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2nd Quarter Earnings Conference

July 8, 2015

Important Information

Forward-Looking Statements

This communication 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, end market conditions, supply/demand balances, and growth opportunities for aluminum in automotive, aerospace, and other applications; targeted financial results or operating performance; statements about Alcoa’s strategies, outlook, and business and financial prospects; and statements regarding the acceleration of Alcoa’s portfolio transformation, including the expected benefits of acquisitions, including the completed acquisition of the Firth Rixson business and TITAL, and the pending acquisition of RTI International Metals, Inc. (RTI). These statements reflect beliefs and assumptions that are based on Alcoa’s perception of historical trends, current conditions, and expected future developments, as well as other factors management believes are appropriate in the circumstances. Forward-looking statements are not guarantees of future performance and are subject to risks, uncertainties, and changes in circumstances that are difficult to predict. Important factors that could cause actual results to differ materially from those expressed or implied in the forward-looking statements include: (a) material adverse changes in aluminum industry conditions, including global supply and demand conditions and fluctuations in London Metal Exchange-based prices and premiums, as applicable, for primary aluminum, alumina, and other products, and fluctuations in indexed-based and spot prices for alumina; (b) deterioration in global economic and financial market conditions generally; (c) unfavorable changes in the markets served by Alcoa, including aerospace, automotive, commercial transportation, building and construction, packaging, defense, and industrial gas turbine; (d) the impact of changes in foreign currency exchange rates on costs and results, particularly the Australian dollar, Brazilian real, Canadian dollar, euro, and Norwegian kroner; (e) increases in energy costs or the unavailability or interruption of energy supplies; (f) increases in the costs of other raw materials; (g) Alcoa’s 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 its alumina refining and aluminum smelting businesses down on the industry cost curves and increasing revenues and improving margins in its Global Rolled Products and Engineered Products and Solutions segments) anticipated from its restructuring programs and productivity improvement, cash sustainability, technology, and other initiatives; (h) Alcoa’s inability to realize expected benefits, in each case as planned and by targeted completion dates, from acquisitions (including achieving the expected levels of synergies, revenue growth, or EBITDA margin improvement), sales of assets, closures or curtailments of facilities, newly constructed, expanded, or acquired facilities, or international joint ventures, including the joint venture in Saudi Arabia; (i) political, economic, and regulatory risks in the countries in which Alcoa operates or sells products, including unfavorable changes in laws and governmental policies, civil unrest, imposition of sanctions, expropriation of assets, or other events beyond Alcoa’s control; (j) the outcome of contingencies, including legal proceedings, government or regulatory investigations, and environmental remediation; (k) the impact of cyber attacks and potential information technology or data security breaches; (l) failure to receive the required votes of RTI’s shareholders to approve the merger of RTI with Alcoa, or the failure to satisfy the other closing conditions to the acquisition; (m) the risk that acquisitions (including Firth Rixson, TITAL and RTI) will not be integrated successfully or such integration may be more difficult, time-consuming or costly than expected; (n) the possibility that certain assumptions with respect to RTI or the acquisition could prove to be inaccurate, including the expected timing of closing; (o) the loss of customers, suppliers and other business relationships as a result of acquisitions, competitive developments, or other factors; (p) the potential failure to retain key employees of Alcoa or acquired businesses; (q) the effect of an increased number of Alcoa shares outstanding as a result of the acquisition of RTI; (r) the impact of potential sales of Alcoa common stock issued in the RTI acquisition; (s) failure to successfully implement, to achieve commercialization of, or to realize expected benefits from, new or innovative technologies, equipment, processes, or products, including the Micromill™, innovative aluminum wheels, and advanced alloys; and (t) the other risk factors discussed in Alcoa’s Form 10-K for the year ended December 31, 2014, and other reports filed with the 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. Nothing on Alcoa’s website is included or incorporated by reference herein.

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. Any reference to historical EBITDA means adjusted EBITDA, for which we have provided calculations and reconciliations in the Appendix. Alcoa has not provided a reconciliation of any forward-looking non-GAAP financial measure to the most directly comparable GAAP financial measure, 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.

Additional Information and Where to Find It

This communication does not constitute an offer to sell or the solicitation of an offer to buy any securities or a solicitation of any vote or approval nor shall there be any sale of securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction. The proposed business combination transaction between Alcoa and RTI will be submitted to the shareholders of RTI for their consideration. Alcoa has filed with the SEC a Registration Statement on Form S-4 (Registration No. 333-203275) containing a definitive proxy statement of RTI that also constitutes a prospectus of Alcoa, and RTI has mailed the proxy statement/prospectus to its shareholders. Alcoa and RTI also plan to file other documents with the SEC regarding the proposed transaction. INVESTORS AND SECURITY HOLDERS OF RTI ARE URGED TO READ THE PROXY STATEMENT/PROSPECTUS AND ANY OTHER RELEVANT DOCUMENTS FILED WITH THE SEC CAREFULLY AND IN THEIR ENTIRETY BECAUSE THEY CONTAIN IMPORTANT INFORMATION ABOUT THE PROPOSED TRANSACTION. You may obtain copies of all documents filed with the SEC regarding this transaction, free of charge, at the SEC's website (www.sec.gov). You may also obtain these documents, free of charge, from Alcoa's website (www.alcoa.com). You may also obtain these documents, free of charge, from RTI's website (www.rtiintl.com).

Participants in the Solicitation

Alcoa, RTI, and certain of their respective directors, executive officers and other members of management and employees may be deemed to be participants in the solicitation of proxies from RTI shareholders in connection with the proposed transaction. You can find information about Alcoa's executive officers and directors in its definitive proxy statement filed with the SEC on March 19, 2015, its Annual Report on Form 10-K filed with the SEC on February 19, 2015 and in the above-referenced Registration Statement on Form S-4. You can find information about RTI's executive officers and directors in the proxy statement/prospectus and in RTI's Annual Report on Form 10-K filed with the SEC on February 26, 2015. You can obtain free copies of these documents from Alcoa and RTI as described in the preceding paragraph.

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Klaus Kleinfeld

Chairman and Chief Executive Officer

July 8, 2015

Driving Solid Operational Results + Transformation On Track

2Q 2015 Overview

Driving Solid Operational Performance

- **Adjusted Earnings[1] up nearly 16% Driven by:**
  - *Downstream:* ***Record ATOI*** *of* ***$210*** *million, up 4%;* ***aerospace revenue up 29%*** *YoY*
  - *Midstream:* ***ATOI*** *of* ***$76*** *million, up 9%;* ***auto sheet revenue up ~180%*** *YoY*
  - *Upstream:* ***Solid Performance*** *in face of significant market headwinds*
    - *Alumina segment:* ***ATOI*** *of* ***$215*** *million;* ***Best First Half*** *ATOI result since 2007*
    - *Primary Metals segment:* ***ATOI*** *of* ***$67*** *million; as Midwest transaction* ***price lower*** *by* ***22%****, YTD 2015*
- **Productivity Gains: $324 million** across **all segments**
- **Free Cash Flow: $205 million; Cash from Operations $472 million**, after **$300 million prepayment** for gas supply contract
- **Cash on Hand:** $1.3 billion

Portfolio Transformation On Track

- **Firth Rixson** integration **on track**
  - ***$1.6 billion*** *revenue and* ***$350 million*** *EBITDA in 2016*
- **Obtained regulatory approvals** for **RTI** acquisition – *RTI Shareholder Vote July 21*
  - *Expected to* ***close*** *by end of July*
- **Micromill™: Qualification agreements** in place with **8 major automotive customers** from three continents
- **Progress** on **12-month** capacity **review: 2.8 MMT** Refining, **500 kmt** Smelting
  - ***Completed 12-year*** *Western Australia* ***Gas Supply*** *Contract*
  - ***Curtailed Suriname*** *alumina* ***refining*** *capacity and* ***São Luís*** *aluminum* ***smelting*** *capacity*
  - *Permanently* ***closed Poços de Caldas*** *primary aluminum smelter in Brazil*
  - ***Announced*** *permanent* ***closure*** *of Anglesea power station & coal mine in Australia*

1) Reported earnings of $140 million in 2Q15 vs 2Q14 of $138 million, up 1.4%. See appendix for adjusted earnings reconciliation.

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William Oplinger

Executive Vice President and Chief Financial Officer

July 8, 2015

Income Statement Summary

$ Millions, except aluminum prices and per-share amounts

	2Q14	1Q15	2Q15	Prior Year Change	Sequential Change
Realized Aluminum Price ($/MT)	$2,291	$2,420	$2,180	($111)	($240)
Revenue	$5,836	$5,819	$5,897	$61	$78
Cost of Goods Sold	$4,765	$4,443	$4,663	($102)	$220
COGS % Revenue	81.6%	76.4%	79.1%	(2.5 % pts.)	2.7 % pts.
Selling, General Administrative, Other	$245	$232	$224	($21)	($8)
SGA % Revenue	4.2%	4.0%	3.8%	(0.4 % pts.)	(0.2 % pts.)
Other Expenses (Income), Net	$5	($12)	-	($5)	$12
Restructuring and Other Charges	$110	$177	$217	$107	$40
Effective Tax Rate	37.7%	47.0%	26.6%	(11.1% pts.)	(20.4% pts.)
EBITDA	$776	$1,089	$942	$166	($147)
Net Income	$138	$195	$140	$2	($55)
Net Income Per Diluted Share	$0.12	$0.14	$0.10	($0.02)	($0.04)
Income excl Special Items	$216	$363	$250	$34	($113)
Income per Diluted Share excl Special Items	$0.18	$0.28	$0.19	$0.01	($0.09)

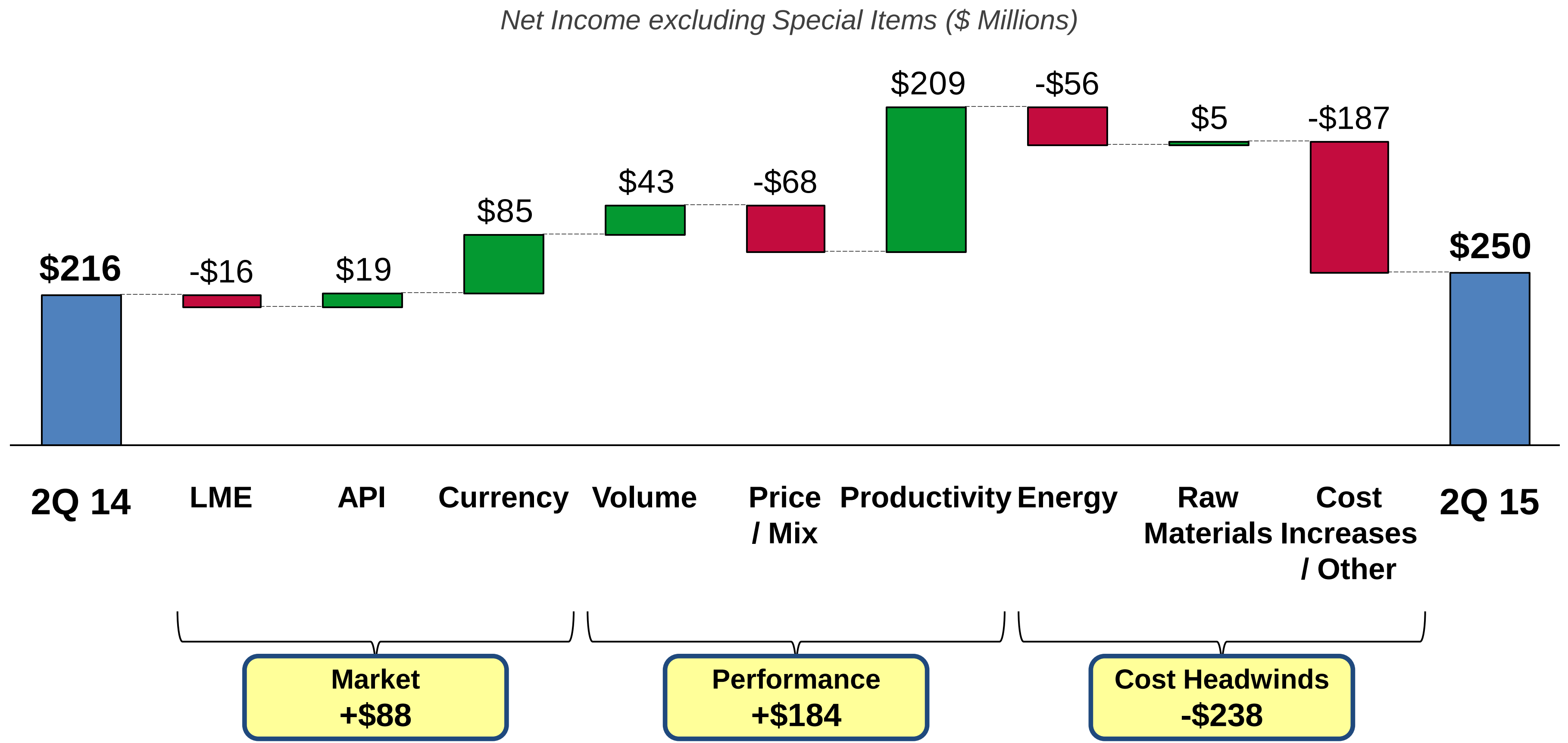
See appendix for EBITDA and Adjusted Income reconciliations.

