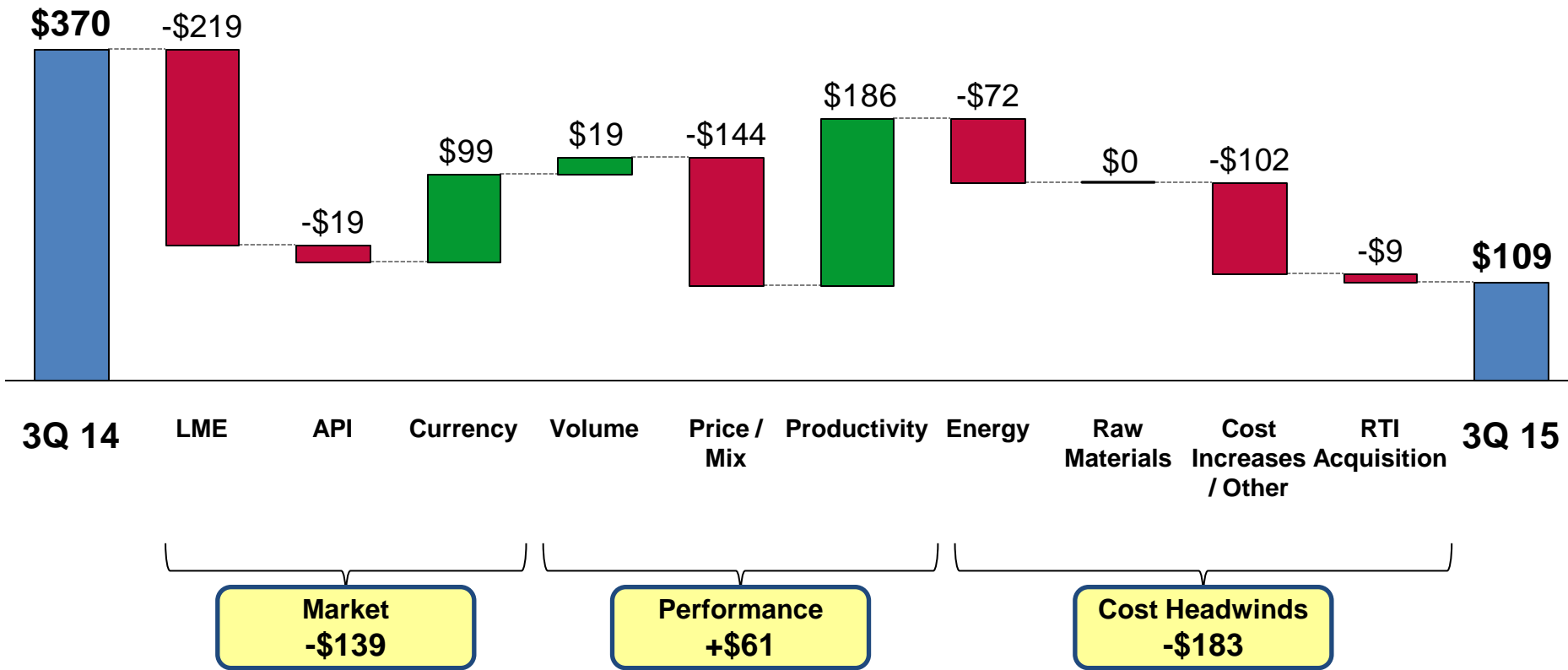
Special Items

\$ Millions, except per-share amounts

| | 3Q14 | 2Q15 | 3Q15 | Income Statement Classification | Segment |
|---|----------------|----------------|---------------|--------------------------------------|------------------------------|
| Net Income | \$149 | \$140 | \$44 | | |
| Net Income per Diluted Share | \$0.12 | \$0.10 | \$0.02 | | |
| Restructuring-Related | (\$202) | (\$143) | (\$43) | Restructuring and Other Charges/COGS | Corporate/ Primary Metals |
| Tax Items | - | \$22 | (\$15) | Income Taxes | Corporate/GRP |
| Gain on Asset Sale | \$9 | \$19 | \$25 | Other Income, Net | Corporate |
| Portfolio Transaction Costs | (\$14) | (\$5) | (\$22) | SG&A/Interest Expense | Corporate |
| Mark-to-Market Energy Contracts | (\$14) | (\$3) | (\$10) | Other Expenses, Net | Corporate |
| Special Items | (\$221) | (\$110) | (\$65) | | |
| Net Income excl. Special Items | \$370 | \$250 | \$109 | | |
| Net Income per Diluted Share excl. Special Items | \$0.31 | \$0.19 | \$0.07 | | |

Adjusted Earnings Down on Pricing Partly Offset by Productivity

Net Income excluding Special Items (\$ Millions)



EPS: Record Revenue up 35% Year-Over-Year; Aerospace up 39%

3Q15 Actual and 4Q15 Outlook – Engineered Products and Solutions

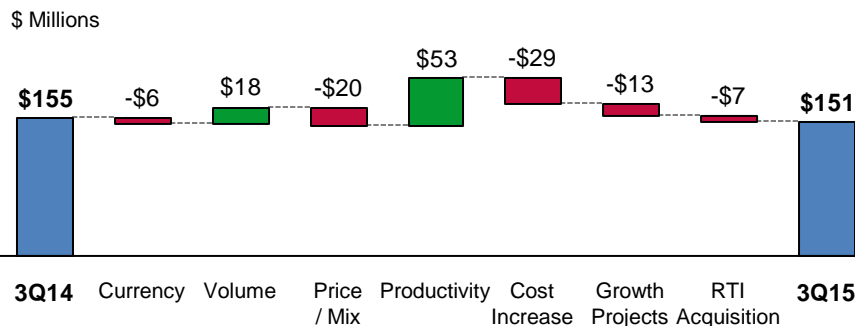
3rd Quarter ATOI Results

| | 3Q 14 | 2Q 15 | 3Q 15 |
|---|-------|-------|--------------|
| 3 rd Party Revenue (\$ Millions) | 1,034 | 1,279 | 1,397 |
| ATOI ¹ (\$ Millions) | 155 | 165 | 151 |
| EBITDA Margin ¹ | 25.7% | 23.5% | 20.3% |

3rd Quarter Business Highlights

- **Record 3Q Revenue, up 35% year-over-year; Aerospace up 39%**
- **Revenue growth** driven mainly by **acquisitions** and supported by **share gains**, partially offset by **currency**
- **Unfavorable currency** ATOI impact of **\$6M**
- **RTI integration** ATOI impact of **\$7M** including **\$16M of unfavorable purchase accounting** and **one-time charges**

3rd Quarter ATOI Performance Bridge



4th Quarter Year-over-Year Outlook

- **Aerospace** market remains **strong**
- **Oil & Gas and European Industrial Gas Turbine** markets remain **soft**
- **Pricing pressure** across **all markets**
- **Share gains** through **innovation and productivity continue** across all sectors
- **ATOI** is expected to **increase 2%-5% year over year** including **unfavorable RTI purchase accounting of \$10M** and **currency pressures of \$3M**

¹The 3Q14 amount has been updated to remove the impact of metal price lag, consistent with the 2Q15 and 3Q15 presentation. See appendix for additional information and EBITDA reconciliation.

TCS: Strong Productivity Offset by Currency and Cost Headwinds

3Q15 Actual and 4Q15 Outlook – Transportation and Construction Solutions

3rd Quarter ATOI Results

| | 3Q 14 | 2Q 15 | 3Q 15 |
|---|-------|-------|-------|
| 3 rd Party Revenue (\$ Millions) | 523 | 492 | 475 |
| ATOI ¹ (\$ Millions) | 50 | 44 | 44 |
| EBITDA Margin ¹ | 15.5% | 14.4% | 15.2% |

3rd Quarter Business Highlights

- Revenue down 9% year-over-year; up 1% excluding currency
- Non-Residential Construction: uneven recovery in N.A., European weakness continues
- Improved N.A. Heavy Duty Truck build rates; gradual recovery in Europe
- Brazil market weakness impacting Latin American extrusions
- Unfavorable currency ATOI impact of \$5M, due to stronger U.S. dollar

3rd Quarter ATOI Performance Bridge

\$ Millions



4th Quarter Year-over-Year Outlook

- Continued recovery in N.A. Non-Residential Construction; weakness in Europe
- N.A. Heavy Duty Truck build rates expected to decline slightly; Europe will continue its gradual improvement
- Productivity gains to continue
- ATOI is expected to increase 15%-20% year-over-year, including unfavorable currency pressures of \$5M

¹The 3Q14 amount has been updated to remove the impact of metal price lag, consistent with the 2Q15 and 3Q15 presentation. See appendix for additional information and EBITDA reconciliation.

GRP: Auto Sheet Sales +133%; Capacity and Innovation Investments

3Q15 Actual and 4Q15 Outlook – Global Rolled Products

3rd Quarter ATOI Results

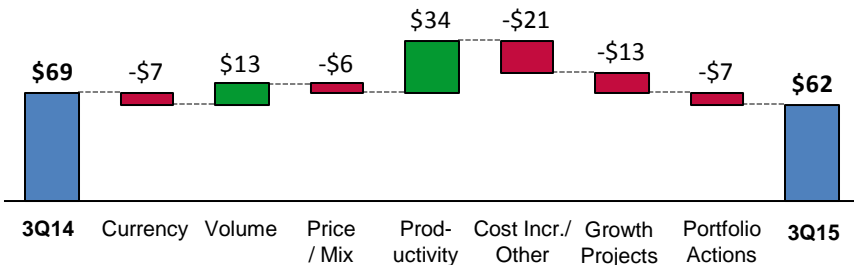
| | 3Q 14 | 2Q 15 | 3Q 15 |
|---|-------|-------|--------------|
| 3 rd Party Revenue (\$ Millions) | 1,926 | 1,668 | 1,527 |
| ATOI ¹ (\$ Millions) | 69 | 76 | 62 |
| EBITDA/MT ¹ (\$) | 312 | 342 | 330 |

3rd Quarter Business Highlights

- **Auto sheet sales up 133%** year over year
- **Unfavorable currency** impacts of \$7M
- **Volume and pricing pressures** from weak/slowing economies in **Brazil, Russia, China** and **packaging**
- **Strong productivity** partially offset by cost increases
- **Continued investments of \$13M** in Growth projects including **Micromill™** R&D and **throughput/capacity increases** at key plants

3rd Quarter ATOI Performance Bridge

\$ Millions



4th Quarter Year-over-Year Outlook

- **Auto sheet shipments** expected to be **up 25%**
- Expect **continued volume** and **pricing pressure** from weaker **developing economies** as well as **packaging**
- **Tennessee Auto** and **Texarkana** casthouse **ramp-up costs**
- **ATOI** is expected to be **flat year-over-year**, including \$6M of Auto related start-up costs, and current currency rates

¹The 3Q14 amount has been updated to remove the impact of metal price lag, consistent with the 2Q15 and 3Q15 presentation. See appendix for additional information and EBITDA reconciliation.

Alumina: Best YTD Profitability Since 2007

3Q15 Actual and 4Q15 Outlook – Alumina

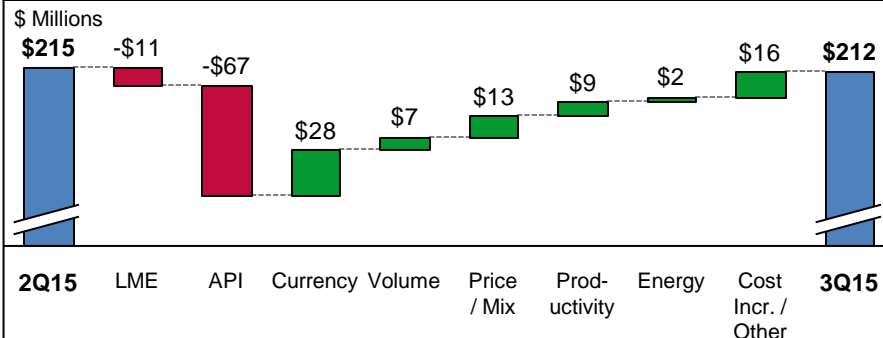
3rd Quarter ATOI Results

| | 3Q 14 | 2Q 15 | 3Q 15 |
|---|-------|-------|--------------|
| Production (kmt) | 4,196 | 3,977 | 3,954 |
| 3 rd Party Shipments (kmt) | 2,714 | 2,706 | 2,798 |
| 3 rd Party Revenue (\$ Millions) | 886 | 924 | 912 |
| 3 rd Party Price (\$/MT) | 320 | 337 | 323 |
| ATOI (\$ Millions) | 62 | 215 | 212 |

3rd Quarter Business Highlights

- **Shipments up** versus Q2'15
- **Lower pricing** partially offset by favorable **currency**
- **Benefit** from increasing **mix** of API shipments, **volume increases** and **productivity improvements**
- **Saudi Arabia refinery** continuing to ramp-up

3rd Quarter ATOI Performance Bridge



4th Quarter Sequential Outlook

- **~75%** of 3rd party alumina shipments on API or spot pricing for 2015
- **API pricing** follows **30-day lag**; **LME pricing** follows **60-day lag**
- **Production down 120KMT** due to **Suriname** curtailment
- **ATOI expected to be up \$10M** excluding the impacts of pricing and currency

Primary Metals: Pricing Pressures Drive Loss

3Q15 Actual and 4Q15 Outlook – Primary Metals

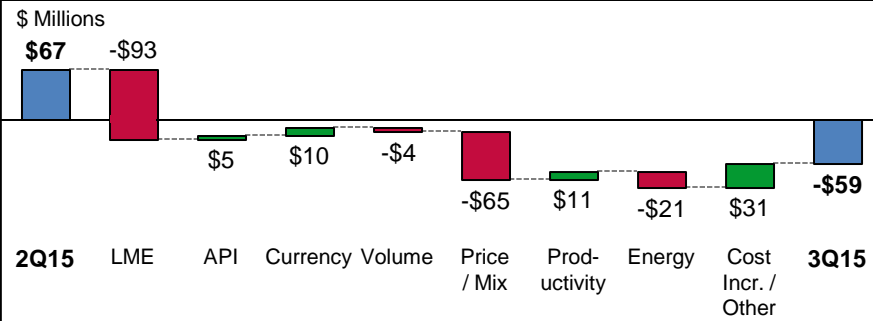
3rd Quarter ATOI Results

| | 3Q 14 | 2Q 15 | 3Q 15 |
|---|-------|-------|--------------|
| Production (kmt) | 760 | 701 | 700 |
| 3 rd Party Shipments (kmt) | 642 | 630 | 615 |
| 3 rd Party Revenue (\$ Millions) | 1,865 | 1,534 | 1,249 |
| 3 rd Party Price (\$/MT) | 2,538 | 2,180 | 1,901 |
| ATOI (\$ Millions) | 245 | 67 | (59) |

3rd Quarter Business Highlights

- **Realized price declines ~13% sequentially**
- **Productivity and cost control** more than offset unfavorable energy costs in Spain and the United States
- **Energy sales down** due to lower prices and currency in **Brazil**