Special Items

$ Millions, except per-share amounts	2Q14	1Q15	2Q15	Income Statement Classification	Segment
Net Income	**$138**	**$195**	**$140**		
Net Income Per Diluted Share	**$0.12**	**$0.14**	**$0.10**		
Restructuring-Related[1]	($54)	($158)	($143)	Restructuring and Other Charges/COGS	Corporate/ Primary Metals
Tax Items	($2)	($4)	$22	Income Taxes	Corporate/GRP
Gain on Land Sale	-	-	$19	Other Income, Net	Corporate
Acquisition Costs	($11)	($7)	($5)	SG&A	Corporate
Mark-to-Market Energy Contracts	$6	$1	($3)	Other Expenses (Income), Net	Corporate
Master U.S. Labor Agreement	($11)	-	-	COGS	Corporate/All
Saudi JV Potline Impact	($6)	-	-	COGS / Other Expenses, Net	Primary Metals
Special Items	**($78)**	**($168)**	**($110)**		
Net Income excl Special Items	**$216**	**$363**	**$250**		
Net Income per Diluted Share excl Special Items	**$0.18**	**$0.28**	**$0.19**		

GRP = Global Rolled Products. 1) Total restructuring-related charges in 2Q15 of $143 million (55 percent cash, 45 percent non-cash).
See appendix for Adjusted Income reconciliation

Adjusted Earnings Up nearly 16% on Performance and Market Factors



EPS: Record Second Quarter

2Q15 Actual and 3Q15 Outlook – Engineered Products and Solutions

2nd Quarter ATOI Results

	2Q 14	1Q 15*	**2Q 15***
3rd Party Revenue ($ Millions)	1,502	1,689	**1,733**
ATOI[1] ($ Millions)	202	194	**210**
EBITDA Margin[1]	22.9%	20.4%	**21.5%**

* Including Firth Rixson and TITAL.
* EPS Base Business EBITDA Margin[1]: 21.8% for 1Q15, 22.6% for 2Q15

2nd Quarter Business Highlights

- **Record second quarter ATOI, up 4% year-over-year**
- **Revenue up 15% year-over-year, EBITDA margin of 21.5%**
- **Revenue growth** driven by acquisitions and share gains **in aerospace,** somewhat offset by currency
- **Unfavorable currency** ATOI impact of **$11M, due to stronger U.S. dollar**
- **Firth Rixson Q2 EBITDA of $42M and EBITDA margin of 16.8%** (2014A full year EBITDA margin of 15.7%)
- Year-over-year ATOI **improvement** driven **by productivity, acquisitions,** strong **Aerospace and Commercial Transportation** revenues

2nd Quarter ATOI Performance Bridge

3rd Quarter Year-over-Year Outlook

- **Aerospace** market remains **strong**
- **Non-Residential Construction:** Continued **recovery in N.A., European weakness continues**
- **Continued strength** in **N.A. Heavy Duty Truck** build rates; gradual recovery in Europe
- **European summer slowdown** across all sectors
- **Firth Rixson** Savannah **press repair outage** (33k ton)
- **Share gains** through innovation & **productivity continue** across all sectors
- ➢ **ATOI** is expected to **increase 5%-10%**, including unfavorable **currency pressures of $9M**

1) Prior period amounts have been revised to remove impact of metal price lag. See appendix for additional information.
See appendix for EBITDA reconciliation.

GRP: Stronger Results on Performance and Volume

2Q15 Actual and 3Q15 Outlook – Global Rolled Products

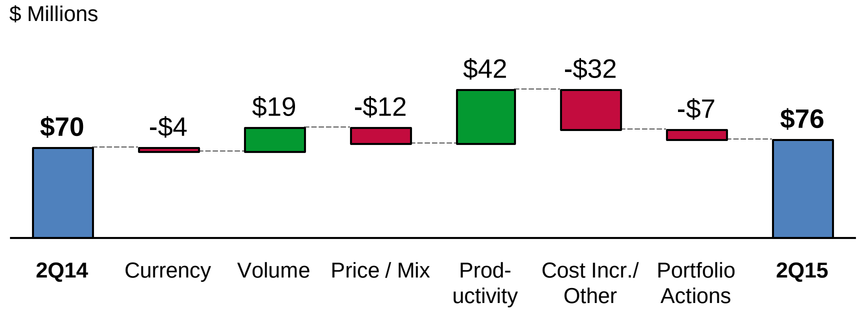
2nd Quarter ATOI Results

	2Q 14	1Q 15	**2Q 15**
3rd Party Revenue ($ Millions)	1,860	1,621	**1,668**
ATOI[1] ($ Millions)	70	54	**76**
EBITDA/MT[1] ($)	289	347	**342**

2nd Quarter Business Highlights

- **ATOI up 9%** and **EBITDA/MT up 18%,** year-over-year
- **Strong productivity** and **record Auto sheet revenue (up ~ 180% year-over-year)**
- Unfavorable **currency** impacts of **$4M**
- Russia negatively impacted by metal premiums and continued **pricing pressures** in **Packaging**
- Increased investments in **Micromill™** R&D and **Saudi** JV **ramp-up**

2nd Quarter ATOI Performance Bridge



3rd Quarter Year-over-Year Outlook

- **Auto and Aero demand** expected to **remain strong,** combined **with seasonal** volume increases in **Packaging**
- **Metal premium negatively impacts Russia** and **Packaging price pressures** expected to continue
- **European summer slowdown** in Commercial Transportation/Industrial
- **Continued investments** in the **Micromill™** and **Saudi** JV **ramp-up**
- ➢ **ATOI is expected to increase 5%-10%,** assuming **current currency** rates

1) Prior period amounts have been revised to remove impact of metal price lag. See appendix for additional information.
See appendix for EBITDA reconciliation.

Alumina Delivers Best First Half ATOI since 2007

2Q15 Actual and 3Q15 Outlook – Alumina

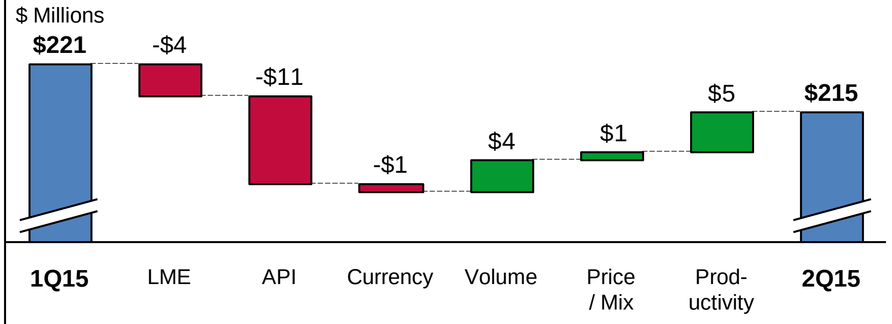
2nd Quarter ATOI Results

	2Q 14	1Q 15	**2Q 15**
Production (kmt)	4,077	3,933	**3,977**
3rd Party Shipments (kmt)	2,361	2,538	**2,706**
3rd Party Revenue ($ Millions)	761	887	**924**
3rd Party Price ($/MT)	318	344	**337**
ATOI ($ Millions)	38	221	**215**

2nd Quarter Business Highlights

- **Best first half ATOI since 2007**
- **Third-party shipments up,** primarily in Australia and Spain
- **Unfavorable API, LME** and **currency** movements
- **Benefit** from **volume increases** and **productivity improvements**
- **Gross productivity up $46M year-over-year**

2nd Quarter ATOI Performance Bridge



3rd Quarter Sequential Outlook

- **~75%** of 3rd party shipments on API or spot pricing for 2015
- **API** pricing follows **30-day lag**; **LME** pricing follows **60-day lag**
- **Production up 40 kmt** due to one additional day in the quarter
- **Saudi Arabia** refinery **reaching stability,** earnings **up $5M**
- **Productivity and volume improvements more than** offset energy and cost increases **by $15M**

Primary Metals Resilient Despite Strong Headwinds

2Q15 Actual and 3Q15 Outlook – Primary Metals

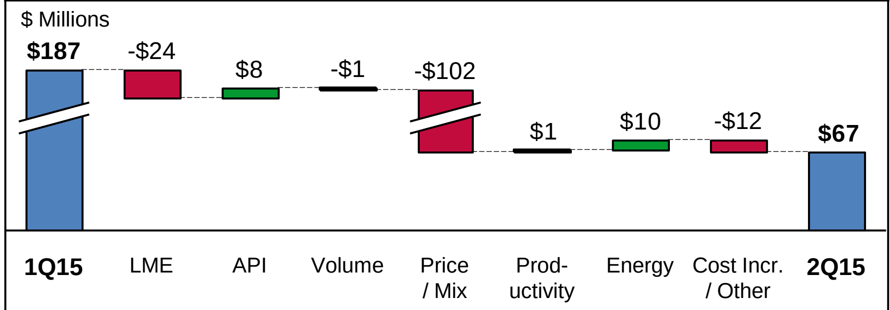
2nd Quarter ATOI Results

	2Q 14	1Q 15	**2Q 15**
Production (kmt)	795	711	**701**
3rd Party Shipments (kmt)	638	589	**630**
3rd Party Revenue ($ Millions)	1,659	1,572	**1,534**
3rd Party Price ($/MT)	2,291	2,420	**2,180**
ATOI ($ Millions)	97	187	**67**

2nd Quarter Business Highlights

- **Realized price declines ~10% sequentially,** largely driven by **lower regional premiums; ~22% drop in Midwest Transaction Price YTD**
- **Production down** due to **São Luís** curtailment
- **Favorable alumina and energy** costs; **cost increases** primarily from **closed/curtailed locations**
- **Gross productivity up $56M year-over-year**