3rd Quarter ATOI Performance Bridge

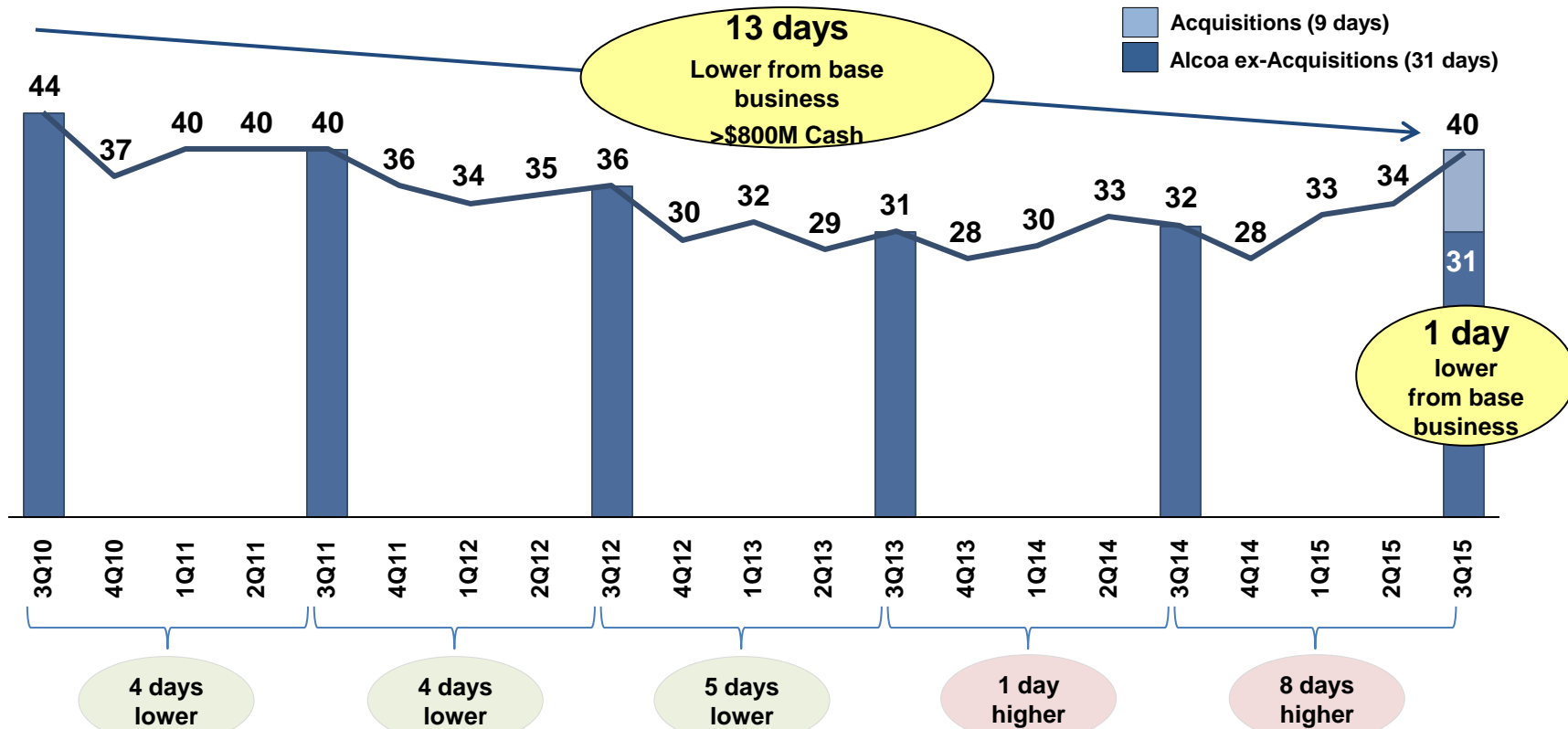


4th Quarter Sequential Outlook

- **Pricing** follows a **15-day lag** to LME
- **Production level** similar to 3rd quarter
- **Lower energy costs** and **favorable energy sales**
- **ATOI expected to be up \$15M** excluding impacts of pricing and currency

Base Business DWC Improves Year-over-Year, Acquisitions Add 9 days

Average Days Working Capital since Third Quarter 2010



Strong Cash Generation; Cash Balance at \$1.7 Billion

3Q14, 2Q15 and 3Q15 Cash Flow

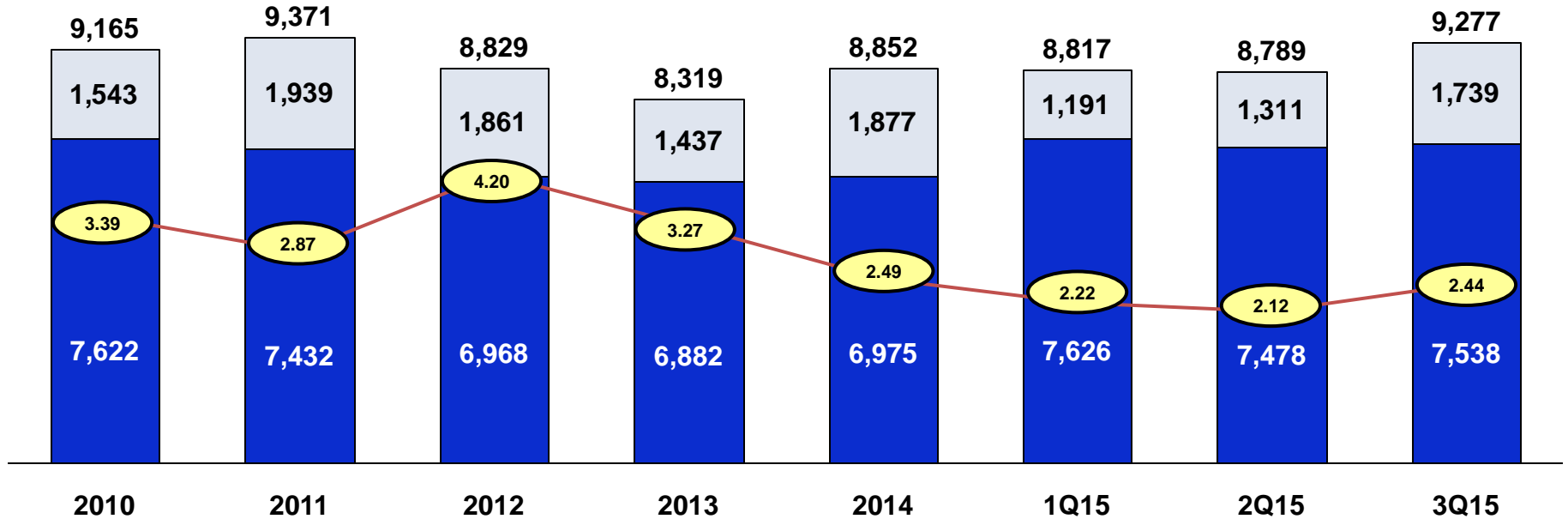
| (\$ Millions) | 3Q14 | 2Q15 | 3Q15 |
|---|----------------|----------------|----------------|
| Net Income before Noncontrolling Interests | \$131 | \$207 | \$106 |
| Depreciation, Depletion and Amortization | \$346 | \$320 | \$318 |
| Change in Working Capital | (\$411) | \$44 | \$38 |
| Pension Expense in Excess of Contributions | (\$61) | \$37 | (\$72) |
| Australian Gas Prepayment | - | (\$300) | - |
| Other Adjustments | \$244 | \$164 | \$30 |
| Cash from Operations | \$249 | \$472 | \$420 |
| Dividends to Shareholders | (\$36) | (\$55) | (\$40) |
| Issuance of Preferred Stock | \$1,213 | - | - |
| Change in Debt | \$981 | (\$38) | (\$9) |
| Net (Distributions)/Contributions from Noncontrolling Interests | (\$20) | (\$42) | (\$1) |
| Other Financing Activities | \$2 | \$2 | (\$2) |
| Cash from Financing Activities | \$2,140 | (\$133) | (\$52) |
| Capital Expenditures | (\$283) | (\$267) | (\$268) |
| Acquisitions/Divestitures/Asset Sales | \$5 | \$67 | \$354 |
| Other Investing Activities | (\$3) | (\$20) | (\$4) |
| Cash from Investing Activities | (\$281) | (\$220) | \$82 |
| Free Cash Flow | (\$34) | \$205 | \$152 |
| Cash on Hand | \$3,272 | \$1,311 | \$1,739 |

Leverage within target range of 2.25 to 2.75

Debt, Net Debt, and Debt-to-LTM EBITDA

(\$ Millions)

Cash
 Net Debt
 Debt-to-LTM EBITDA



Maintaining Our 2015 Financial Targets

2015 Annual Financial Targets and Year-to-Date Results

Taking the Right Actions

Drive Productivity Gains of \$900M

Manage Return-Seeking Capital of \$750M

Control Sustaining Capital of \$725M

Attain 2.25 to 2.75
Debt-to-EBITDA

YTD:

\$849M



\$408M



\$389M



2.44

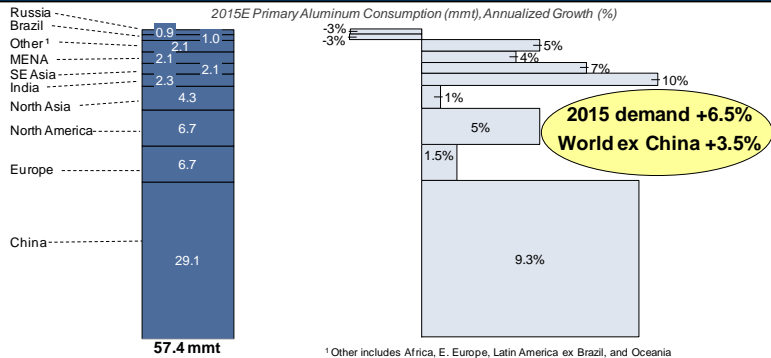


Overarching 2015 Financial Target

**Target
\$500M
Free Cash
Flow**

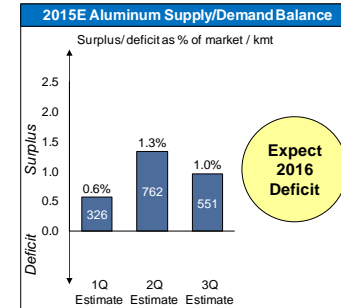
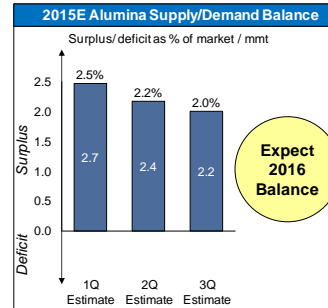
Market Fundamentals Remain Mixed

6.5% 2015E Demand Growth

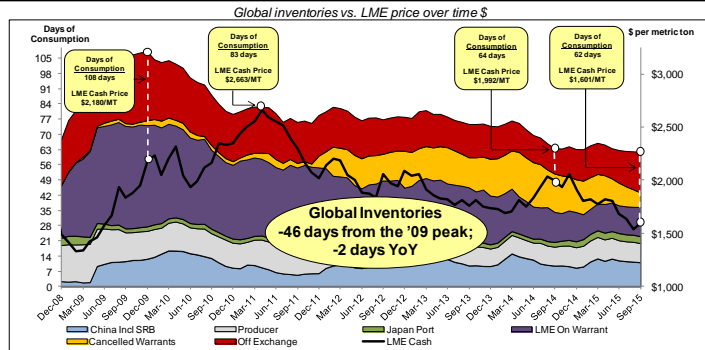


Aluminum and Alumina Surplus Tightening

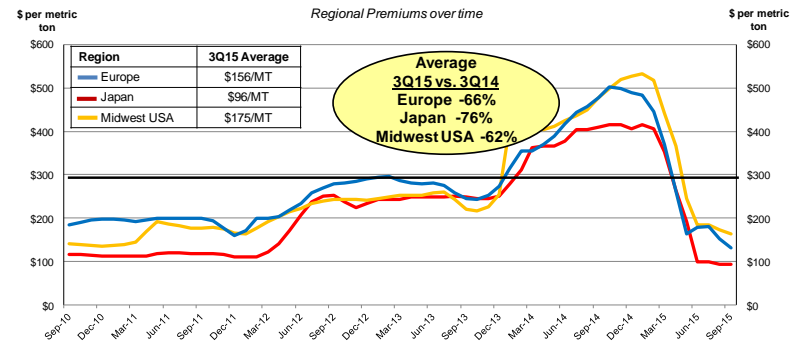
Supply/Demand Analysis



Global Inventories at 62 days; -2 days YoY



Continued Weakness in Regional Premiums





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Klaus Kleinfeld

Chairman and Chief Executive Officer

October 8, 2015

Aerospace Remains Strong; Steady Growth in Automotive

Alcoa End Markets: Current Assessment of 2015 vs. 2014

End Market

2015 Growth

Global and Regional Commentary

Aerospace



↑
8% to 9%
Global sales
growth

- **Large Commercial Aircraft** segment **Growth** of 8.3%
- **Strong Commercial Jet Engine Order Book**: ~23,800 Engines on firm order
- **Strong demand continues** after Paris Air Show including **Boeing's \$38B** in orders and commitments from **China (a new record)** and **Airbus' \$26.5B** from **IndiGo**
- **Strong Commercial Jet Order Book**: >9 Years of Production at 2014 delivery rates
- **Solid Airline Fundamentals**¹: +6.7% Passenger and +5.5% Cargo Demand, Dramatic Improvement in Airline Profitability (\$29B in 2015E)

Automotive



↑
1% to 3%
Global
production
growth

N.A.
2% to 4%



- **Strong Sales**: U.S. sales +5.1% YTD; **Light Truck** penetration at **all-time high** of 58.3%
- **Sustained Pent Up Demand**: Average vehicle age **11.5 years**² vs. prior recording of 11.4
- **Production Up**: +2.8% YTD (11.6M vehicles)
- **Inventory Down**: **59 days**, -5 YoY (industry target is 60-65 days)
- **Incentives Up**: +5.7% YoY (\$3,144/unit), driven by Passenger Cars +12.5% YoY

E.U.
1% to 3%



- **Production Up**: +2.1% YTD; W. Eur continues to improve, offsetting decline in Russia
- **Registrations**: +8.6% YTD; **Exports** +3.0% vs. prior year (2015 forecast)

China
1% to 2%



- **Production Slowing**: +1.3% YTD and -7.8% YoY Aug
- **Sales** +1.5% YTD and -2.1% YoY Aug on softening Consumer Confidence
- **Moderated growth** driven by **increasing middle class, affordability**, and **Clean Air Act**

Heavy Duty Truck – U.S.: Strong, China: Weak; Packaging Stable

Alcoa End Markets: Current Assessment of 2015 vs. 2014

End Market

2015 Growth

Global and Regional Commentary

Heavy Duty Truck and Trailer



↓
-7% to -9%
Global production decline

N.A.
9% to 11% ↑

- **Peaked Production: +15.8% YTD** though decelerating, 4Q15F down -8.8% from 3Q15
- **Decreasing Orders: -10.9% YTD**, after **record 4Q14 orders**
- **Diminishing Order Book: +20.3% YoY** at 147k trucks, yet down -15% from end 2014
- **Solid Fundamentals: +1.7% freight ton miles (YTD); +9.0% Fleet profitability (2Q15 YoY)**