2nd Quarter ATOI Performance Bridge



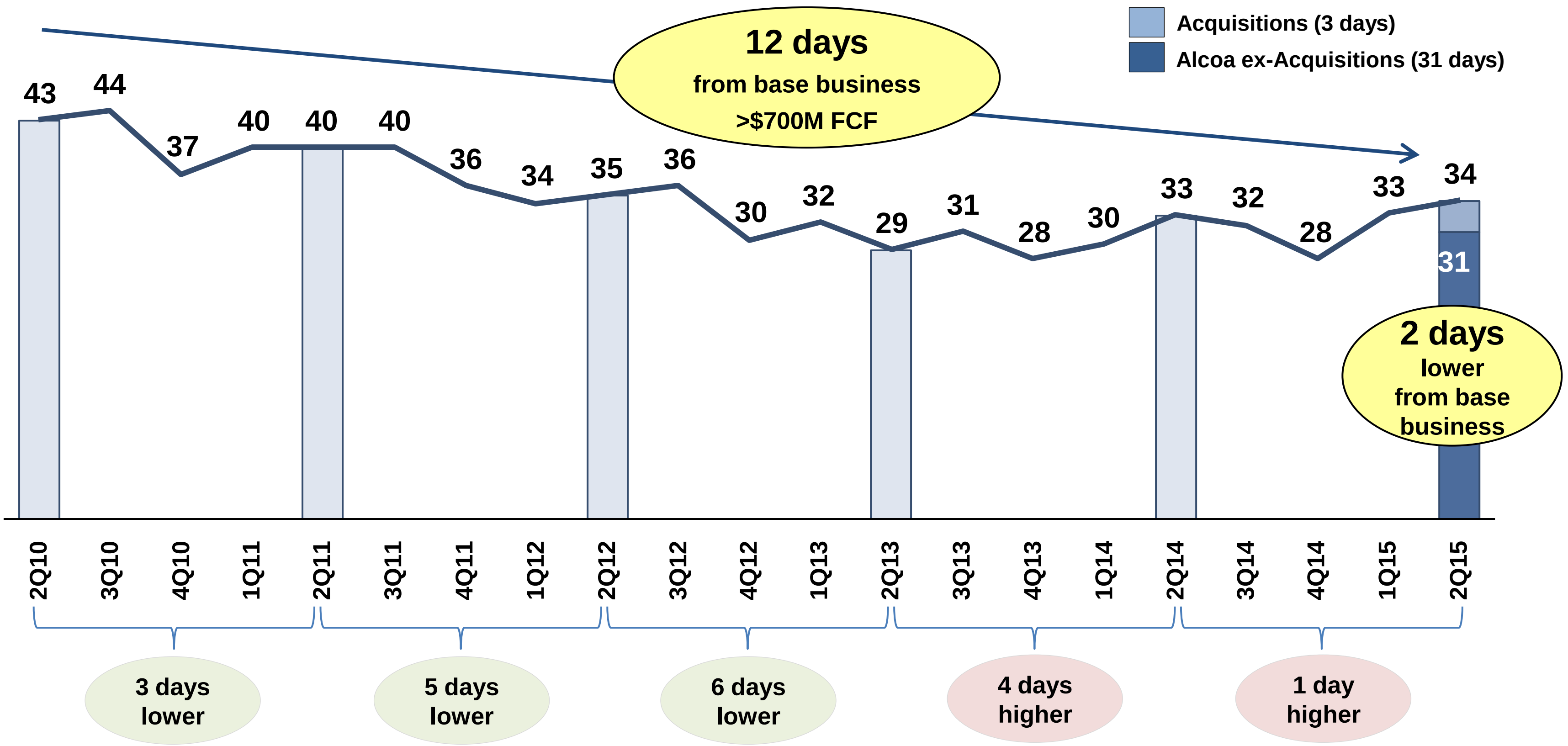
3rd Quarter Sequential Outlook

- **Pricing** follows a **15-day lag** to LME
- **Production up 10 kmt** due to one additional day in the quarter
- **Regional premium decline** impact of **$70M**[1]
- **Brazil energy sales** improve by **$10M**
- **Productivity and higher volume more than** offset energy and cost increases **by $8M**

1) Based on published prices as of July 8, 2015 for premiums; Midwest = 8.5c/lb, Euro Duty Paid = $190/MT, CIF Japan = $100/MT.

Base Business DWC Improved Year-over-Year, Acquisitions Add 3 days

Average Days Working Capital since Second Quarter 2010



FCF: Free Cash Flow. See appendix for days working capital reconciliation

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2nd Quarter 2015 Cash Flow Overview

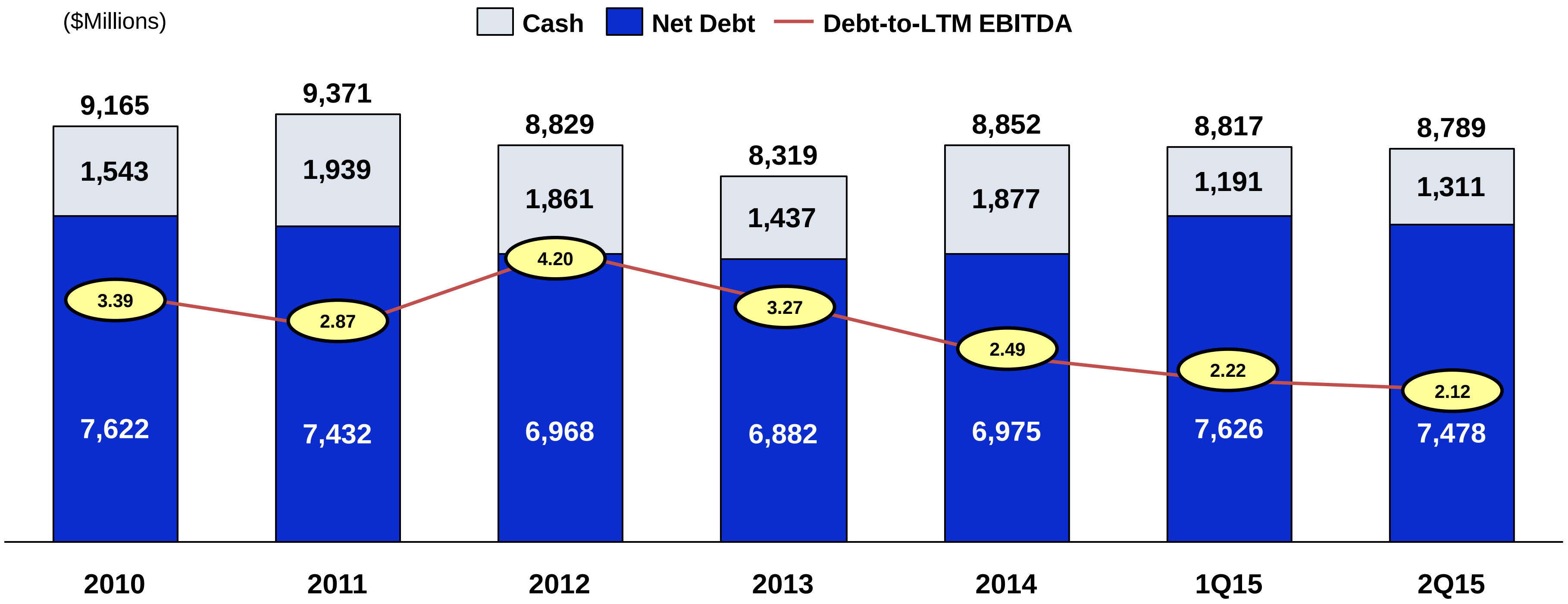
2Q14, 1Q15 and 2Q15 Cash Flow

($ Millions)	2Q14	1Q15	2Q15
Net Income before Noncontrolling Interests	$129	$255	$207
DD&A	$350	$321	$320
Change in Working Capital	$31	($595)	$44
Pension Expense in Excess of Contributions	($82)	$37	$37
Australian Gas Prepayment	-	-	($300)
Other Adjustments	$90	($193)	$164
Cash from Operations	**$518**	**($175)**	**$472**
Dividends to Shareholders	($36)	($54)	($55)
Change in Debt	$296	$24	($38)
Net (Distributions)/Contributions from Noncontrolling Interests	$4	($29)	($42)
Other Financing Activities	$17	$33	$2
Cash from Financing Activities	**$281**	**($26)**	**($133)**
Capital Expenditures	($258)	($247)	($267)
Acquisitions/Divestitures/Asset Sales	$1	($212)	$67
Other Investing Activities	($29)	($6)	($20)
Cash from Investing Activities	**($286)**	**($465)**	**($220)**
Free Cash Flow	**$260**	**($422)**	**$205**
Cash on Hand	**$1,183**	**$1,191**	**$1,311**

See appendix for Free Cash Flow reconciliation

Maintained Strong Balance Sheet

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



LTM = last twelve months; See appendix for Net Debt and LTM EBITDA reconciliations.

Maintaining Our 2015 Financial Targets

2015 Annual Financial Targets and Year-to-Date Results

Taking the Right Actions

	YTD:
Drive Productivity Gains of $900M	$562M ✓
Manage Return-Seeking Capital of $750M	$283M ✓
Control Sustaining Capital of $725M	$240M ✓
Attain 2.25 to 2.75 Debt-to-EBITDA	2.12 ✓

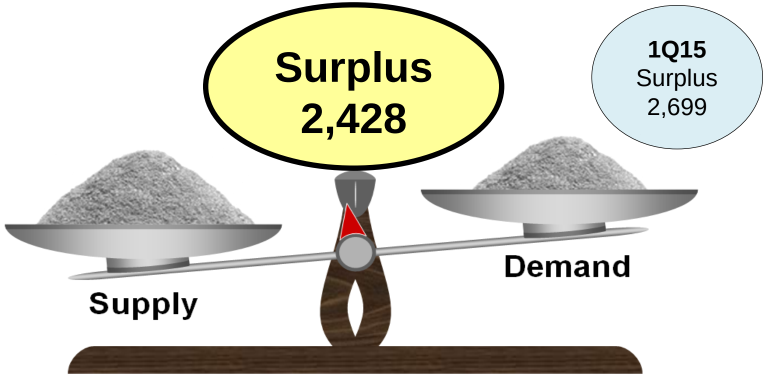
Overarching 2015 Financial Target

Generate $500M Free Cash Flow

Alumina Surplus Tightens; Pricing Steady

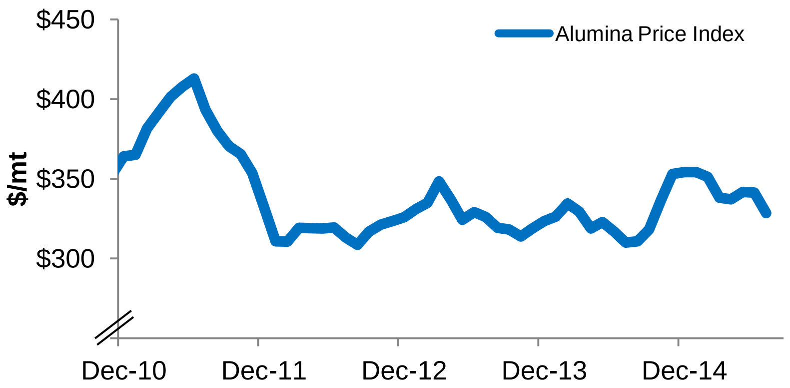
2015E Alumina Supply/Demand, Alumina Price Index (API) and % Third-Party Shipments

2015E Alumina Supply/Demand Balance

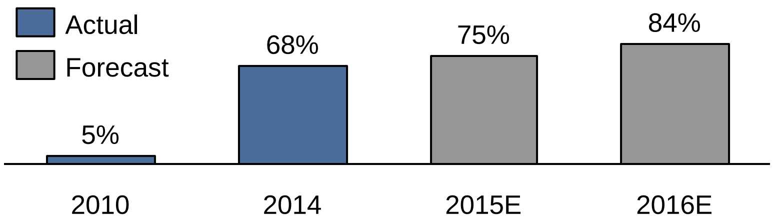


’000 mt	China	Rest of World
2015 Production	51,567	54,921
2015 Production to be added	5,830	2,523
2015 Capacity curtailed or restarted	0	(350)
Imports/(exports)	3,200	(3,200)
Total supply	60,597	53,894
Demand	(60,597)	(51,466)
Net Balance	**0**	**2,428**

Alumina Price Index



API/Spot[1] as % of 3rd Party Shipments

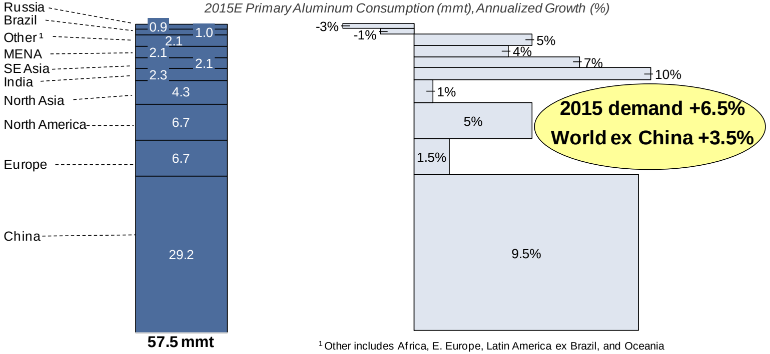


Source: Alcoa analysis, Brook Hunt, CRU, CNIA, NBS, Chinese Customs

1) Smelter Grade Alumina % of 3rd party shipments on API/Spot pricing.

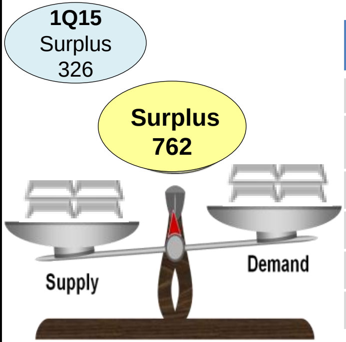
Aluminum Market Fundamentals are Mixed

6.5% 2015E Demand Growth



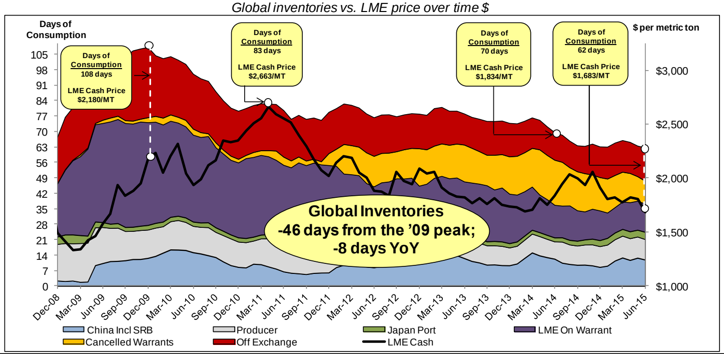
[1] Other includes Africa, E. Europe, Latin America ex Brazil, and Oceania

2015E Aluminum Supply/Demand Balance

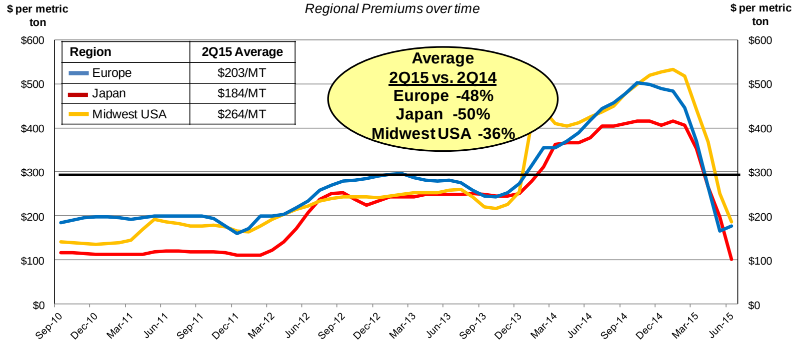


'000 mt	China	Rest of World
2015 Production	29,579	26,280
2015 Production to be added	2,819	719
2015 Capacity curtailed	(1,000)	(155)
Total Supply	31,398	26,844
Demand	(29,171)	(28,309)
Net Balance	**2,227**	**(1,465)**

Global Inventories Fall to 62 days; -8 days YoY



Regional Premiums through 2Q 2015



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ALCOA

Klaus Kleinfeld

Chairman and Chief Executive Officer

July 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

- **Shift** from **2015 to 2016** on slower new platform ramp-up (mainly A350 and CSeries); **2016/2017** growth rates **nearly double** prior fcst.(+8% 2016 vs. +4-5% prior; +13% 2017 vs. 6% prior)
- **Paris Air Show + Chinese Premier Li visit to France secured $125B orders/commitments** for Airbus and Boeing (exceeding the $116B during Farnborough 2014)
- **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

2% to 4% Global production growth

NA 1% to 4%
- **Strong Sales:** U.S. sales **+4.4% YTD** (8.5M vehicles), **led by Light Trucks**
- **Production Up: +1.7% YTD**
- **Inventory Flat: 60 days**, +1 day YoY (industry target is 60-65 days)
- **Incentives Up: +4.7% YoY** ($2,877/unit), driven by Passenger Cars +12.4% YoY
- **Avg. Transaction Price Up: +2.5% YoY** at $33,340, driven by Light Trucks

EU -1% to +3%
- **Production Flat: +1.3% YTD**; W. Eur improves, offsetting further decline in Russia
- **Registrations: +6.8% YTD**; **Exports +1.6%** vs. prior year (2015 forecast)

China 5% to 8%
- **Production: +5.1% YTD** (9.9M vehicles); **Sales +4.0% YTD**
- **Moderated growth** driven by **increasing middle class, affordability**, and **Clean Air Act**

Source: Alcoa analysis 1) International Air Transport Association 2015 Expectations
N.A. Auto sales, inventory, incentives, avg. transaction price as of Jun. 2015; Production as of May 2015. Europe and China YTD data as of May 2015

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

Alcoa End Markets: Current Assessment of 2015 vs. 2014

End Market	2015 Growth	Region	Global and Regional Commentary
Heavy Duty Truck and Trailer 	**-4% to -6%** Global production decline	**NA** 9% to 11% (up)	• **OEM supply chain supporting higher than expected build rates in 2Q15** • **Peaking Production: +18.7% YTD** at 137k trucks • **Large Order Book: +42% YoY** at 169k trucks; Remains **above 10 year avg** of **101k** • **Decreasing Orders: -8.6% YTD**, after **record 4Q14 orders** • **Solid Fundamentals:** +2.3% Freight ton miles (YTD); +54% Fleet profitability (1Q15 YoY)
		EU -2% to 0% (down)	• **Increasing Production: W.Eur +5.2% YTD** • **Improving conditions in W.Eur: Orders +12.2% YTD, Registrations +17.8% YTD**
		China -14% to -16% (down)	• **Production Down: -34.1% YTD**; Strong pull-ahead demand in 2014 due to stage IV regulations; 2H15 forecasted to normalize from regulatory conditions
Packaging 	**2% to 3%** Global sales growth	**NA** -1% to -2% (down)	• **Demand decline:** Weakness (-2.5% YTD) in **Carbonated Soft Drinks** (CSD) • **Moderate growth** in **Beer Segment** (+0.5% YTD) to partially offset CSD
		EU 1% to 2% (up)	• **Growth** led by Steel to **Aluminum conversion** in **Western Europe**, partially offset by declines in **Eastern Europe**
		China 8% to 12% (up)	• **Growth** driven by continued **penetration of Aluminum** in **Beer** segment

Source: Alcoa analysis. Heavy Duty Truck: YTD and YoY data for production, order book, freight miles, and EU registrations as of May 2015; YTD orders data as of June 2015. Packaging: YTD figures as of May 2015.

Solid Commercial B&C Growth; Global Airfoil Market Improves

Alcoa End Markets: Current Assessment of 2015 vs. 2014

End Market	2015 Growth	Region	Global and Regional Commentary
Building and Construction 	**5% to 7%** Global sales growth (↑)	**NA** 4% to 5% (↑)	***Positive Early Indicators:*** • **Non-Residential Contracts Awarded: +13.6%** in May (mean of 12-month rolling average) • **Architectural Billing Index: Positive** at **51.9** in May • **Case-Shiller Home Price Index: +4.1% YoY** Mar; Growth moderated since 1Q14 (10%+)
		EU -2% to -3% (↓)	• Decline as **weakness continues**, outlook varies across markets
		China 6% to 8% (↑)	• **Market drivers** continue to be **relatively stable** • **Slower industrial production growth** at **+6.1% YoY** May
Industrial Gas Turbines 	**1% to 3%** Global airfoil market growth (↑)		• Market moving towards **higher value product** as customers develop **new, high efficiency** turbines with **advanced technology** • **U.S. (60 Hz) gas-fired generation +19.5% YTD** April driving strong demand for **spares** and **component upgrades** on existing turbines • **Tempered by EU (50 Hz)** demand which remains soft due to **subsidized renewables**

Transforming Alcoa – Creating Compelling Sustainable Value

Building a Lightweight Multi-Material Innovation Powerhouse

- **Increasing share** in **exciting** growth **markets**
  e.g., aerospace, automotive, heavy duty truck and trailer, building and construction
- **Full pipeline** of innovative products and solutions
- Using all **growth levers**
  e.g., Alcoa Advantage
- **Shifting** mix to **higher value-add**
- **Expanding multi-material,** technology and process **expertise**

Creating a Globally Competitive Commodity Business

- **Increasing competitiveness, mitigating** downside **risk**
- **Optimizing** the **casthouse value-add** portfolio
- **Shifting pricing** to reflect market fundamentals
- Continuing to drive **productivity improvements**

Investments Position Alcoa as a Premier Aerospace Solutions Provider

2014 Pro forma[2] Aerospace Revenue ~$5.6B

Organic and Inorganic Aerospace Investments Increase Multi-Material, Multi-Platform Offerings

Organic Growth Through Innovation

Jet Engines

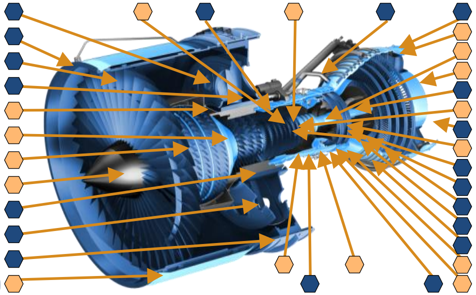
- **Hampton[1]:** Enhanced blade performance; cuts blade weight by 20%, **improved aerodynamics**
- **LaPorte[1]:** Expands Ni structural castings to large commercial **jet engines**
- **Whitehall[1]:** Advanced coatings, high-temperature protection; **hot-isostatic press** for Ti, Ni, and 3D-printed jet engine parts
- **Lafayette:** World's first **Al-Li fan blade**

Airframe Structures

- **Davenport[1]:** World's largest stretcher for **monolithic ribs**
- **Lafayette:** World's largest **Al-Li** casthouse (20 kmt)
  - Grows Al-Li capabilities
  - Largest Al-Li ingot; slabs **~50% larger** than nearest competitor
- **Carson:** Flite-tite® fasteners, **lightning-strike** management

Inorganic Investments in Robust Aerospace Market

FR Doubles Engine Content



Can Produce >90% of Structural and Rotating Components

(e.g., turbine blades and vanes, structural castings, rings, discs, shafts, fasteners and front fan blades)

Multi-Material

- ***Ni and Ti-Al in hot section***
- ***Ti, Al and Steel in cold section***

RTI[3]+TITAL Complement Value Chain[4]

ALCOA + RTI International Metals, Inc. + TITAL

Midstream

Melting
(Ingot, Cast Slab)

Billetizing, Rolling
(Mill Products)

Downstream

Conversion
(Closed-Die Forging, Extruding, Investment Casting)

Machining, Subassembly

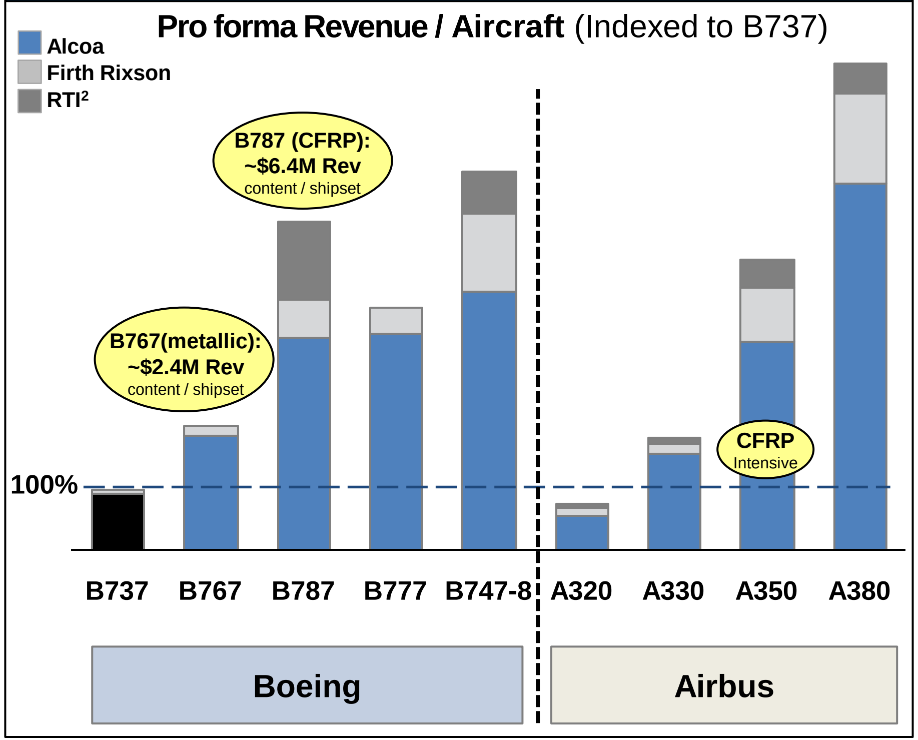
Capabilities: None, Limited, Moderate, Significant, Full

FR = Firth Rixson. 1) Estimated completion for Hampton/LaPorte by 4Q 2015, Whitehall HIP in 2016 and Davenport in 2017. 2) Pro forma includes EPS, FR, Tital and RTI. 3) RTI close expected by end of July, subject to RTI shareholder approval. 4)Represents mid & downstream capabilities, not market position.