E.U.
1% to 3% ↑

- **Production Up: Western Europe +1.0% YoY** in Aug and **+5.2% YTD**
- **Improving conditions in W.Eur: Orders +10.4% YTD, Registrations +20.7% YTD**

China
-22% to -24% ↓

- **Production Down: -32.2% YTD**; Strong pull-ahead demand in 2014 due to stage IV regulations; 4Q15 forecasted to normalize from regulatory conditions

Packaging



↑
2% to 3%
Global sales growth

N.A.
-1% to -2% ↓

- **Demand decline: Weakness (-2.0% YTD) in Carbonated Soft Drinks (CSD)**
- **Moderate growth in Beer Segment (+1.5% YTD)** to partially offset CSD

E.U.
1% to 2% ↑

- **Growth** led by Steel to **Aluminum conversion** in **Western Europe**, partially offset by declines in **Eastern Europe**

China
8% to 12% ↑

- **Growth** driven by continued **penetration of Aluminum** in **Beer** segment

Solid Commercial B&C Growth; Global Airfoil Market Improves

Alcoa End Markets: Current Assessment of 2015 vs. 2014

End Market


2015 Growth


Global and Regional Commentary


Building and Construction




4% to 6%
 Global sales growth

N.A.
 4% to 5%
 

E.U.
 -2% to -3%
 

China
 4% to 6%
 

Positive Early Indicators:


- **Non-Residential Contracts Awarded: +12.1%** in Aug (mean of 12-month rolling average)
- **Architectural Billings Index Mixed in 2015:** Growth punctuated by temporary decline; **positive for 5 months** and **negative for 3 months** (Jan, Apr and Aug)
- **Case-Shiller Home Price Index: +4.7% YoY** Jul; Growth moderated since 1Q14 (10%+)

• Decline as **weakness continues**, outlook varies across markets

- **Market drivers** – industrial and manufacturing sectors – **softening** in recent months
- **Slower industrial production growth** at **+6.1%** Aug and **+6%** Jul (vs. **+6.8%** in Jun)

Industrial Gas Turbines




3% to 4%
 Global airfoil market growth

- Market moving towards **higher value-add product** as customers develop **new, high efficiency** turbines with **advanced technology**
- **U.S. (60 Hz) gas-fired generation +19.7% YTD** Jul driving strong demand for **spares** and **component upgrades** on existing turbines
- **Tempered by EU (50 Hz)** demand which remains soft due to **subsidized renewables**

Completing Transformation – Creating Two Industry Leaders

Separation Rationale and Path to Completion

Will provide
Progress Updates

Separation into Two Industry-Leading Companies

Creates Two Distinct Global Leaders

Premier Provider of High-Performance
Multi-Material Solutions

Strong Upstream Leader Built for Success
Throughout the Cycle

Offers Two Top-Tier Investment Choices

Our Path to Successful Completion

- **Timing:**
 - Target **completion** in the **second half of 2016**
- **Critical Closing Conditions:**
 - **Final approval** from Alcoa **Board of Directors**
 - Receipt of opinion of counsel with respect to the **tax-free nature of the transaction**
 - Effectiveness of a **Form 10 filing** with the U.S. SEC
- **Target Prudent Capital Structures:**
 - **Value-Add Co.** target of **investment grade** rating
 - *Current intent: Debt of Alcoa would be retained by the Value-Add Company*
 - **Upstream Co.** target of **strong non-investment grade** rating
- Expect **customary one-time charges** driven by the transaction

Launching Two Strong Companies - Driving Value

Separating into Value-Add Co. and Upstream Co.



Value-Add Co.

Lightweight Multi-Material Innovation Powerhouse

- **Premier provider** of high-performance advanced **multi-material products and solutions**
- **Positioned** to grow in **growth markets** with significant **customer synergies**
e.g., aerospace, automotive, commercial transportation, building and construction
- **Expanded multi-material** technology and process **expertise**
- **Innovation leader** with full pipeline of products & solutions
- **Successfully shifting** product mix to **higher value-add**
- **Robust margins** and **investment opportunities** **above cost of capital**

Upstream Co.

Globally Competitive Upstream Business

- **Robust** projected aluminum **demand growth** of **6.5%** in **2015** and **double** between **2010** and **2020**
- **Attractive Portfolio of five businesses:**
 - **World's largest, low cost bauxite miner** at the **19th percentile¹** on cost curve (*46M BDMT²*)
 - **World's largest, most attractive alumina** business in the **1st quartile³** of the cost curve (*17.3M MT*)
 - **Substantial energy** assets with operational flexibility
 - **Optimized smelting** capacity (*3.4M MT*) continuing to **improve** its **2nd quartile³** cost curve position
 - **17 casthouses** providing **value-add** products
- **Diverse sites** – **close proximity** to major markets
- **Committed to disciplined capital allocation** and **prudent return of capital** to shareholders

1) CRU analysis. 2) Mined in 2014, including equity interests. 3) CRU and Alcoa analysis.
BDMT = Bone Dry Metric Ton

Value-Add Co: Premier Provider of Innovative Solutions to Growing Markets

Value-Add Co. Business Operations and Key Attributes

Key Attributes

- **Premier provider** of high-performance advanced **multi-material products and solutions**
- **Positioned** to grow in **growth markets** with significant **customer synergies** e.g., aerospace, automotive, commercial transportation, building and construction
- **Expanded multi-material** technology and process **expertise**
- **Innovation leader** with full pipeline of products and solutions
- **Successfully shifting** product mix to **higher value-add**
- **Robust margins** and **investment opportunities** above cost of capital

GRP

Aerospace and Automotive Products



Global Leader in the automotive & aerospace markets

Brazing, Commercial Transportation and Industrial



Global Leader for heat exchanger, commercial transportation and industrial products

Micromill Products and Services



Bringing breakthrough products and technology to customers around the world

Global Packaging



Market Leader in N.A., Russia, MENA, China

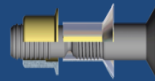
EPS

Power and Propulsion



Global Leader in jet engine and industrial gas turbine airfoils

Fastening Systems and Rings



Global Leader in aerospace fasteners and jet engine rings

Forgings and Extrusions



Global Leader in aero, defense structures & jet engine disks

Titanium and Engineered Products



Vertically integrated player in the Ti value chain

TCS

Building and Construction Systems



N.A. Market Leader in commercial architectural systems

Wheels and Transportation Products







Global Leader in forged aluminum commercial vehicle wheels

Alcoa + RTI = Integrated Supply Solutions ... Benefiting our Customers

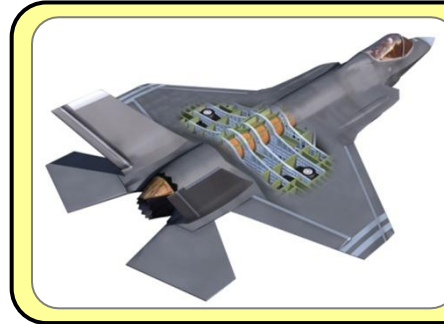
RTI Investment and Lockheed Contract

RTI Complements Titanium Supply Chain¹

| | | ALCOA | RTI International Metals, Inc. | ALCOA + RTI International Metals, Inc. |
|------------|--|-------|--------------------------------------|---|
| Midstream |  INGOT Melting (Ingot, Cast Slab) | | | |
| |  PLATE Billetizing, Rolling (Mill Products) | | | |
| Downstream |  FORGING Conversion (Closed-Die Forging, Extruding, Investment Casting) | | | |
| |  MACHINING Machining, Subassembly | | | |

Capabilities: ○ None ◐ Limited ◑ Moderate ◒ Significant ● Full

~\$1.1B² Ti Multi-Year³ Contract with Lockheed Martin



Alcoa now **provides 100%** of **titanium milled products** (i.e., ingot, billet, plate) for the **structures** of the **Joint Strike Fighter**

F-35 Ti Structural Components Supply Chain



- **Exclusive Ti supplier of milled products for airframe structures on F-35 variants**
- **Full production rate of 13 aircraft/month** by mid 2020s, up from 3 aircraft/month in 2014
- **Adds to current multi-material (Al, Ti, Ni) contracts from engine to aircraft body**

RTI Financial Benefits: 2019 Targets

- ✓ **\$1.2B revenue, 25% EBITDA margin**
- ✓ **Net Synergies⁴: \$100M**
 - **30% in Year 2, 100% in Year 4**

¹ Represents mid and downstream capabilities, not market position. ² Estimated value for projected build rates. ³ 2016 – 2024. ⁴ Figure reflects net synergies after \$9M merger integration costs (\$44M process productivity, \$20M procurement savings, \$20M overhead cost reduction, \$25M growth). Source: IHS Janes

Aero Fasteners: High Tech - Multi Material - Customer Solutions

Multi-material Fastener Solutions, Market Position and Airbus Contract

#1 Global Leader in Aerospace Fastening Systems

20% Fuel Efficiency Improvement

2-5% lower wing aerodynamic drag

Up to 3% weight reduction

15% Engine fuel burn reduction

30% Maintenance cost reduction

10% Assembly cost reduction

- Leader in **Innovation**
- Broadest fastener solutions** offering
- Expertise in **Multi-Material** environments

Broad application designs



Custom solutions



20 lb weight savings on A320



165 lb weight savings on A350



~\$1B Multi-Year Largest Airbus Fastener Contract

- Alcoa's **largest-ever fastener deal with Airbus**
- Positioned on new, high-growth** (e.g., A350, A320neo) and **longer running** (e.g., A330) platforms
- Titanium, stainless steel and nickel-based superalloy fastening systems**
- Improved fatigue life**, enabling lightning **strike protection**
- Enhanced performance in multi-material applications**



Automotive Growth shifts Rolling Business to Higher Value

Automotive Capacity Investments, Alcoa Auto Shipment Indexed Growth and 2014-2018E Revenue

Automotive Investments On Track

Davenport Fully Operational



- Fully ramped up
- At capacity
- Meeting Auto growth needs for customers

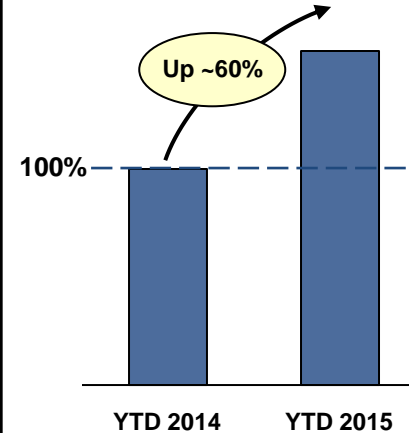
Tennessee Online



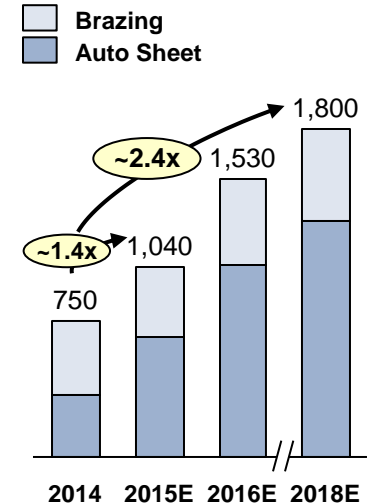
- Four months ahead of plan to meet customer demand
- Shipping to customers in 3Q 2015
- Allows flex production with changing market demands

Profitable Growth in Automotive

Indexed¹ Auto Sheet Shipments



Revenues (\$M)



Growing auto business supplies customers such as Ford, GM, FCA, Tesla, Nissan, Subaru, and Honda

1) Indexed to 3Q2014 YTD shipments.
 FCA = Fiat Chrysler Automobiles GM = General Motors

Micromill: Disruptive ... Material – Process – Business Model

Micromill's Innovation in Automotive Alloys, Value Proposition, Ford JDA, and Development Progress

The World's Most Advanced Rolling Mill

Breakthrough Materials

- **40% more formable, 30% stronger vs. incumbent Al**
- **2x more formable and 30% lighter vs. HSS**
- **Equivalent HSS crash resistance**

Revolutionary Process

- **20 minutes vs. 20 days; 1/4 the footprint** of conventional mill; **50% less energy** use



Ford & Alcoa Collaborate on Next-Gen Alloys



- **Micromill material to debut on 2016 Ford F-150** starting in Q4 2015
- **Collaborate** to produce **next-gen automotive aluminum alloys**
- **Micromill alloy validated by Ford engineers** for high quality parts, complex structures for F-150
- Use of **Micromill material** on Ford vehicles to **grow 2x** from **2016 to 2017**

Moving Forward

Completed successful customer trials

Qualification agreements in place with 9 major OEMs on 3 continents

Letter of Intent with Danieli for Commercial Licensing Agreement

Signed Joint Development Agreement with Ford

First commercial application on 2016 F-150 in Q4 2015

Exploring Full Scale Capacity Expansion Options

■ Completed □ In Process

Upstream Co: Cost Competitive Industry Leader

Key Attributes and Global Business Unit 3Q15 Updates

Key Attributes

12-month
Capacity Review⁴
2.8 MMT Refining and
500 kmt Smelting

- **Robust** projected aluminum **demand growth** of **6.5%** in **2015** and **double** between **2010** and **2020**
- **Attractive Portfolio of five businesses:**
 - **World's largest, low cost bauxite miner** at the **19th percentile¹** on cost curve (**46M BDMT²**)
 - **World's largest, most attractive alumina** business in the **1st quartile³** of the cost curve (**17.3M MT**)
 - **Substantial energy** assets with operational flexibility
 - **Optimized smelting** capacity (**3.4M MT**) continuing to **improve** its **2nd quartile³** cost curve position
 - **17 casthouses** providing **value-add** products
- **Diverse sites – close proximity** to major markets
- **Committed to disciplined capital allocation** and **prudent return of capital** to shareholders

ALUMINA

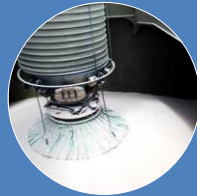
ALUMINUM

MINING



**World's largest
bauxite miner¹**

REFINING



**1st quartile³
cost curve
refiner**

ENERGY



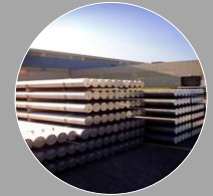
**Flexibility to
profit from
market cycles**

SMELTING



**Strategic global
footprint**

CASTING



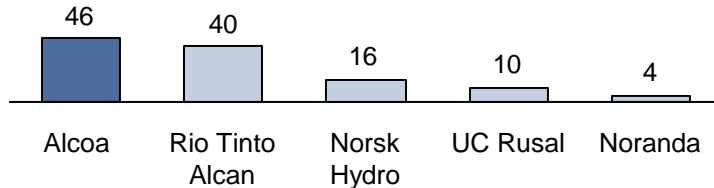
**Value-add
products in
key markets**

World's Most Attractive Bauxite and Alumina Portfolio

Mining and Refining Overview and Business Updates

World's Largest & Low cost Bauxite Miner...