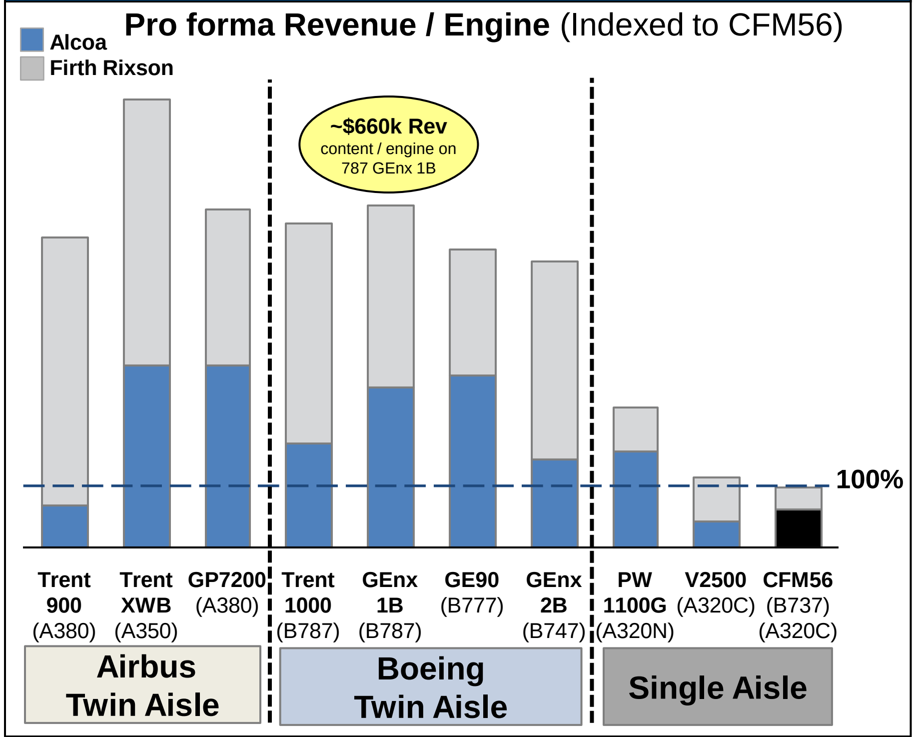
Positioned on Every Large Commercial Aircraft, Regardless of Material

Indexed Revenue by Aircraft Type and Key Engine Type[1]

Strong Revenue Generator on All Platforms



Better Coverage of Key Engine Platforms



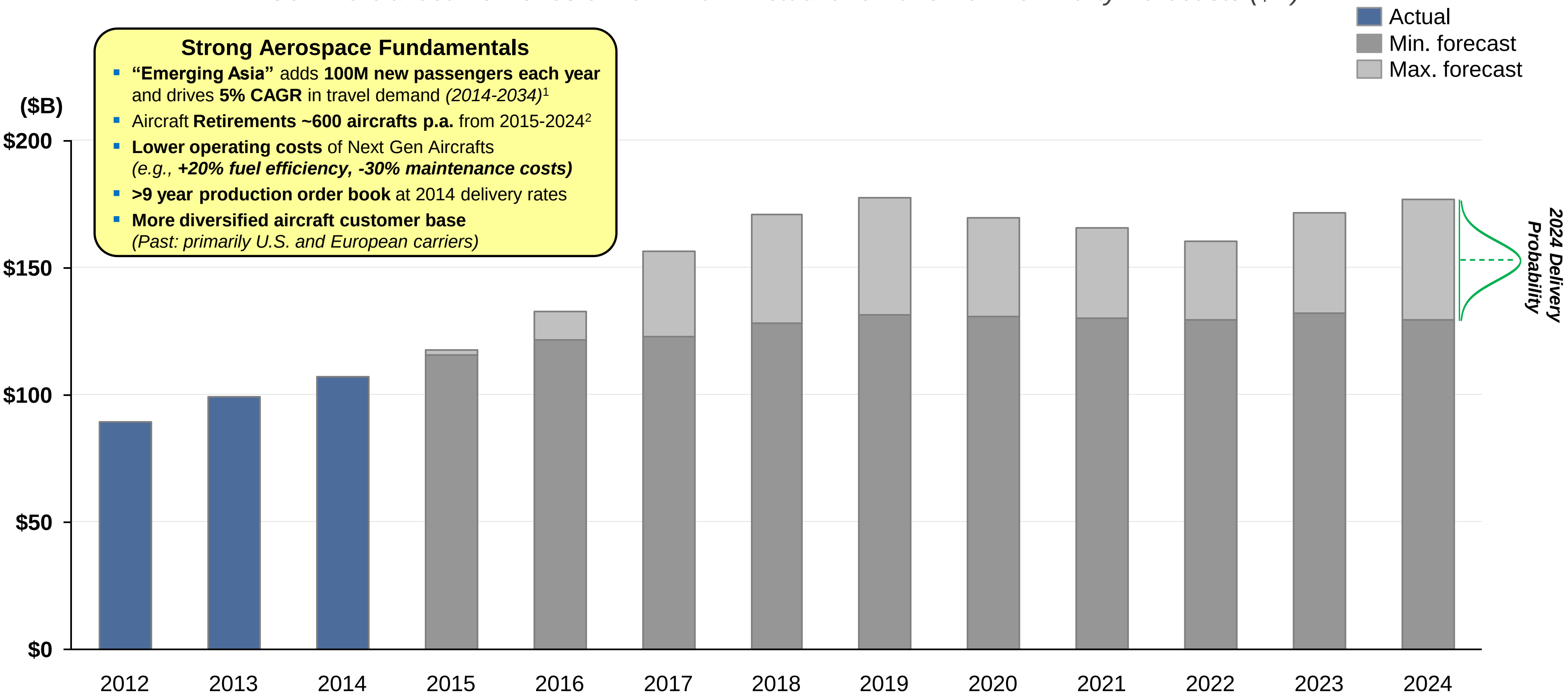
CFRP = Carbon Fiber Reinforced Polymer. 1) A320NEO and 737MAX aircrafts as well as GE Leap-X engine not included as contract negotiations ongoing. 2) Estimated RTI content; RTI close expected by end of July, subject to RTI shareholder approval.

Robust Aerospace Fundamentals

Commercial Jet Deliveries of 2012-2014 Actual and 2015-2024 3rd Party Forecasts ($B)

Strong Aerospace Fundamentals

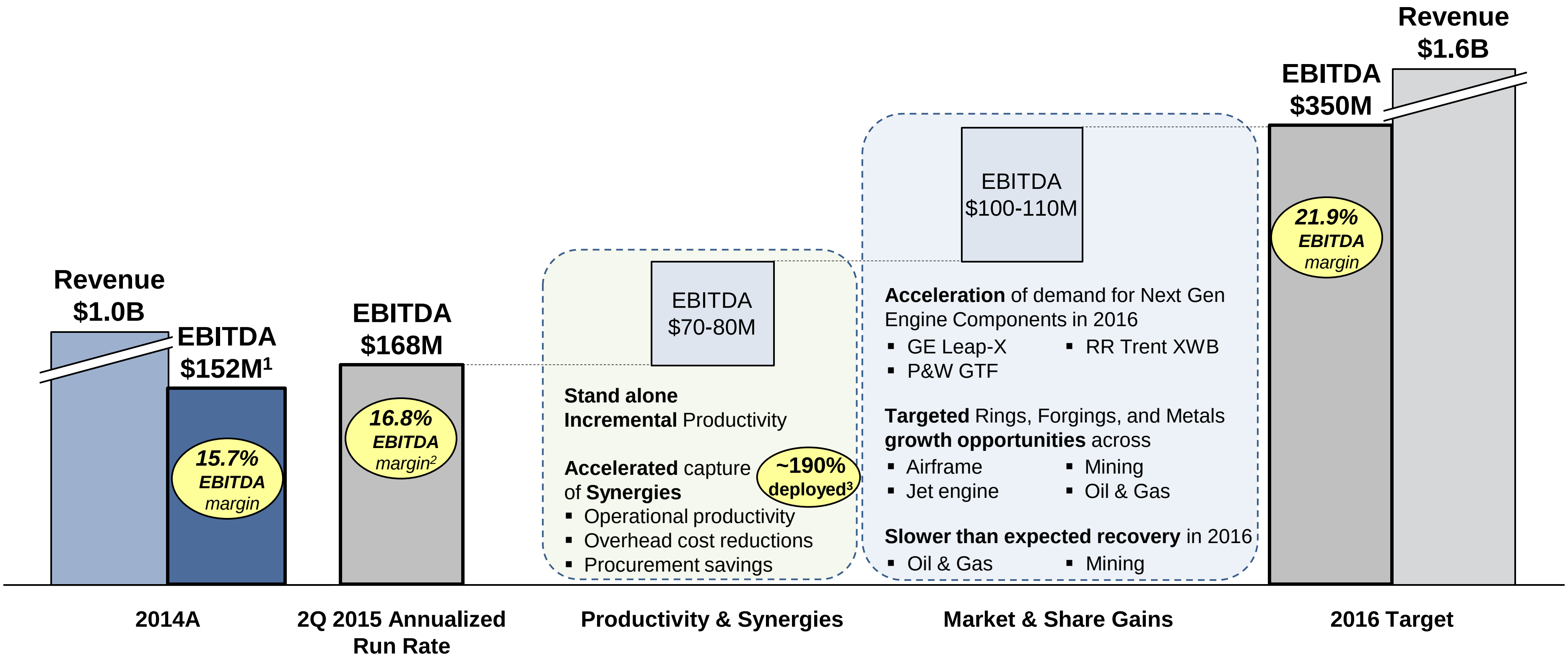
- **"Emerging Asia"** adds **100M new passengers each year** and drives **5% CAGR** in travel demand *(2014-2034)*[1]
- Aircraft **Retirements ~600 aircrafts p.a.** from 2015-2024[2]
- **Lower operating costs** of Next Gen Aircrafts *(e.g., **+20% fuel efficiency, -30% maintenance costs)***
- **>9 year production order book** at 2014 delivery rates
- **More diversified aircraft customer base** *(Past: primarily U.S. and European carriers)*



Source: The Airline Monitor June 2015, Teal Group April 2015, and Forecast International April 2015.
Forecasted values are in 2015 constant dollars. 1) Boeing Current Market Outlook 2015. 2) The Airline Monitor June 2015.

Firth Rixson Integration – On Track to Achieve 2016 Targets

2014 Actual and 2016 Target Revenue and EBITDA and 2Q 2015 EBITDA Annualized Run Rate to 2016 EBITDA Target



1) Firth Rixson unaudited financials. 2) 2Q 2015 Actual. 3) Deployed versus 2016 target, gross synergies of $44M offset by $4M integration costs.

RTI Acquisition On Track for End of July Close

Net Synergies
$100M[4]
30% in year 2
100% in year 4

Highlights of RTI Acquisition, Closing Progress and Synergy Preparation

Enhances Offerings: Expands Ti, Value-Add Solutions

Strategic Merits

- **Builds value-add** portfolio;
  Expands further into **high-performance** metals
- **Expands range** of midstream and downstream **titanium supply chain** capabilities
- **Captures growth** from **long-term agreements** and **Advanced Technologies**

Transaction Overview

- **Fixed Exchange Ratio:** 2.8315 AA shares per RTI share[1]
- **Enterprise Value[1]:** $1.5B reflecting:
  - **~ $1.3B** equity issuance [~89M shares]
  - **$517M** convertible senior notes (2015[2] & 2019)
  - **$330M** of RTI cash on hand
- **Accretion:** 1st full year in 2017[3]
- **Returns:** In excess of Cost of Capital

Targeting End of July Close

- **Approvals on track:**

U.S.	✔
Europe	✔
RTI Shareholder Vote (July 21, 2015)	☐

2019 Target:
$1.2B revenue
25% EBITDA margin

Identified 2019 RTI Gross Synergies

Operational Productivity ***$44M***	▪ Maximize internal metal supply ▪ Decrease outsourced machining ▪ Increase utilization of capacity *(e.g., melting, billetizing, rolling, machining)* ▪ Optimize revert metal loop
Procurement Savings ***$20M***	▪ Leverage Alcoa's $18B global spend *(e.g., commodities, production, maintenance supplies)* ▪ Standardize payment terms
Overhead Cost Reductions ***$20M***	Integrate Shared Services Center of Excellence ▪ *Finance* ▪ *Information Technology* ▪ *Credit* ▪ *Human Resources*
Growth ***$25M***	▪ Expand selection of machined parts *(e.g., plate, forgings, extrusions)* ▪ Migrate from Ti ingot directed buy programs ▪ Offer Ti-Al for high-growth engine components

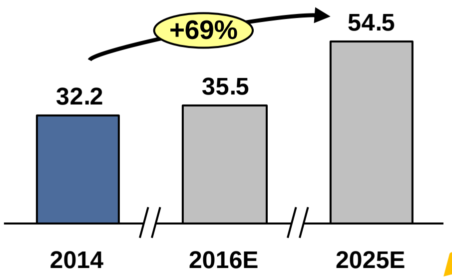
1) Fixed exchange ratio based on market close price as of March 6, 2015; Enterprise value as of March 6, 2015. 2) As a result of the acquisition, Alcoa assumes $114.4M convertible senior notes due 2015 of which holders have the right to elect to convert to common stock within 35 trading days post-close. 3) As of July 8, based on current market conditions and phased-in synergies . 4) Figure reflects net synergies after $9M integration costs.

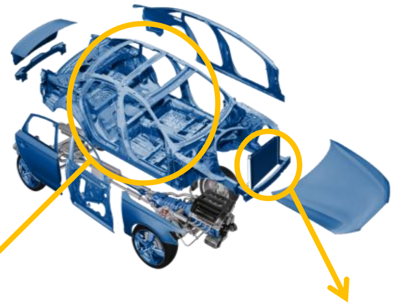
GRP: Lightweighting Trend Drives Substantial Automotive Growth

Automotive Demand Drivers for Auto & Brazing Sheet and Alcoa Automotive 2014-2018 Revenue

OEMs Need Fuel Economy and Consumer Benefits

U.S. CAFE Regulations (MPG)





Auto Sheet

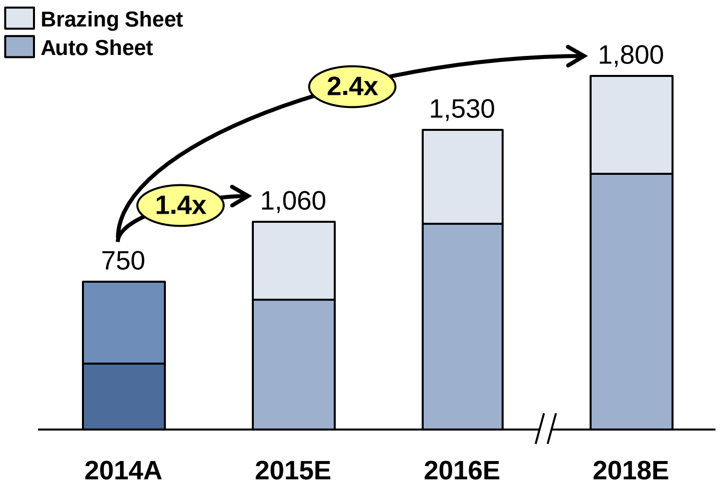
- ✓ Reduced **fuel** consumption: **Δ9 MPG $916**/yr **savings**[1]
- ✓ Additional **payload** / **towing capacity** (e.g., 700 lbs on F-150)
- ✓ **Faster** acceleration; Improved **braking distance**

Brazing Sheet

- ✓ Reduced heat exchanger **size and weight** up to 25%
- ✓ ~3% new auto sales **growth**
- ✓ **Higher content growth per vehicle** from adoption of turbo charged engines: **80% by 2025** from 17% in 2013[2]

Auto & Brazing Sheet: Profitable Growth

Automotive Revenue ($M)



Result:

- ***Auto Sheet Shipments: ~65% CAGR (2013-2016E)***
- ***Automotive Revenue: 10% of GRP in 2014A to 20% in 2016E***
- ***Brazing Sheet Revenue Doubled and Profits Tripled (2011-2014)***

GRP = Global Rolled Products. CAFE=Corporate Average Fuel Economy. 1) Annual Savings = ((15,000 Hwy Miles/Yr ÷ 17 Hwy MPG) – (15,000 Hwy Miles/Yr ÷ 26 Hwy MPG)) x $3/gal. 2) Alcoa Analysis and Environmental Protection Agency, October 2014.

GPP: New Global Business Structure Maximizing Profits

12-month Capacity Review[1] 2.8 MMT Refining and 500 kmt Smelting

2010 and 2014 Actual and 2016 Target Cost Curve Positions and Global Business Unit 2Q15 Updates

Alumina

30th (2010) → 25th (2014) → 21st (2016)

Target **-9% points** cost position

Primary Metals

51st (2010) → 43rd (2014) → 38th (2016)

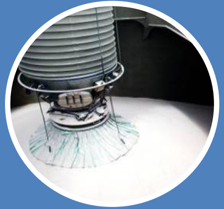
Target **-13% points** cost position

MINING

Explore opportunities in external markets

- ✓ Saudi JV mine **99% complete**
- ✓ **Shipped** Western Australian bauxite **samples to 6** customers for testing

REFINING



Improve competitiveness; Transform pricing

- ✓ **Curtailed** Suralco
- ✓ **Completed** 12-year Western Australia Gas Supply Contract
- ✓ **1.1 MMT** Saudi JV 2015 production **on track**
- ✓ **$15/mt** lower on cost curve[2]

ENERGY

Leverage assets; Secure long-term solutions

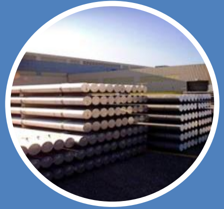
- ✓ **Revised** Intalco BPA power contract
- ✓ Announced **permanent closure** of Anglesea power station & coal mine (by 8/31/2015)

SMELTING

Lower cost; Enhance operational excellence

- ✓ **Curtailed** São Luís
- ✓ Announced **permanent closure** of Poços
- ✓ 740 kmt Saudi JV 2015 production **on track**
- ✓ **$50/mt** lower on cost curve[2]
- ✓ **$435/mt** reduced cost[3]

CASTING



Grow value-add product mix

- ✓ Innovative **new foundry alloys** for automotive launched in April 2015
- ✓ **Upgrading** Baie-Comeau casthouse to meet **automotive demand**

GPP=Global Primary Products. BPA = Bonneville Power Administration. Cost Curve targets represent percentile. Source: CRU and Alcoa analysis.
1) Announced March 6, 2015. 2) Relative to market cash cost curve from 2010-2014. 3) Reflects Alcoa's change in production cash cost; 3Q08-2Q15: $435/mt lower cash cost vs. $362/mt lower cash cost from 3Q08-3Q14.

Creating Sustainable Value for Shareholders

Continue to Deliver Improved Operational Results

Capture Value Add Market Share from Our Investments

Drive Continued Upstream Competitiveness

Additional Information

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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

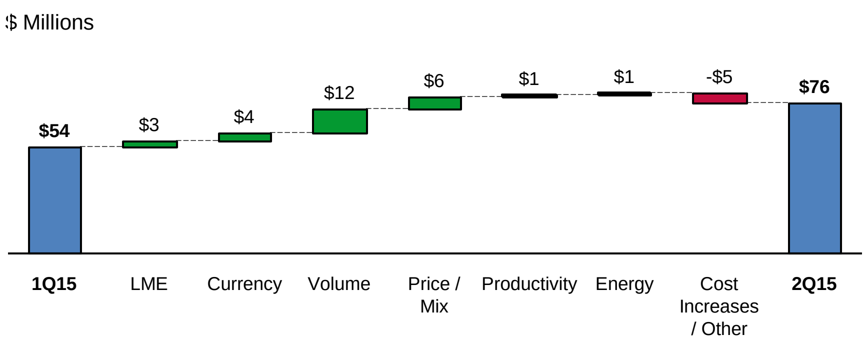
Composition of Regional Premium Pricing Convention

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

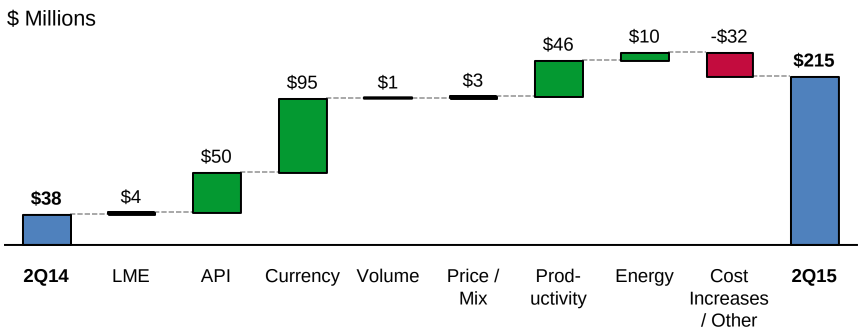
Second Quarter 2015 Supplemental Segment Bridges