2014 Bauxite Production^{1,2} (M BDMT)



Cost curve position³ (percentile)

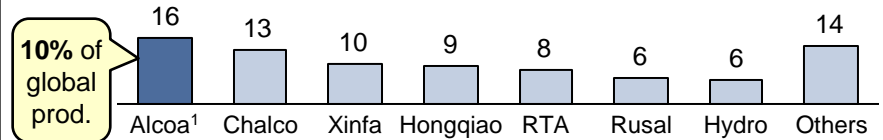


- Juruti mine hits 5M mtpy run rate
- Saudi mine 100% complete
- Received approval from Government of Western Australia to export trial bauxite shipments from Willowdale and Huntly mines; targeted for early 2016
- Strong presence in Atlantic and Pacific markets
- Proximity to owned refinery operations

China imports 40%-60% of total Chinese and 70%-90% of global 3rd party demand

...and Largest & First Quartile Alumina Refiner

2015E alumina production from top 10 producers⁴ (mmt)



Cost curve progression⁴ (percentile)



- Announced full curtailment of Suralco refinery
- Expect 1.0 mmt Saudi JV 2015 production
- New gas supply agreement secures a low cost position for Western Australia refineries through 2032
- San Ciprian nat. gas solution; ~\$20/MT improvement in 2015E

Expect ~75%⁵ of 3rd party smelter-grade shipments on API/Spot

1) CRU and Alcoa analysis, including equity interests, and not adjusted for AWAC interest. 2) Bauxite Production based on average 10% moisture. 3) CRU analysis. 4) CRU and Alcoa Analysis. 5) In 2015E.

Energy and Casting - Profitability Through the Cycle

Energy and Casting Overview and Business Updates

Maximize Energy Assets¹ Profitability

| Country | Consolidated Capacity (MW) ² |
|---------------|---|
| Brazil | 492 |
| Canada | 132 |
| Suriname | 189 |
| United States | 739 |

Power production capacity of
~1,550 MW

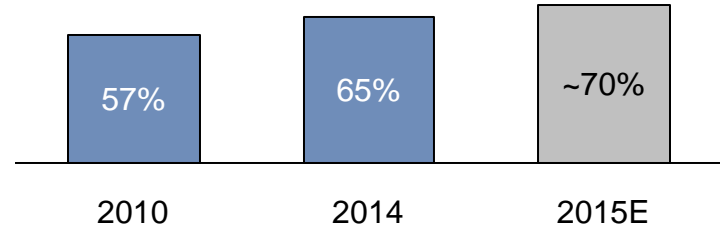
- ~65% of production is **hydroelectric generation**
- Provides **optionality** between **market sales** and **metal production** (~30% currently used for metal production)
- **Sell remaining ~70% of capacity** into the power grid, depending on the power requirements of other assets
- **Capturing significant earnings** from **power sales** globally

Casthouses shifting to high value-add products

Value-Add portfolio provides **profits** throughout the cycle: **\$1.3B Incremental Margin** 2010 through 2014



Value-add products as % of total shipments



- **17 casthouses provide ~70% value-add** products in 2015E
- Qualified **new foundry alloys** with top tier OEM; **8 customer trials** ongoing

1) Alcoa has an equity interest in the majority of facilities. 2) The Consolidated Capacity of the Brazilian energy facilities is the assured energy that is approximately 55% of hydropower plant nominal capacity.

Primary Metals: \$110 - \$130M Improvement Plan Underway

Track Record, Historical Performance and Improvement Plan

Optimizing Portfolio

- **33% operating capacity** closed/curtailed/divested since 2007
- **\$2.1B in productivity¹ gains**
- Moved **8 points down the cost curve in 4 years**, down **\$50/MT** relative to industry
- **Flex energy assets**

Continuous Execution on Portfolio Improvements

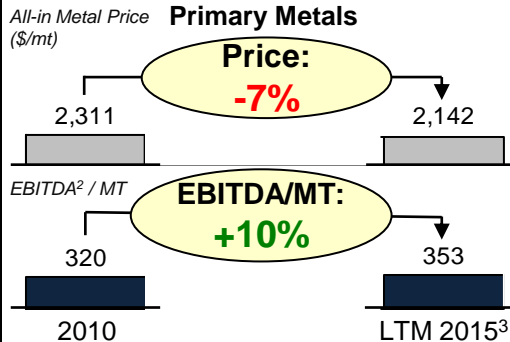
➤ Year to Date Actions:

- **Curtailed Sao Luis:** 74 kmt
- **Closed Pocos:** 96 kmt
- **Closed Anglesea** power station
- **Secured** 2016 interruptibility sales for Spain (408 kmt⁴)
- **Revised Intalco** BPA power contract (279 kmt⁵)
- **Optimized** pot restarts across locations

Strategic Review
Ongoing through 1Q16

\$110 - \$130M
Improvement in 2016

Building Financial Resilience



Launched Aggressive Primary Metals Improvement Program

Operations

\$35 - \$40M

- **Reduce** spend usage and demand
- **Accelerate productivity, labor cost** reduction

Procurement

\$40 - \$45M

- **Raw material price** reductions
- **Energy contract** renegotiations

Overhead

\$10 - \$15M

- **Overhead labor and** spend reductions

Value-Add Volume

\$25 - \$30M

- **Casting throughput** optimization
- **Casting technology** upgrades

1) Includes energy assets, smelting, and casting. 2009-2014 Productivity figures, pretax and pre-minority interest. 2009/2010 represent net productivity. 2011-2014 represent gross productivity. 2) ATOI was \$488M in 2010 and \$462M in LTM 2015 3) Last Twelve Months ended September 30, 2015. 4) Includes 56 kmt of idle capacity. 5) Includes 49kmt of idle capacity. BPA = Bonneville Power Administration

Transformation on Course

Managing Headwinds; Portfolio Resilient

Intensified Innovation & Growth in Value-Add

Upstream Portfolio Less Vulnerable to Downswings

Transformation Continues on Path to Separation

Nahla Azmy

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Annual Sensitivity Summary

LME Aluminum Annual Net Income Sensitivity

+/- \$100/MT = +/- \$190 million

API/Spot Alumina Annual Net Income Sensitivity

+/- \$10/MT = +/- \$20 million

Currency Annual Net Income Sensitivity

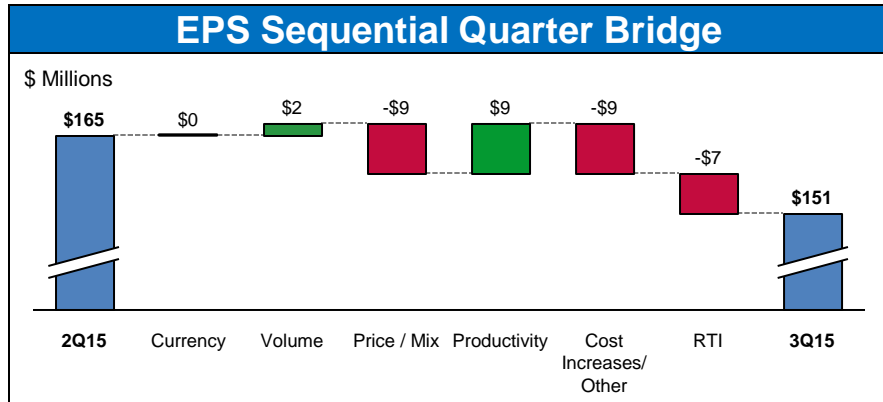
| | | |
|------------------|------------------|------------------------------|
| Australian \$ | +/- \$11 million | per 0.01 change in USD / AUD |
| Brazilian \$ | +/- \$ 1 million | per 0.01 change in BRL / USD |
| Euro € | +/- \$ 2 million | per 0.01 change in USD / EUR |
| Canadian \$ | +/- \$ 4 million | per 0.01 change in CAD / USD |
| Norwegian Kroner | +/- \$ 4 million | per 0.10 change in NOK / USD |

Composition of Regional Premium Pricing Convention

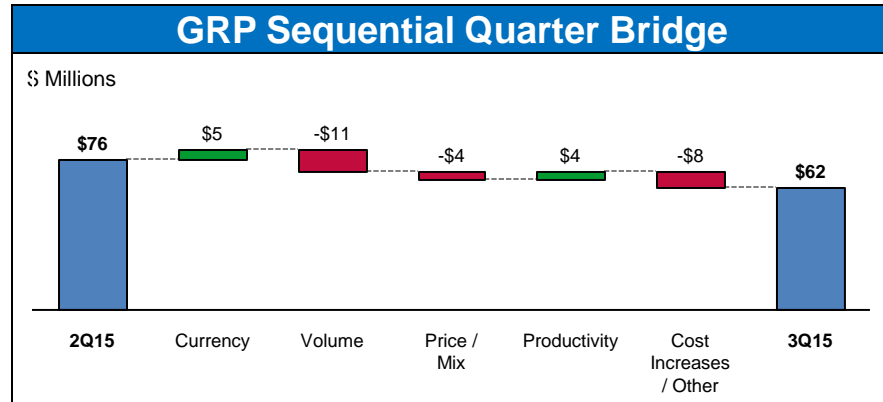
| 2015E Shipments | Regional Premiums | Estimated Pricing Convention |
|-----------------|--------------------------------|------------------------------|
| 50% | Midwest – Platts | 15-day lag |
| 35% | Rotterdam DDP – Metal Bulletin | 45-day lag |
| 10% | CIF Japan – Platts | Month prior to Quarter start |
| 5% | Negotiated | Annual |

Value-Add Co. Segment Bridges – 3Q 2015

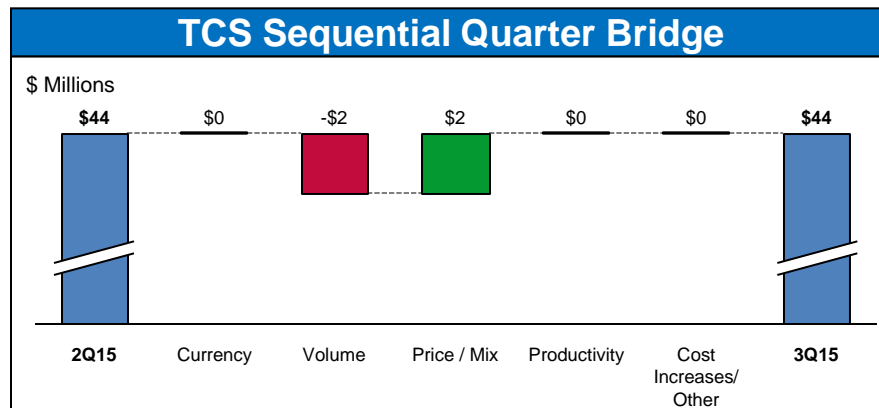
EPS Sequential Quarter Bridge



GRP Sequential Quarter Bridge

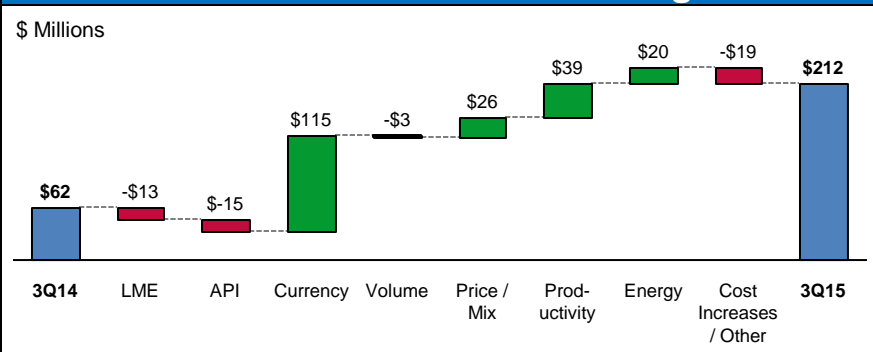


TCS Sequential Quarter Bridge

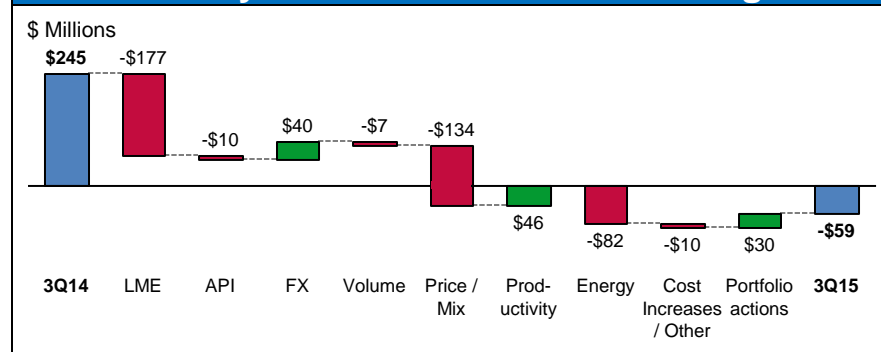


Upstream Co. Segment Bridges – 3Q 2015

Alumina Year-over-Year Bridge

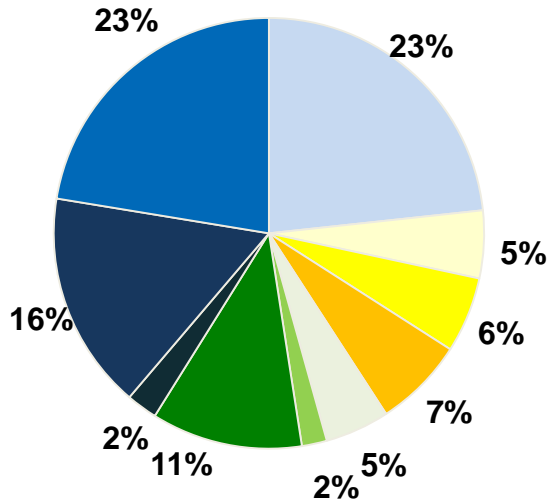


Primary Metals Year-over-Year Bridge



Revenue Change by Market - 3Q 2015

3Q15 Third-Party Revenue



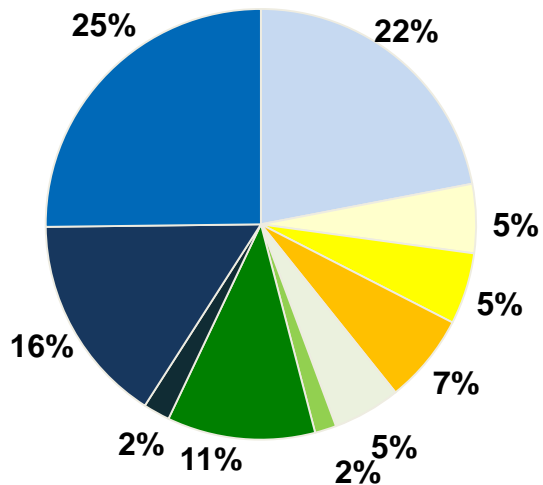
Sequential Change

Year-Over-Year Change

| | | |
|---------------------|-------|-------|
| Aerospace | 3% | 27% |
| Automotive | (11%) | 32% |
| B&C | 0% | (21%) |
| Comm. Transport | (5%) | 0% |
| Industrial Products | (12%) | (38%) |
| IGT | 13% | 24% |
| Packaging | (2%) | (26%) |
| Distribution/Other | 21% | 24% |
| Alumina | (1%) | 3% |
| Primary Metals | (19%) | (33%) |

Revenue Change by Market – YTD 2015

3Q YTD Third-Party Revenue

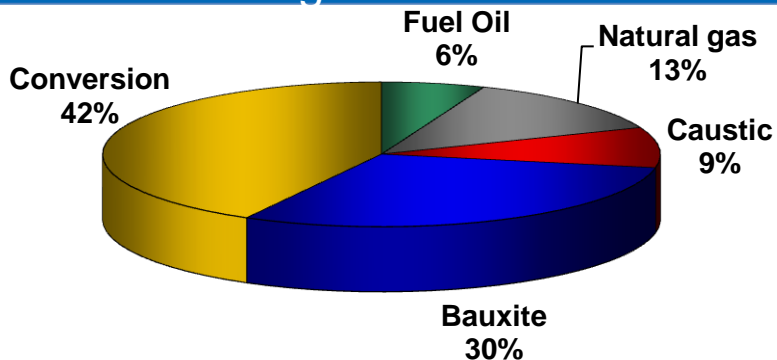


Year-Over-Year Change

| | |
|---------------------|-------|
| Aerospace | 25% |
| Automotive | 44% |
| B&C | (20%) |
| Comm. Transport | 6% |
| Industrial Products | (33%) |
| IGT | 2% |
| Packaging | (17%) |
| Distribution/Other | 27% |
| Alumina | 9% |
| Primary Metals | (12%) |

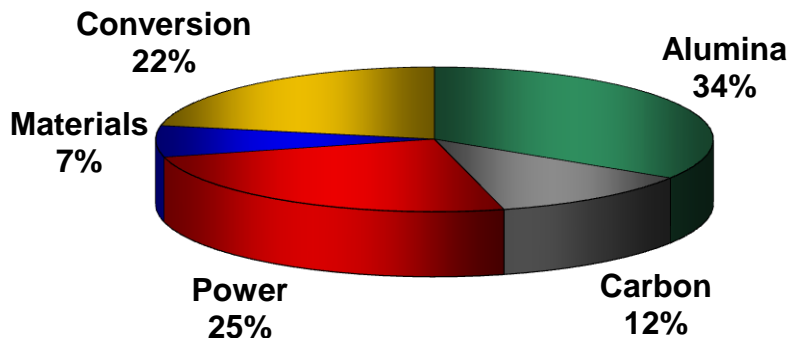
Composition of Upstream Production Costs

Refining Cost Structure



| Input Cost | Inventory flow | Pricing convention | Annual ATOI Sensitivity |
|--------------|----------------|--------------------|-------------------------------|
| Fuel oil | 1 – 2 months | Prior month | \$2m per \$1/bbl |
| Natural gas | N/A | Spot ¹ | \$13m per \$1/GJ ¹ |
| Caustic soda | 3 - 6 months | Spot & semi-annual | \$8m per \$10/DMT |

Smelting Cost Structure



| Input Cost | Inventory flow | Pricing convention | Annual ATOI Sensitivity |
|------------|----------------|-------------------------------|-------------------------|
| Coke | 1 - 2 months | Spot, quarterly & semi-annual | \$7m per \$10/MT |
| Pitch | 1 - 2 months | Spot, quarterly & semi-annual | \$2m per \$10/MT |

¹Natural gas information corresponds to Point Comfort, as Australia is priced on a rolling 16 quarter average

Alcoa Upstream capacity closed, sold and idled

Smelting Capacity

Closed/sold since December 2007

| Facility | Year | kmt |
|-------------------------------------|------|--------------|
| Baie Comeau | 2008 | 53 |
| Eastalco | 2010 | 195 |
| Badin | 2010 | 60 |
| Warrick | 2010 | 40 |
| Tennessee | 2011 | 215 |
| Rockdale | 2011 | 76 |
| Baie Comeau | 2013 | 105 |
| Fusina | 2013 | 44 |
| Massena East | 2013 | 41 |
| Massena East | 2014 | 84 |
| Point Henry | 2014 | 190 |
| Portovesme | 2014 | 150 |
| Mt. Holly (sale of 50.33% interest) | 2014 | 115 |
| Pocos | 2015 | 96 |
| Total | | 1,464 |

Idled

| Facility | kmt |
|--------------|------------|
| Rockdale | 191 |
| Sao Luis | 268 |
| Intalco | 49 |
| Wenatchee | 41 |
| Aviles | 32 |
| Portland | 30 |
| La Coruna | 24 |
| Total | 635 |

Refining Capacity

Closed/sold since December 2007

| Facility | Year | kmt |
|--------------------------------|------|------------|
| Jamalco (sale of 55% interest) | 2014 | 779 |
| Total | | 779 |

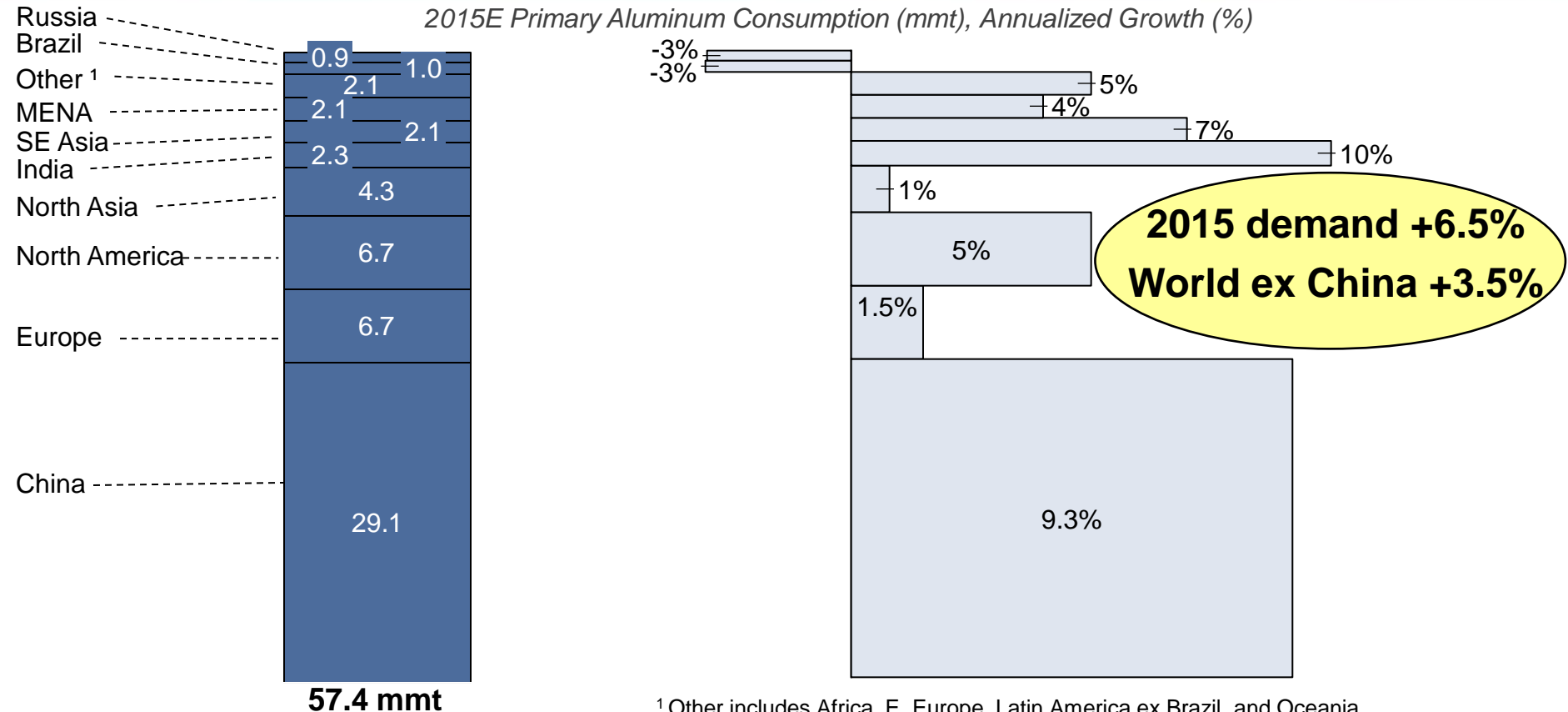
Idled

| Facility | kmt |
|-----------------------|--------------|
| Suriname ¹ | 2,207 |
| Point Comfort | 295 |
| Total | 2,502 |

1) Includes 887 kmt announced Sept 14th, 2015; expected to be executed by end of November 2015

6.5% 2015E Demand Growth

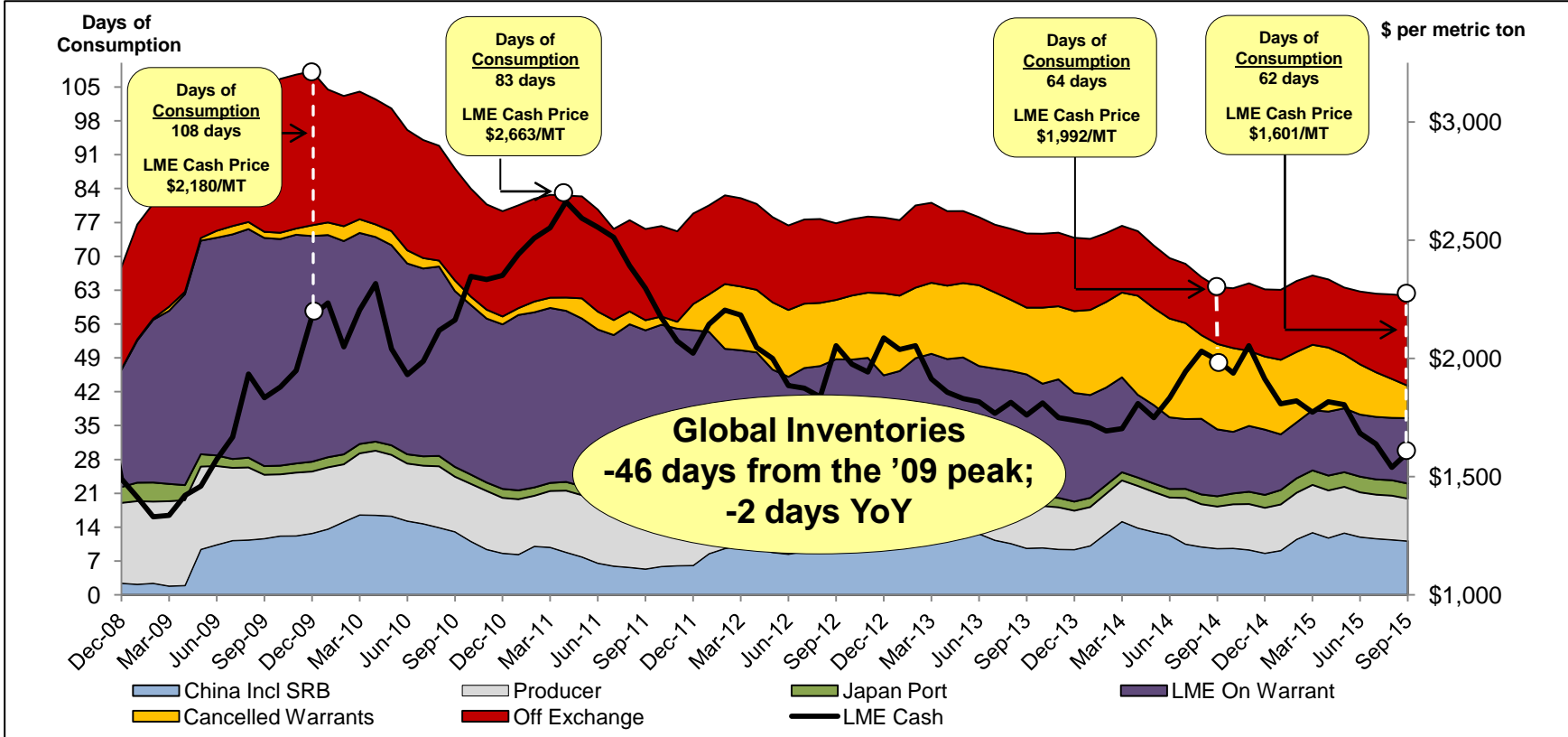
2015E Primary Aluminum Consumption (mmt), Annualized Growth (%)



¹ Other includes Africa, E. Europe, Latin America ex Brazil, and Oceania

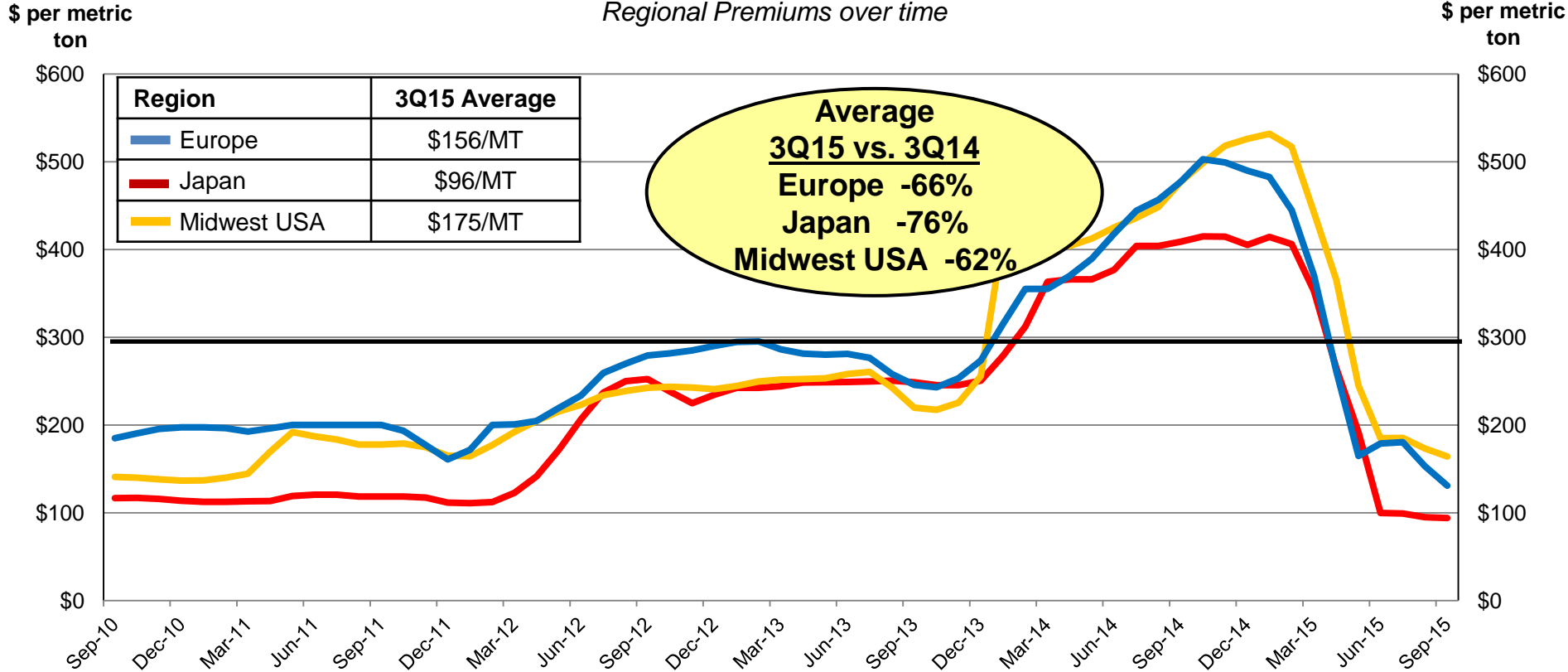
Global Inventories at 62 days; Down 2 days YoY