EPS Sequential Quarter Bridge

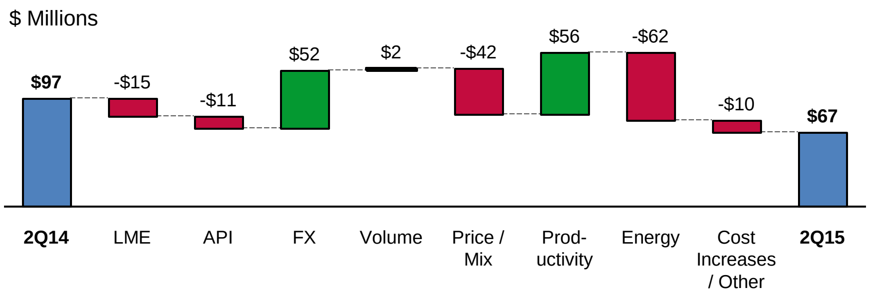
GRP Sequential Quarter Bridge



Alumina Year-over-Year Bridge



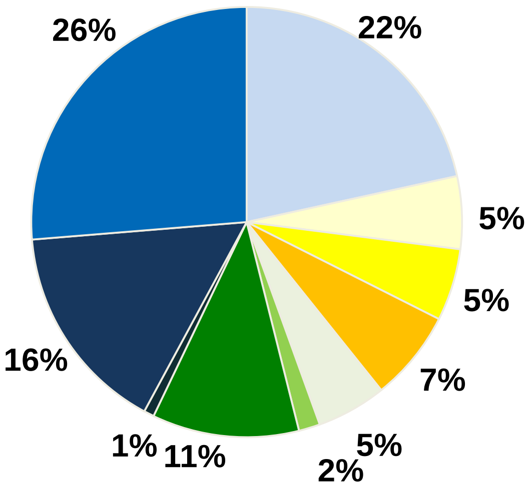
Primary Metals Year-over-Year Bridge



EPS = Engineered Products and Solutions
GRP = Global Rolled Products

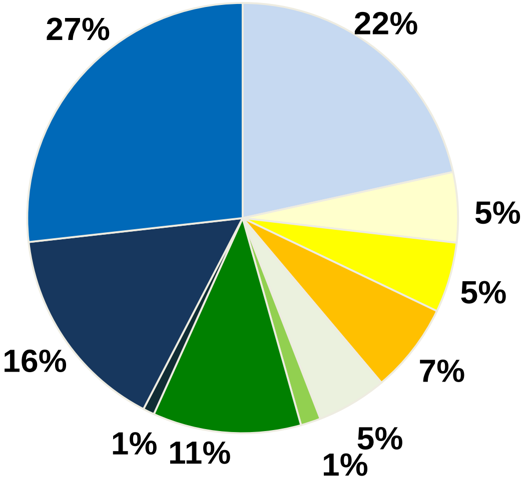
Revenue Change by Market - 2Q 2015

2Q15 Third-Party Revenue	Sequential Change	Year-Over-Year Change
Aerospace	1%	24%
Automotive	9%	54%
B&C	7%	(20%)
Comm. Transport	3%	5%
Industrial Products	(0%)	(32%)
IGT	15%	(9%)
Packaging	(1%)	(18%)
Distribution/Other	(17%)	209%
Alumina	4%	21%
Primary Metals	(2%)	(8%)



Revenue Change by Market – YTD 2015

2Q YTD Third-Party Revenue

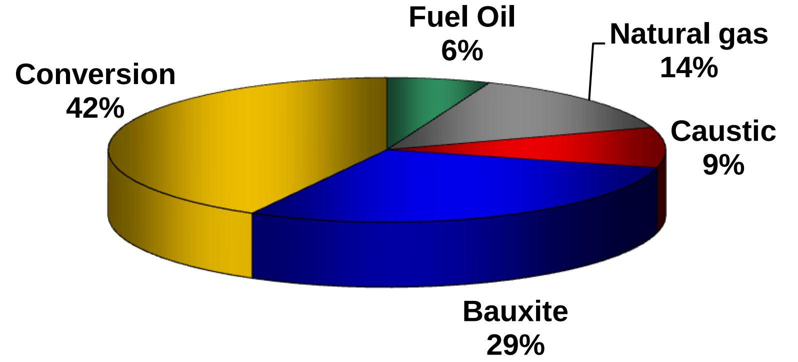


Year-Over-Year Change

Aerospace	24%
Automotive	50%
B&C	(19%)
Comm. Transport	9%
Industrial Products	(30%)
IGT	(7%)
Packaging	(12%)
Distribution/Other	195%
Alumina	13%
Primary Metals	1%

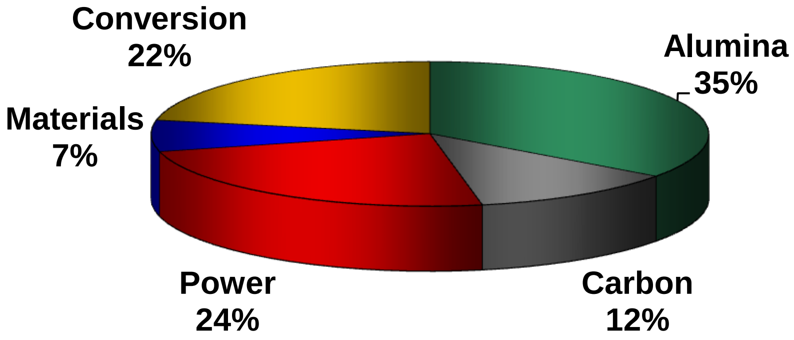
Composition of Upstream Production Costs

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

[1]Natural 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**

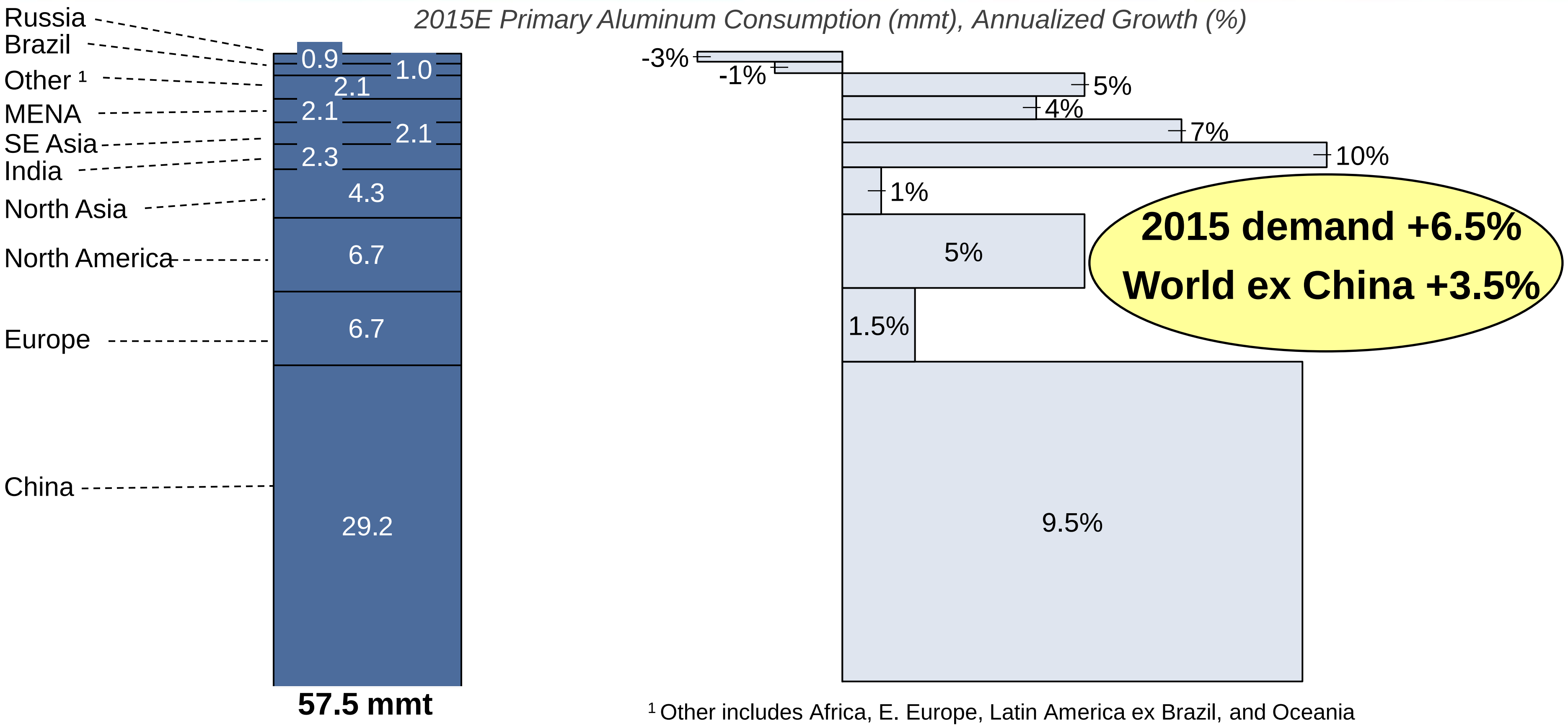
Idled

Facility	kmt
Suriname[1]	1,324
Point Comfort	295
Total	**1,619**

1) Does not include a potential sale transaction with the Government of Suriname.