Global inventories vs. LME price over time \$



Continued Weakness in Regional Premiums

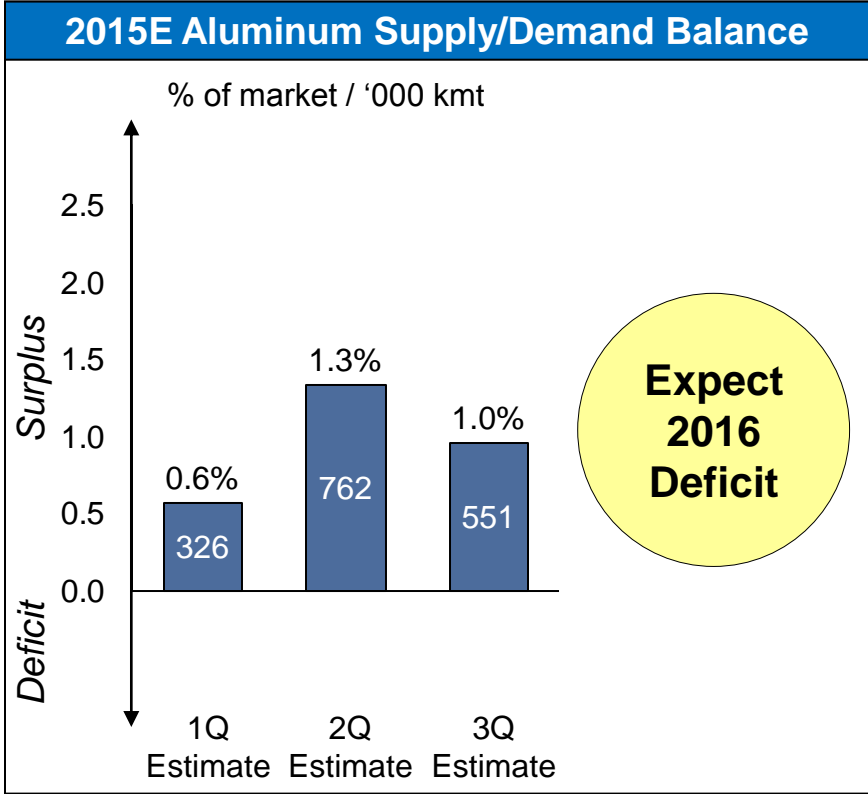
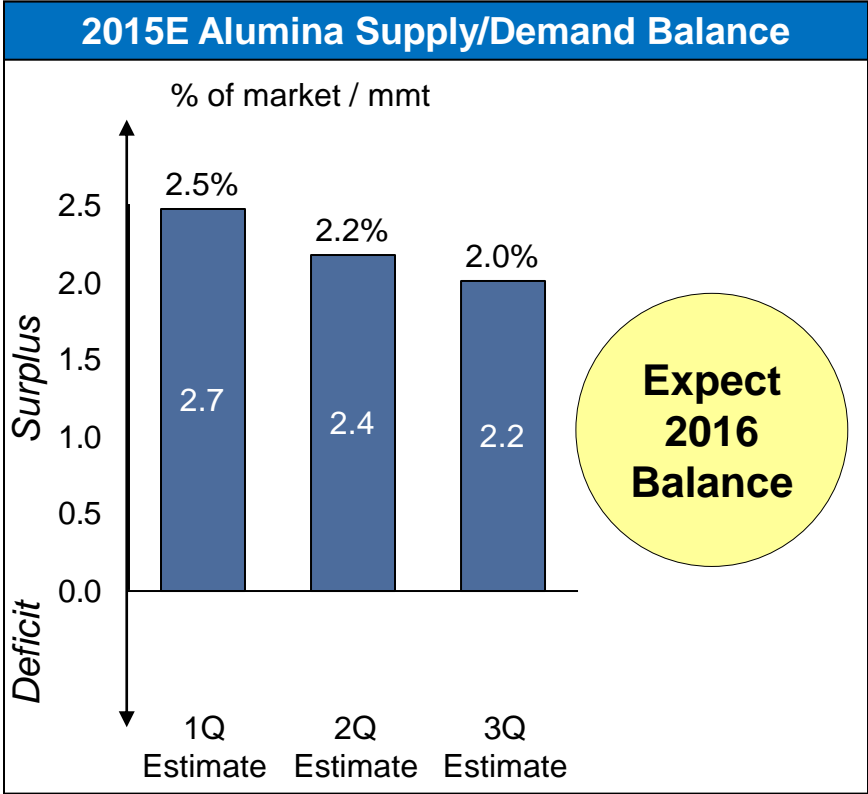
Regional Premiums over time



Source: Graph shows monthly average of daily prices - Platts Metals Week 3Q15 and 3Q14 bubble/table data shows quarterly average of daily prices

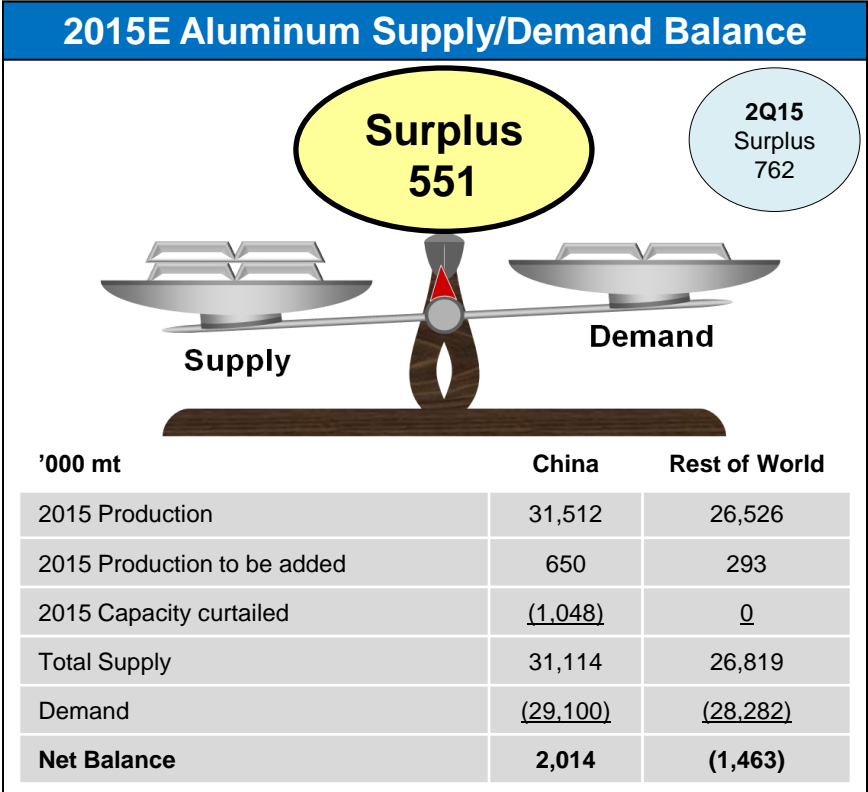
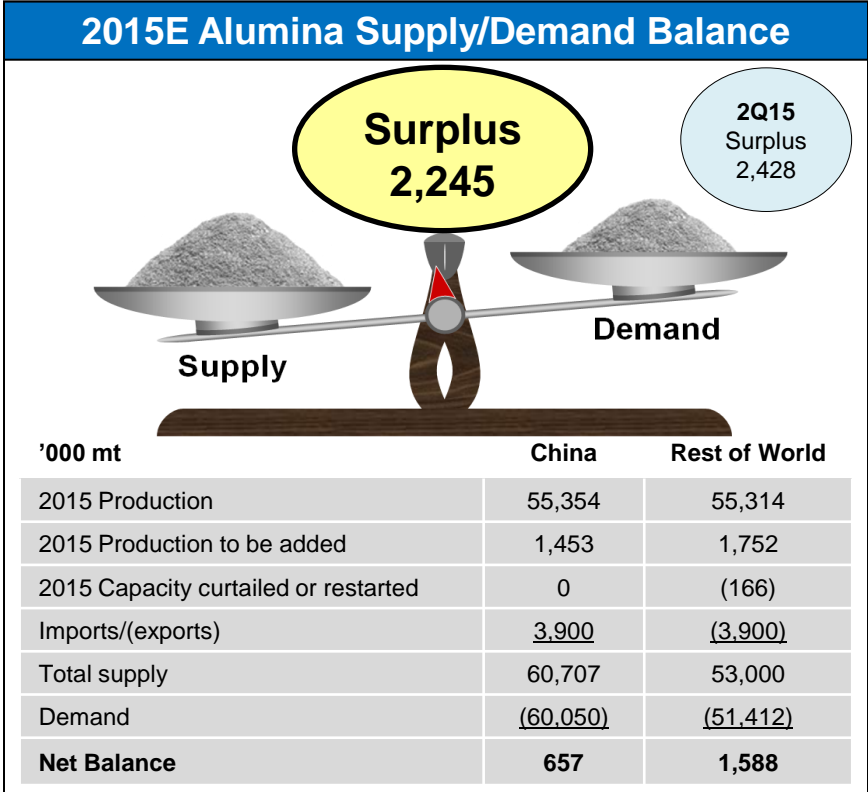
2015 Alumina and Aluminum Surplus Tightening

Supply/Demand Analysis



2015 Alumina and Aluminum Surplus Tightening

Supply/Demand Analysis



Special Items

\$ Millions, except per-share amounts

| | Pre-tax, Before NCI | | After-tax, After NCI | | Income Statement Classification | Segment |
|---|---------------------|---------------|----------------------|---------------|--------------------------------------|--------------------------|
| | 2Q15 | 3Q15 | 2Q15 | 3Q15 | | |
| Income from Continuing Operations | \$282 | \$206 | \$140 | \$44 | | |
| Income per Diluted Share | - | - | \$0.10 | \$0.02 | | |
| Restructuring-Related | (\$221) | (\$94) | (\$143) | (\$43) | Restructuring and Other Charges/COGS | Corporate/Primary Metals |
| Tax Items | - | - | \$22 | (\$15) | Income Taxes | Corporate/GRP |
| Gain on Land Sale | \$28 | \$38 | \$19 | \$25 | Other Income, Net | Corporate |
| Portfolio Transaction Costs | (\$6) | (\$25) | (\$5) | (\$22) | SG&A/Interest Expense | Corporate |
| Mark-to-Market Energy Contracts | (\$4) | (\$17) | (\$3) | (\$10) | Other Expenses, Net | Corporate |
| Special Items | (\$203) | (\$98) | (\$110) | (\$65) | | |
| Income from Continuing Ops excl. Special Items | \$485 | \$304 | \$250 | \$109 | | |
| Income per Diluted Share excl. Special Items | - | - | \$0.19 | \$0.07 | | |

RECONCILIATIONS

Advancing each generation.



Reconciliation of ATOI to Consolidated Net (Loss) Income Attributable to Alcoa⁽¹⁾

| (in millions) | 1Q14 | 2Q14 | 3Q14 | 4Q14 | 2014 | 1Q15 | 2Q15 | 3Q15 |
|---|----------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|
| Total segment ATOI ⁽²⁾ | \$320 | \$408 | \$581 | \$659 | \$1,968 | \$656 | \$567 | \$410 |
| Unallocated amounts (net of tax): | | | | | | | | |
| Impact of LIFO | (7) | (8) | (18) | (21) | (54) | 7 | 36 | 50 |
| Metal price lag ⁽²⁾ | 7 | 11 | 38 | 22 | 78 | (23) | (39) | (48) |
| Interest expense | (78) | (69) | (81) | (80) | (308) | (80) | (80) | (80) |
| Noncontrolling interests | 19 | 9 | 18 | 45 | 91 | (60) | (67) | (62) |
| Corporate expense | (65) | (67) | (72) | (80) | (284) | (62) | (65) | (72) |
| Restructuring and other charges | (321) | (77) | (189) | (307) | (894) | (161) | (159) | (48) |
| Other | (53) | (69) | (128) | (79) | (329) | (82) | (53) | (106) |
| Consolidated net (loss) income attributable to Alcoa | \$(178) | \$138 | \$149 | \$159 | \$268 | \$195 | \$140 | \$44 |

⁽¹⁾ In the third quarter of 2015, management approved a realignment of Alcoa's Engineered Products and Solutions segment due to the expansion of this part of Alcoa's business portfolio through both organic and inorganic growth. A portion of this realignment consisted of moving the Latin American extrusions business from Corporate into a new Transportation and Construction Solutions segment (see the Reconciliation of Transportation and Construction Solutions Adjusted EBITDA for additional information). Segment information for all prior periods presented was revised to reflect the new segment structure

⁽²⁾ Effective in the second quarter of 2015, management removed the impact of metal price lag from the results of the Global Rolled Products and Engineered Products and Solutions (now Engineered Products and Solutions and Transportation and Construction Solutions – see footnote 1 above) segments in order to enhance the visibility of the underlying operating performance of these businesses. Metal price lag describes the timing difference created when the average price of metal sold differs from the average cost of the metal when purchased by the respective segment. The impact of metal price lag is now reported as a separate line item in Alcoa's reconciliation of total segment ATOI to consolidated net (loss) income attributable to Alcoa. As a result, this change does not impact the consolidated results of Alcoa. Segment information for all prior periods presented was updated to reflect this change.

Reconciliation of ATOI to Consolidated Net (Loss) Income Attributable to Alcoa⁽¹⁾ – Supplemental View

| (in millions) | 1Q14 | 2Q14 | 3Q14 | 4Q14 | 2014 | 1Q15 | 2Q15 | 3Q15 |
|---|----------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|
| Total segment ATOI ⁽²⁾ | \$320 | \$408 | \$581 | \$659 | \$1,968 | \$656 | \$567 | \$410 |
| Unallocated amounts (net of tax): | | | | | | | | |
| Impact of LIFO | (7) | (8) | (18) | (21) | (54) | 7 | 36 | 50 |
| Metal price lag ⁽²⁾ | 7 | 11 | 38 | 22 | 78 | (23) | (39) | (48) |
| Interest expense | (78) | (69) | (72) | (80) | (299) | (80) | (80) | (80) |
| Noncontrolling interests | (20) | (13) | (29) | (72) | (134) | (95) | (87) | (92) |
| Corporate expense | (66) | (58) | (68) | (60) | (252) | (56) | (60) | (55) |
| Other | (58) | (55) | (62) | (16) | (191) | (46) | (87) | (76) |
| Income excluding special items | 98 | 216 | 370 | 432 | 1,116 | 363 | 250 | 109 |
| Special items ⁽³⁾ | (276) | (78) | (221) | (273) | (848) | (168) | (110) | (65) |
| Consolidated net (loss) income attributable to Alcoa | \$(178) | \$138 | \$149 | \$159 | \$268 | \$195 | \$140 | \$44 |

NOTES FOR CORPORATE AMOUNTS:

LIFO and Metal price lag – these items tend to offset each other over time as the same underlying market conditions typically drive both amounts.

Noncontrolling interests – primarily represents Alumina Limited's 40% share of the operating results of the Alcoa World Alumina and Chemicals joint venture, which principally comprises Alcoa's Alumina segment.

Corporate expense – represents general and administrative expenses attributable to Alcoa's corporate and business support locations, as well as costs associated with Alcoa's corporate research and development center.

Other – includes all other income and expenses not included in the segments, primarily: postretirement benefits and environmental remediation costs associated with certain closed or divested businesses; various corporate eliminations of inter-segment transactions; certain corporate foreign currency gains and losses; and the impact of the difference between the income tax rates applicable to the segments and the consolidated effective tax rate of the Company.

⁽¹⁾ In the third quarter of 2015, management approved a realignment of Alcoa's Engineered Products and Solutions segment due to the expansion of this part of Alcoa's business portfolio through both organic and inorganic growth. A portion of this realignment consisted of moving the Latin American extrusions business from Corporate into a new Transportation and Construction Solutions segment (see the Reconciliation of Transportation and Construction Solutions Adjusted EBITDA for additional information). Segment information for all prior periods presented was revised to reflect the new segment structure.

⁽²⁾ Effective in the second quarter of 2015, management removed the impact of metal price lag from the results of the Global Rolled Products and Engineered Products and Solutions (now Engineered Products and Solutions and Transportation and Construction Solutions – see footnote 1 above) segments in order to enhance the visibility of the underlying operating performance of these businesses. Metal price lag describes the timing difference created when the average price of metal sold differs from the average cost of the metal when purchased by the respective segment. The impact of metal price lag is now reported as a separate line item in Alcoa's reconciliation of total segment ATOI to consolidated net (loss) income attributable to Alcoa. As a result, this change does not impact the consolidated results of Alcoa. Segment information for all prior periods presented was updated to reflect this change.

⁽³⁾ Special items are defined as restructuring and other charges, discrete tax items, and other special items. See the Reconciliation of Adjusted Income for additional information.

Reconciliation of Adjusted Income

| (in millions, except per-share amounts) | Income | | | Diluted EPS | | |
|--|-----------------------|------------------|-----------------------|-----------------------|------------------|-----------------------|
| | Quarter ended | | | Quarter ended | | |
| | September 30, 2014 | June 30, 2015 | September 30, 2015 | September 30, 2014 | June 30, 2015 | September 30, 2015 |
| Net income attributable to Alcoa | \$149 | \$140 | \$44 | \$0.12 | \$0.10 | \$0.02 |
| Restructuring and other charges | 175 | 141 | 30 | | | |
| Discrete tax items ⁽¹⁾ | 25 | (5) | 4 | | | |
| Other special items ⁽²⁾ | 21 | (26) | 31 | | | |
| Net income attributable to Alcoa – as adjusted | \$370 | \$250 | \$109 | 0.31 | 0.19 | 0.07 |

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

⁽¹⁾ Discrete tax items include the following:

- for the quarter ended September 30, 2015, a net charge for a number of small items;
- for the quarter ended June 30, 2015, a net benefit for a number of small items; and
- for the quarter ended September 30, 2014, a charge for the remeasurement of certain deferred tax assets of a subsidiary in Brazil due to a tax rate change (\$34) and a net benefit for a number of small items (\$9).

⁽²⁾ Other special items include the following:

- for the quarter ended September 30, 2015, an unfavorable tax impact resulting from the difference between Alcoa's consolidated estimated annual effective tax rate and the statutory rates applicable to special items (\$27), a gain on the sale of both land and an equity investment in a China rolling mill (\$25), costs associated with the planned separation of Alcoa and the acquisition of RTI International Metals (\$22), a favorable tax impact related to the interim period treatment of operational losses in certain foreign jurisdictions for which no tax benefit was recognized (\$16), a write-down of inventory related to a refinery in Suriname (\$13), and a net unfavorable change in certain mark-to-market energy derivative contracts (\$10);
- for the quarter ended June 30, 2015, a favorable tax impact related to the interim period treatment of operational losses in certain foreign jurisdictions for which no tax benefit was recognized (\$21), a gain on the sale of land (\$19), costs associated with the then-planned acquisition of RTI International Metals (\$5), an unfavorable tax impact resulting from the difference between Alcoa's consolidated estimated annual effective tax rate and the statutory rates applicable to special items (\$4), a net unfavorable change in certain mark-to-market energy derivative contracts (\$3), and a write-down of inventory related to the permanent closures of a smelter in Brazil and a power station in Australia (\$2); and
- for the quarter ended September 30, 2014, a favorable tax impact resulting from the difference between Alcoa's consolidated estimated annual effective tax rate and the statutory rates applicable to special items (\$33), a write-down of inventory related to the permanent closure of smelters in Italy and Australia (\$27), costs associated with the then-planned acquisition of Firth Rixson (\$14), a net unfavorable change in certain mark-to-market energy derivative contracts (\$14), a gain on the sale of an equity investment in a China rolling mill (\$9), and an unfavorable tax impact related to the interim period treatment of operational losses in certain foreign jurisdictions for which no tax benefit was recognized (\$8).

Reconciliation of Alcoa Adjusted EBITDA

| (\$ in millions) | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 3Q14 | 2Q15 | 3Q15 |
|--|----------|----------|----------|----------|----------|-----------|----------|----------|----------|-----------|----------|---------|---------|---------|
| Net income (loss) attributable to Alcoa | \$1,310 | \$1,233 | \$2,248 | \$2,564 | \$(74) | \$(1,151) | \$254 | \$611 | \$191 | \$(2,285) | \$268 | \$149 | \$140 | \$44 |
| Add: | | | | | | | | | | | | | | |
| Net income (loss) attributable to noncontrolling interests | 233 | 259 | 436 | 365 | 221 | 61 | 138 | 194 | (29) | 41 | (91) | (18) | 67 | 62 |
| Cumulative effect of accounting changes | – | 2 | – | – | – | – | – | – | – | – | – | – | – | – |
| Loss (income) from discontinued operations | 27 | 50 | (22) | 250 | 303 | 166 | 8 | 3 | – | – | – | – | – | – |
| Provision (benefit) for income taxes | 546 | 464 | 853 | 1,623 | 342 | (574) | 148 | 255 | 162 | 428 | 320 | 199 | 75 | 100 |
| Other (income) expenses, net | (266) | (478) | (236) | (1,920) | (59) | (161) | 5 | (87) | (341) | (25) | 47 | 23 | – | (15) |
| Interest expense | 271 | 339 | 384 | 401 | 407 | 470 | 494 | 524 | 490 | 453 | 473 | 126 | 124 | 123 |
| Restructuring and other charges | (29) | 266 | 507 | 268 | 939 | 237 | 207 | 281 | 172 | 782 | 1,168 | 209 | 217 | 66 |
| Impairment of goodwill | – | – | – | – | – | – | – | – | – | 1,731 | – | – | – | – |
| Provision for depreciation, depletion, and amortization | 1,142 | 1,227 | 1,252 | 1,244 | 1,234 | 1,311 | 1,450 | 1,479 | 1,460 | 1,421 | 1,371 | 347 | 319 | 318 |
| Adjusted EBITDA | \$3,234 | \$3,362 | \$5,422 | \$4,795 | \$3,313 | \$359 | \$2,704 | \$3,260 | \$2,105 | \$2,546 | \$3,556 | \$1,035 | \$942 | \$698 |
| Sales | \$21,370 | \$24,149 | \$28,950 | \$29,280 | \$26,901 | \$18,439 | \$21,013 | \$24,951 | \$23,700 | \$23,032 | \$23,906 | \$6,239 | \$5,897 | \$5,573 |
| Adjusted EBITDA Margin | 15.1% | 13.9% | 18.7% | 16.4% | 12.3% | 1.9% | 12.9% | 13.1% | 8.9% | 11.1% | 14.9% | 16.6% | 16.0% | 12.5% |

Alcoa's definition of Adjusted EBITDA (Earnings before interest, taxes, depreciation, and amortization) 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'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.

Reconciliation of Alumina Adjusted EBITDA

| (\$ in millions, except per metric ton amounts) | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 3Q14 | 2Q15 | 3Q15 |
|---|--------------|----------------|----------------|----------------|----------------|--------------|--------------|----------------|--------------|--------------|--------------|--------------|--------------|--------------|
| After-tax operating income (ATOI) | \$632 | \$682 | \$1,050 | \$956 | \$727 | \$112 | \$301 | \$607 | \$90 | \$259 | \$370 | \$62 | \$215 | \$212 |
| Add: | | | | | | | | | | | | | | |
| Depreciation, depletion, and amortization | 153 | 172 | 192 | 267 | 268 | 292 | 406 | 444 | 455 | 426 | 387 | 100 | 77 | 71 |
| Equity (income) loss | (1) | – | 2 | (1) | (7) | (8) | (10) | (25) | (5) | 4 | 29 | 7 | 11 | 9 |
| Income taxes | 240 | 246 | 428 | 340 | 277 | (22) | 60 | 179 | (27) | 66 | 153 | 26 | 87 | 85 |
| Other | (46) | (8) | (6) | 2 | (26) | (92) | (5) | (44) | (8) | (6) | (28) | (2) | – | (1) |
| Adjusted EBITDA | <u>\$978</u> | <u>\$1,092</u> | <u>\$1,666</u> | <u>\$1,564</u> | <u>\$1,239</u> | <u>\$282</u> | <u>\$752</u> | <u>\$1,161</u> | <u>\$505</u> | <u>\$749</u> | <u>\$911</u> | <u>\$193</u> | <u>\$390</u> | <u>\$376</u> |
| Production (thousand metric tons) (kmt) | 14,343 | 14,598 | 15,128 | 15,084 | 15,256 | 14,265 | 15,922 | 16,486 | 16,342 | 16,618 | 16,606 | 4,196 | 3,977 | 3,954 |
| Adjusted EBITDA / Production (\$ per metric ton) | \$68 | \$75 | \$110 | \$104 | \$81 | \$20 | \$47 | \$70 | \$31 | \$45 | \$55 | \$46 | \$98 | \$95 |

Alcoa's definition of Adjusted EBITDA (Earnings before interest, taxes, depreciation, and amortization) 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. The Other line in the table above includes gains/losses on asset sales and other non-operating items. 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'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.

Reconciliation of Primary Metals Adjusted EBITDA

| (\$ in millions, except per metric ton amounts) | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 3Q14 | 2Q15 | 3Q15 | LTM 2015* |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------|--------------|----------------|--------------|--------------|------------|----------------|
| After-tax operating income (ATOI) | \$808 | \$822 | \$1,760 | \$1,445 | \$931 | \$(612) | \$488 | \$481 | \$309 | \$(20) | \$594 | \$245 | \$67 | \$(59) | \$462 |
| Add: | | | | | | | | | | | | | | | |
| Depreciation, depletion, and amortization | 326 | 368 | 395 | 410 | 503 | 560 | 571 | 556 | 532 | 526 | 494 | 124 | 109 | 106 | 441 |
| Equity (income) loss | (58) | 12 | (82) | (57) | (2) | 26 | (1) | 7 | 27 | 51 | 34 | – | 5 | 7 | 4 |
| Income taxes | 314 | 307 | 726 | 542 | 172 | (365) | 96 | 92 | 106 | (74) | 203 | 95 | 6 | (49) | 103 |
| Other | 20 | (96) | (13) | (27) | (32) | (176) | (7) | 2 | (422) | (8) | (6) | 1 | – | (2) | (5) |
| Adjusted EBITDA | <u>\$1,410</u> | <u>\$1,413</u> | <u>\$2,786</u> | <u>\$2,313</u> | <u>\$1,572</u> | <u>\$(567)</u> | <u>\$1,147</u> | <u>\$1,138</u> | <u>\$552</u> | <u>\$475</u> | <u>\$1,319</u> | <u>\$465</u> | <u>\$187</u> | <u>\$3</u> | <u>\$1,005</u> |
| Production (thousand metric tons) (kmt) | 3,376 | 3,554 | 3,552 | 3,693 | 4,007 | 3,564 | 3,586 | 3,775 | 3,742 | 3,550 | 3,125 | 760 | 701 | 700 | 2,843 |
| Adjusted EBITDA / Production (\$ per metric ton) | \$418 | \$398 | \$784 | \$626 | \$392 | \$(159) | \$320 | \$301 | \$148 | \$134 | \$422 | \$612 | \$267 | \$4 | \$353 |

* LTM 2015 refers to the twelve-month period ended September 30, 2015.

Alcoa's definition of Adjusted EBITDA (Earnings before interest, taxes, depreciation, and amortization) 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. The Other line in the table above includes gains/losses on asset sales and other non-operating items. 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'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.

Reconciliation of Global Rolled Products Adjusted EBITDA⁽¹⁾

| (\$ in millions, except per metric ton amounts) | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 ⁽²⁾ | 2011 ⁽²⁾ | 2012 ⁽²⁾ | 2013 | 2014 | 3Q14 | 2Q15 | 3Q15 |
|--|-------|-------|-------|-------|-------|--------|---------------------|---------------------|---------------------|-------|-------|-------|-------|-------|
| After-tax operating income (ATOI) | \$254 | \$278 | \$233 | \$178 | \$(3) | \$(49) | \$220 | \$266 | \$358 | \$292 | \$245 | \$69 | \$76 | \$62 |
| Add: | | | | | | | | | | | | | | |
| Depreciation, depletion, and amortization | 200 | 220 | 223 | 227 | 216 | 227 | 238 | 237 | 229 | 226 | 235 | 62 | 56 | 56 |
| Equity loss | 1 | – | 2 | – | – | – | – | 3 | 6 | 13 | 27 | 8 | 7 | 8 |
| Income taxes | 75 | 121 | 58 | 92 | 35 | 48 | 92 | 104 | 167 | 123 | 89 | 26 | 25 | 28 |
| Other | 1 | 1 | 20 | 1 | 6 | (2) | 1 | 1 | (2) | – | (1) | (1) | – | (1) |
| Adjusted EBITDA | \$531 | \$620 | \$536 | \$498 | \$254 | \$224 | \$551 | \$611 | \$758 | \$654 | \$595 | \$164 | \$164 | \$153 |
| Total shipments (thousand metric tons) (kmt) | 2,136 | 2,250 | 2,376 | 2,482 | 2,361 | 1,888 | 1,755 | 1,866 | 1,943 | 1,989 | 2,056 | 526 | 479 | 464 |
| Adjusted EBITDA / Total shipments (\$ per metric ton) | \$249 | \$276 | \$226 | \$201 | \$108 | \$119 | \$314 | \$327 | \$390 | \$329 | \$289 | \$312 | \$342 | \$330 |

⁽¹⁾ Effective in the second quarter of 2015, management removed the impact of metal price lag from the results of the Global Rolled Products segment in order to enhance the visibility of the underlying operating performance of this business. Metal price lag describes the timing difference created when the average price of metal sold differs from the average cost of the metal when purchased by this segment. The impact of metal price lag is now reported as a separate line item in Alcoa's reconciliation of total segment ATOI to consolidated net (loss) income attributable to Alcoa. As a result, this change does not impact the consolidated results of Alcoa. Segment information for all prior periods presented was updated to reflect this change.

⁽²⁾ The average Adjusted EBITDA per metric ton of these three years equals \$344 and represents the average historical high for the Global Rolled Products segment. Alcoa has a 2016 target to meet or exceed this average historical high.

Alcoa's definition of Adjusted EBITDA (Earnings before interest, taxes, depreciation, and amortization) 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. The Other line in the table above includes gains/losses on asset sales and other non-operating items. 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'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.

Reconciliation of Engineered Products and Solutions⁽¹⁾ Adjusted EBITDA⁽²⁾

| (\$ in millions) | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 3Q14 | 2Q15 | 3Q15 |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| After-tax operating income (ATOI) | \$144 | \$183 | \$237 | \$351 | \$465 | \$321 | \$355 | \$436 | \$484 | \$569 | \$579 | \$155 | \$165 | \$151 |
| Add: | | | | | | | | | | | | | | |
| Depreciation, depletion, and amortization | 118 | 114 | 111 | 114 | 118 | 118 | 114 | 120 | 122 | 124 | 137 | 32 | 54 | 61 |
| Income taxes | 81 | 86 | 128 | 186 | 225 | 159 | 182 | 224 | 248 | 286 | 298 | 78 | 81 | 71 |
| Other | (9) | (12) | 2 | 2 | 2 | 2 | – | – | – | – | – | 1 | 1 | – |
| Adjusted EBITDA | \$334 | \$371 | \$478 | \$653 | \$810 | \$600 | \$651 | \$780 | \$854 | \$979 | \$1,014 | \$266 | \$301 | \$283 |
| Third-party sales | \$2,643 | \$2,966 | \$3,406 | \$3,821 | \$4,215 | \$3,355 | \$3,225 | \$3,716 | \$3,863 | \$4,054 | \$4,217 | \$1,034 | \$1,279 | \$1,397 |
| Adjusted EBITDA Margin | 12.6% | 12.5% | 14.0% | 17.1% | 19.2% | 17.9% | 20.2% | 21.0% | 22.1% | 24.1% | 24.0% | 25.7% | 23.5% | 20.3% |

⁽¹⁾ In the third quarter of 2015, management approved a realignment of Alcoa's Engineered Products and Solutions segment due to the expansion of this part of Alcoa's business portfolio through both organic and inorganic growth. This realignment consisted of moving both the Alcoa Wheels and Transportation Products and Building and Construction Systems business units to a new reportable segment named Transportation and Construction Solutions. Additionally, the Latin American extrusions business previously included in Corporate was moved into the new Transportation and Construction Solutions segment. The remaining Engineered Products and Solutions segment consists of the Alcoa Fastening Systems and Rings (renamed to include portions of the Firth Rixson business acquired in November 2014), Alcoa Power and Propulsion (includes the TITAL business acquired in March 2015), Alcoa Forgings and Extrusions (includes the other portions of Firth Rixson), and Alcoa Titanium and Engineered Products (a new business unit that represents the RTI International Metals business acquired in July 2015) business units. Segment information for all prior periods presented was revised to reflect the new segment structure.

⁽²⁾ Effective in the second quarter of 2015, management removed the impact of metal price lag from the results of the Engineered Products and Solutions (now Engineered Products and Solutions and Transportation and Construction Solutions – see footnote 1 above) segment in order to enhance the visibility of the underlying operating performance of this business. Metal price lag describes the timing difference created when the average price of metal sold differs from the average cost of the metal when purchased by this segment. The impact of metal price lag is now reported as a separate line item in Alcoa's reconciliation of total segment ATOI to consolidated net (loss) income attributable to Alcoa. As a result, this change does not impact the consolidated results of Alcoa. Segment information for all prior periods presented was updated to reflect this change.

Alcoa's definition of Adjusted EBITDA (Earnings before interest, taxes, depreciation, and amortization) 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. The Other line in the table above includes gains/losses on asset sales and other non-operating items. 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'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.

Reconciliation of Transportation and Construction Solutions⁽¹⁾ Adjusted EBITDA⁽²⁾

| (\$ in millions) | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 3Q14 | 2Q15 | 3Q15 |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------|-------|-------|
| After-tax operating income (ATOI) | \$15 | \$94 | \$129 | \$94 | \$82 | \$5 | \$73 | \$109 | \$126 | \$167 | \$180 | \$50 | \$44 | \$44 |
| Add: | | | | | | | | | | | | | | |
| Depreciation, depletion, and amortization | 52 | 50 | 45 | 55 | 53 | 65 | 48 | 45 | 42 | 42 | 42 | 10 | 11 | 11 |
| Equity loss (income) | – | – | 6 | – | – | (2) | (2) | (1) | – | – | – | – | – | – |
| Income taxes | (15) | 30 | 27 | 7 | – | (21) | 18 | 38 | 49 | 67 | 69 | 20 | 17 | 18 |
| Other | 116 | 1 | (4) | (10) | – | – | – | (1) | (9) | (2) | – | 1 | (1) | (1) |
| Adjusted EBITDA | \$168 | \$175 | \$203 | \$146 | \$135 | \$47 | \$137 | \$190 | \$208 | \$274 | \$291 | \$81 | \$71 | \$72 |
| Third-party sales | \$1,754 | \$1,954 | \$2,204 | \$2,249 | \$2,270 | \$1,537 | \$1,656 | \$1,936 | \$1,914 | \$1,951 | \$2,021 | \$523 | \$492 | \$475 |
| Adjusted EBITDA Margin | 9.6% | 9.0% | 9.2% | 6.5% | 5.9% | 3.1% | 8.3% | 9.8% | 10.9% | 14.0% | 14.4% | 15.5% | 14.4% | 15.2% |

⁽¹⁾ In the third quarter of 2015, management approved a realignment of Alcoa's Engineered Products and Solutions segment due to the expansion of this part of Alcoa's business portfolio through both organic and inorganic growth. This realignment consisted of moving both the Alcoa Wheels and Transportation Products and Building and Construction Systems business units to a new reportable segment named Transportation and Construction Solutions. Additionally, the Latin American extrusions business previously included in Corporate was moved into the new Transportation and Construction Solutions segment. The remaining Engineered Products and Solutions segment consists of the Alcoa Fastening Systems and Rings (renamed to include portions of the Firth Rixson business acquired in November 2014), Alcoa Power and Propulsion (includes the TITAL business acquired in March 2015), Alcoa Forgings and Extrusions (includes the other portions of Firth Rixson), and Alcoa Titanium and Engineered Products (a new business unit that represents the RTI International Metals business acquired in July 2015) business units. Segment information for all prior periods presented was revised to reflect the new segment structure.

⁽²⁾ Effective in the second quarter of 2015, management removed the impact of metal price lag from the results of the Engineered Products and Solutions (now Engineered Products and Solutions and Transportation and Construction Solutions – see footnote 1 above) segment in order to enhance the visibility of the underlying operating performance of this business. Metal price lag describes the timing difference created when the average price of metal sold differs from the average cost of the metal when purchased by this segment. The impact of metal price lag is now reported as a separate line item in Alcoa's reconciliation of total segment ATOI to consolidated net (loss) income attributable to Alcoa. As a result, this change does not impact the consolidated results of Alcoa. Segment information for all prior periods presented was updated to reflect this change.

Alcoa's definition of Adjusted EBITDA (Earnings before interest, taxes, depreciation, and amortization) 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. The Other line in the table above includes gains/losses on asset sales and other non-operating items. 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'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.

Reconciliation of Free Cash Flow

| (in millions) | Year ended | | | | | Quarter ended | | |
|----------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|------------------------------|-------------------------|------------------------------|
| | December 31, <u>2010</u> | December 31, <u>2011</u> | December 31, <u>2012</u> | December 31, <u>2013</u> | December 31, <u>2014</u> | September 30, <u>2014</u> | June 30, <u>2015</u> | September 30, <u>2015</u> |
| Cash from operations | \$2,261 | \$2,193 | \$1,497 | \$1,578 | \$1,674 | \$249 | \$472 | \$420 |
| Capital expenditures | (1,015) | (1,287) | (1,261) | (1,193) | (1,219) | (283) | (267) | (268) |
| Free cash flow | \$1,246 | \$906 | \$236 | \$385 | \$455 | \$(34) | \$205 | \$152 |

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 due to the fact that these expenditures are considered necessary to maintain and expand Alcoa's asset base and are 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.

Days Working Capital

(\$ in millions)

| | Quarter ended | | | | | | | | | | | | | | |
|--|---------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--------------------------|--------------------------|--------------------------|
| | 31-Mar-12 | 30-Jun-12 | 30-Sep-12 | 31-Dec-12 | 31-Mar-13 | 30-Jun-13 | 30-Sep-13 | 31-Dec-13 | 31-Mar-14 | 30-Jun-14 | 30-Sep-14 | 31-Dec-14 | 31-Mar-15 ⁽³⁾ | 30-Jun-15 ⁽³⁾ | 30-Sep-15 ⁽³⁾ |
| Receivables from customers, less allowances | \$1,709 | \$1,650 | \$1,600 | \$1,573 | \$1,704 | \$1,483 | \$1,427 | \$1,383 | \$1,391 | \$1,401 | \$1,526 | \$1,513 | \$1,487 | \$1,548 | \$1,489 |
| Add: Deferred purchase price receivable ⁽¹⁾ | 85 | 144 | 104 | 53 | 50 | 223 | 347 | 339 | 238 | 371 | 438 | 395 | 389 | 421 | 382 |
| Receivables from customers, less allowances, as adjusted | 1,794 | 1,794 | 1,704 | 1,626 | 1,754 | 1,706 | 1,774 | 1,722 | 1,629 | 1,772 | 1,964 | 1,908 | 1,876 | 1,969 | 1,871 |
| Add: Inventories | 3,079 | 3,097 | 3,051 | 2,894 | 2,961 | 2,949 | 2,932 | 2,783 | 2,974 | 3,201 | 3,194 | 3,064 | 3,189 | 3,230 | 3,443 |
| Less: Accounts payable, trade | 2,660 | 2,594 | 2,496 | 2,587 | 2,656 | 2,820 | 2,746 | 2,816 | 2,813 | 2,880 | 3,016 | 3,021 | 2,936 | 2,978 | 2,871 |
| Working Capital ⁽²⁾ | \$2,213 | \$2,297 | \$2,259 | \$1,933 | \$2,059 | \$1,835 | \$1,960 | \$1,689 | \$1,790 | \$2,093 | \$2,142 | \$1,951 | \$2,129 | \$2,221 | \$2,443 |
| Sales | \$6,006 | \$5,963 | \$5,833 | \$5,898 | \$5,833 | \$5,849 | \$5,765 | \$5,585 | \$5,454 | \$5,836 | \$6,239 | \$6,377 | \$5,819 | \$5,897 | \$5,573 |
| Days Working Capital | 34 | 35 | 36 | 30 | 32 | 29 | 31 | 28 | 30 | 33 | 32 | 28 | 33 | 34 | 40 |

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

⁽¹⁾ The deferred purchase price receivable relates to an arrangement to sell certain customer receivables to several financial institutions on a recurring basis. Alcoa is adding back this receivable for the purposes of the Days Working Capital calculation.

⁽²⁾ The Working Capital for each period presented represents an average quarter Working Capital, which reflects the capital tied up during a given quarter. As such, the components of Working Capital for each period presented represent the average of the ending balances in each of the three months during the respective quarter.

⁽³⁾ In the quarters ended March 31, 2015, June 30, 2015, and September 30, 2015, Working Capital and Sales include \$279 and \$233, respectively, \$315 and 268 respectively, and \$708 and \$387, respectively, related to three acquisitions, Firth Rixson (November 2014), TITAL (March 2015), and RTI International Metals (July 2015). Excluding these amounts, Days Working Capital was 30, 31, and 31 for the quarters ended March 31, 2015, June 30, 2015, and September 30, 2015, respectively.

Reconciliation of Net Debt

(in millions)

| | December 31, | | | | | March 31, | June 30, | September 30, |
|---|--------------|---------|---------|---------|---------|-----------|----------|---------------|
| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2015 | 2015 |
| Short-term borrowings | \$92 | \$62 | \$53 | \$57 | \$54 | \$80 | \$50 | \$50 |
| Commercial paper | – | 224 | – | – | – | – | – | – |
| Long-term debt due within one year | 231 | 445 | 465 | 655 | 29 | 26 | 26 | 136 |
| Long-term debt, less amount due within one year | 8,842 | 8,640 | 8,311 | 7,607 | 8,769 | 8,711 | 8,713 | 9,091 |
| Total debt | 9,165 | 9,371 | 8,829 | 8,319 | 8,852 | 8,817 | 8,789 | 9,277 |
| Less: Cash and cash equivalents | 1,543 | 1,939 | 1,861 | 1,437 | 1,877 | 1,191 | 1,311 | 1,739 |
| Net debt | \$7,622 | \$7,432 | \$6,968 | \$6,882 | \$6,975 | \$7,626 | \$7,478 | \$7,538 |

Net debt is a non-GAAP financial measure. Management believes that this measure is meaningful to investors because management assesses Alcoa's leverage position after factoring in available cash that could be used to repay outstanding debt.

Reconciliation of Debt-to-Adjusted EBITDA Ratio

| (\$ in millions) | 2010 | 2011 | 2012 | 2013 | 2014 | 1Q15* | 2Q15* | 3Q15* |
|--|---------|---------|---------|-----------|---------|---------|---------|---------|
| Net income (loss) attributable to Alcoa | \$254 | \$611 | \$191 | \$(2,285) | \$268 | \$641 | \$643 | \$538 |
| Add: | | | | | | | | |
| Net income (loss) attributable to noncontrolling interests | 138 | 194 | (29) | 41 | (91) | (12) | 64 | 144 |
| Loss from discontinued operations | 8 | 3 | – | – | – | – | – | – |
| Provision for income taxes | 148 | 255 | 162 | 428 | 320 | 623 | 620 | 521 |
| Other expenses (income), net | 5 | (87) | (341) | (25) | 47 | 10 | 5 | (33) |
| Interest expense | 494 | 524 | 490 | 453 | 473 | 475 | 494 | 491 |
| Restructuring and other charges | 207 | 281 | 172 | 782 | 1,168 | 884 | 991 | 848 |
| Impairment of goodwill | – | – | – | 1,731 | – | – | – | – |
| Provision for depreciation, depletion, and amortization | 1,450 | 1,479 | 1,460 | 1,421 | 1,371 | 1,352 | 1,322 | 1,293 |
| Adjusted EBITDA | \$2,704 | \$3,260 | \$2,105 | \$2,546 | \$3,556 | \$3,973 | \$4,139 | \$3,802 |
| Total Debt | \$9,165 | \$9,371 | \$8,829 | \$8,319 | \$8,852 | \$8,817 | \$8,789 | \$9,277 |
| Debt-to-Adjusted EBITDA Ratio | 3.39 | 2.87 | 4.20 | 3.27 | 2.49 | 2.22 | 2.12 | 2.44 |

* The calculation of Adjusted EBITDA for the quarters ended March 31, 2015, June 30, 2015, and September 30, 2015 is based on the respective trailing twelve months.

Alcoa's definition of Adjusted EBITDA (Earnings before interest, taxes, depreciation, and amortization) 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'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.

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