6.5% 2015E Demand Growth

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

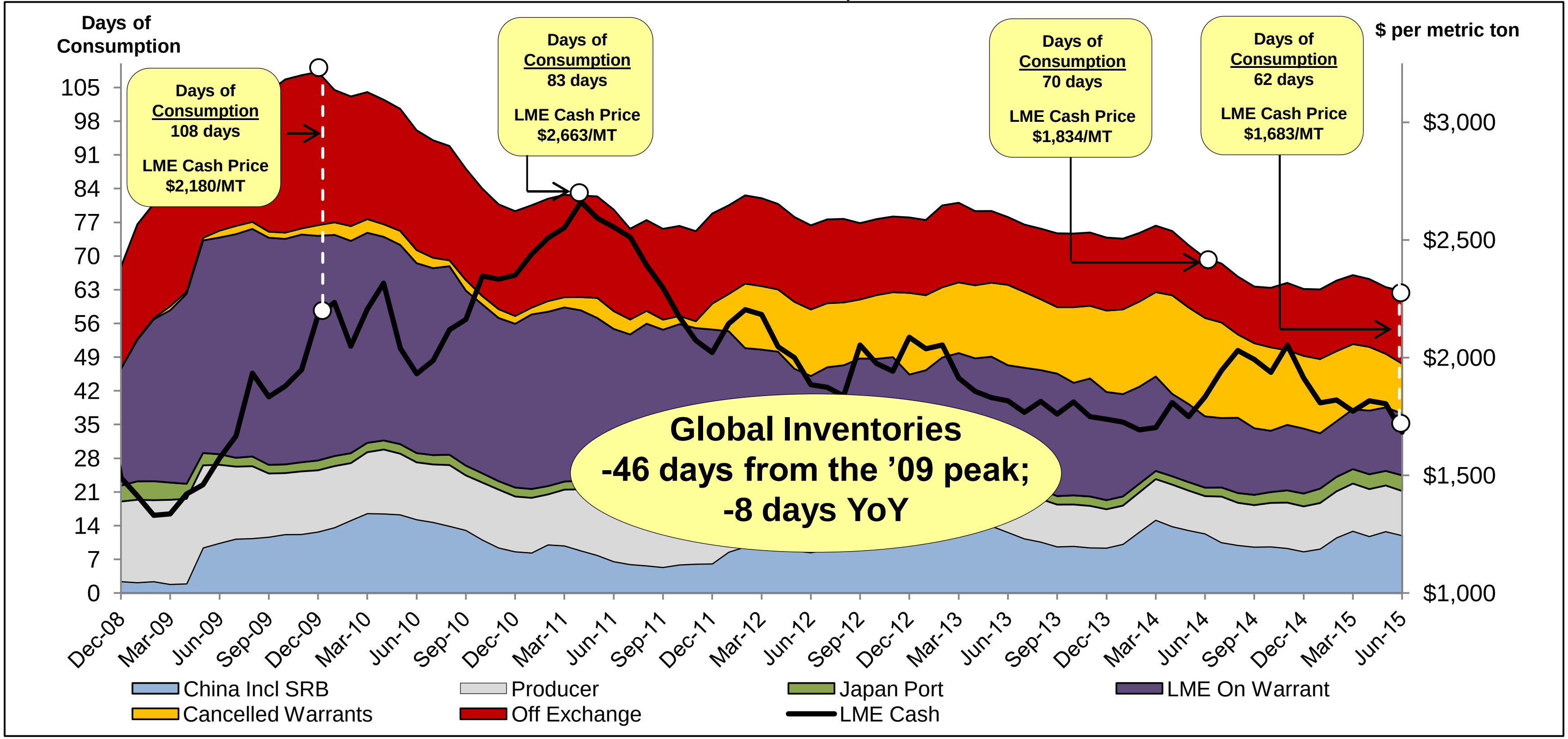


[1] Other includes Africa, E. Europe, Latin America ex Brazil, and Oceania

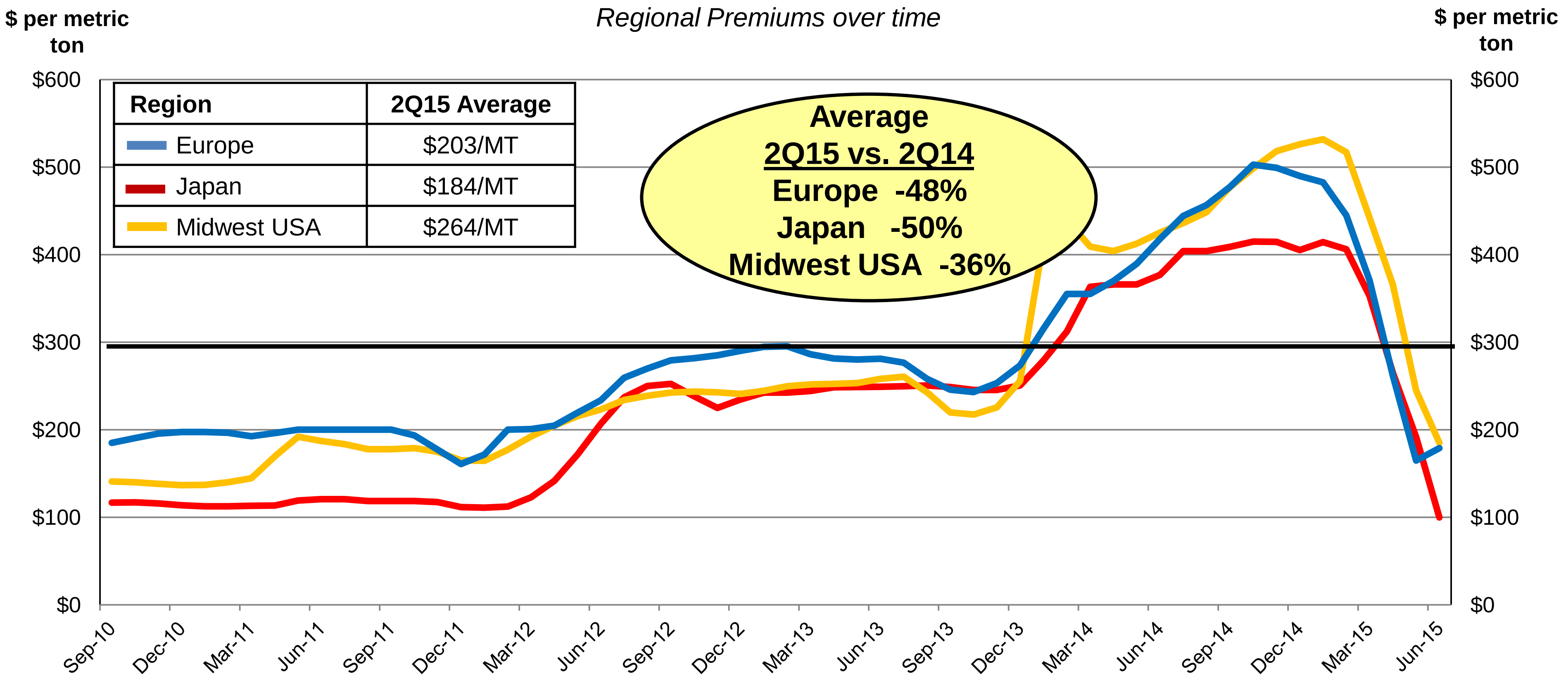
Source: Alcoa estimates, CRU, Harbor, Wood Mackenzie

Global Inventories Fall to 62 days; Down 8 days YoY

Global inventories vs. LME price over time $



Premiums Down from Record Highs, Break Below 2014 Levels



Source: Graph shows monthly average of daily prices - Platts Metals Week
2Q15 and 2Q14 bubble/table data shows quarterly average of daily prices

Special Items

$ Millions, except per-share amounts	Pre-tax, Before NCI 1Q15	Pre-tax, Before NCI 2Q15	After-tax, After NCI 1Q15	After-tax, After NCI 2Q15	Income Statement Classification	Segment
Net Income	**$481**	**$282**	**$195**	**$140**		
Net Income Per Diluted Share	**-**	**-**	**$0.14**	**$0.10**		
Restructuring-Related[1]	($177)	($221)	($158)	($143)	Restructuring and Other Charges/COGS	Corporate/ Primary metals
Tax Items	-	-	($4)	$22	Income Taxes	Corporate/GRP
Gain on Land Sale	-	$28	-	$19	Other Income, Net	Corporate
Acquisition Costs	($9)	($6)	($7)	($5)	SG&A	Corporate
Mark-to-Market Energy Contracts	$2	($4)	$1	($3)	Other Expenses (Income), Net	Corporate
Special Items	**($184)**	**($203)**	**($168)**	**($110)**		
Net Income excl Special Items	**$665**	**$485**	**$363**	**$250**		
Net Income per Diluted Share excl Special Items	**-**	**-**	**$0.28**	**$0.19**		

NCI: Non-controlling interest. 1) Total restructuring-related charges in 2Q15 of $143 million (55 percent cash, 45 percent non-cash).

Advancing each generation. ALCOA

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

(in millions)	1Q14	2Q14	3Q14	4Q14	2014	1Q15	2Q15
Total segment ATOI*	$318	$407	$581	$659	$1,965	$656	$568
Unallocated amounts (net of tax):							
Impact of LIFO	(7)	(8)	(18)	(21)	(54)	7	36
Metal price lag*	7	11	38	22	78	(23)	(39)
Interest expense	(78)	(69)	(81)	(80)	(308)	(80)	(80)
Noncontrolling interests	19	9	18	45	91	(60)	(67)
Corporate expense	(67)	(70)	(74)	(83)	(294)	(64)	(66)
Restructuring and other charges	(321)	(77)	(189)	(307)	(894)	(161)	(159)
Other	(49)	(65)	(126)	(76)	(316)	(80)	(53)
Consolidated net (loss) income attributable to Alcoa	$(178)	$138	$149	$159	$268	$195	$140

* Effective in the second quarter of 2015, management removed the impact of metal price lag from the results of the Engineered Products and Solutions and Global Rolled Products 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 income (loss) attributable to Alcoa. As a result, this revision does not impact the consolidated results of Alcoa. Segment information for all prior periods presented was revised to reflect this change.

Reconciliation of Adjusted Income

(in millions, except per-share amounts)	Income			Diluted EPS(3)		
	Quarter ended			Quarter ended		
	June 30, 2014	March 31, 2015	June 30, 2015	June 30, 2014	March 31, 2015	June 30, 2015
Net income attributable to Alcoa	$138	$195	$140	$0.12	$0.14	$0.10
Restructuring and other charges	54	158	141			
Discrete tax items(1)	(2)	-	(5)			
Other special items(2)	26	10	(26)			
Net income attributable to Alcoa – as adjusted	$216	$363	$250	0.18	0.28	0.19

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 June 30, 2015, a net benefit for a number of small items; and
- for the quarter ended June 30, 2014, a net benefit for a number of small items.

(2) Other special items include the following:
- 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 a future acquisition of an aerospace business ($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 closure of a smelter in Brazil and a power station in Australia ($2);
- for the quarter ended March 31, 2015, an unfavorable tax impact related to the interim period treatment of operational losses in certain foreign jurisdictions for which no tax benefit was recognized ($35), 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 ($31), costs associated with current and future acquisitions of aerospace businesses ($7), and a net favorable change in certain mark-to-market energy derivative contracts ($1); and
- for the quarter ended June 30, 2014, a favorable tax impact related to the interim period treatment of operational losses in certain foreign jurisdictions for which no tax benefit was recognized ($20), 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 ($24), costs associated with (i) a then-planned acquisition of an aerospace business ($11) and (ii) preparation for and ratification of a new labor agreement with the United Steelworkers ($11), a net favorable change in certain mark-to-market energy derivative contracts ($6), and an unfavorable impact related to the restart of one potline at the joint venture in Saudi Arabia that was previously shut down due to a period of pot instability ($6).

(3) The average number of shares applicable to diluted EPS for Net income attributable to Alcoa excludes certain share equivalents as their effect was anti-dilutive (see footnote 3 to the Statement of Consolidated Operations). However, certain of these share equivalents may become dilutive in the EPS calculation applicable to Net income attributable to Alcoa – as adjusted due to a larger, positive numerator. Specifically, these share equivalents were associated with mandatory convertible preferred stock for the quarter ended March 31, 2015. As a result, the average number of shares applicable to diluted EPS for Net income attributable to Alcoa – as adjusted was 1,315,558,890 for the quarter ended March 31, 2015. Additionally, the subtraction of preferred stock dividends declared from the numerator (see footnote 1 to the Statement of Consolidated Operations) needs to be reversed for the quarter ended March 31, 2015 since the related mandatory convertible preferred stock was dilutive in the EPS calculation for Net income attributable to Alcoa – as adjusted.

Reconciliation of Alcoa Adjusted EBITDA

($ in millions)	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2Q14	1Q15	2Q15
Net income (loss) attributable to Alcoa	$1,310	$1,233	$2,248	$2,564	$(74)	$(1,151)	$254	$611	$191	$(2,285)	$268	$138	$195	$140
Add:														
Net income (loss) attributable to noncontrolling interests	233	259	436	365	221	61	138	194	(29)	41	(91)	(9)	60	67
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	78	226	75
Other (income) expenses, net	(266)	(478)	(236)	(1,920)	(59)	(161)	5	(87)	(341)	(25)	47	5	(12)	–
Interest expense	271	339	384	401	407	470	494	524	490	453	473	105	122	124
Restructuring and other charges	(29)	266	507	268	939	237	207	281	172	782	1,168	110	177	217
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	349	321	319
Adjusted EBITDA	$3,234	$3,362	$5,422	$4,795	$3,313	$359	$2,704	$3,260	$2,105	$2,546	$3,556	$776	$1,089	$942
Sales	$21,370	$24,149	$28,950	$29,280	$26,901	$18,439	$21,013	$24,951	$23,700	$23,032	$23,906	$5,836	$5,819	$5,897
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%	13.3%	18.7%	16.0%

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	2Q14	1Q15	2Q15
After-tax operating income (ATOI)	$632	$682	$1,050	$956	$727	$112	$301	$607	$90	$259	$370	$38	$221	$215
Add:														
Depreciation, depletion, and amortization	153	172	192	267	268	292	406	444	455	426	387	100	80	77
Equity (income) loss	(1)	–	2	(1)	(7)	(8)	(10)	(25)	(5)	4	29	7	7	11
Income taxes	240	246	428	340	277	(22)	60	179	(27)	66	153	12	92	87
Other	(46)	(8)	(6)	2	(26)	(92)	(5)	(44)	(8)	(6)	(28)	–	–	–
Adjusted EBITDA	$978	$1,092	$1,666	$1,564	$1,239	$282	$752	$1,161	$505	$749	$911	$157	$400	$390
Production (thousand metric tons) (kmt)	14,343	14,598	15,128	15,084	15,256	14,265	15,922	16,486	16,342	16,618	16,606	4,077	3,933	3,977
Adjusted EBITDA / Production ($ per metric ton)	$68	$75	$110	$104	$81	$20	$47	$70	$31	$45	$55	$39	$102	$98

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	2Q14	1Q15	2Q15
After-tax operating income (ATOI)	$808	$822	$1,760	$1,445	$931	$(612)	$488	$481	$309	$(20)	$594	$97	$187	$67
Add:														
Depreciation, depletion, and amortization	326	368	395	410	503	560	571	556	532	526	494	129	109	109
Equity (income) loss	(58)	12	(82)	(57)	(2)	26	(1)	7	27	51	34	17	3	5
Income taxes	314	307	726	542	172	(365)	96	92	106	(74)	203	30	57	6
Other	20	(96)	(13)	(27)	(32)	(176)	(7)	2	(422)	(8)	(6)	(5)	(1)	–
Adjusted EBITDA	$1,410	$1,413	$2,786	$2,313	$1,572	$(567)	$1,147	$1,138	$552	$475	$1,319	$268	$355	$187
Production (thousand metric tons) (kmt)	3,376	3,554	3,552	3,693	4,007	3,564	3,586	3,775	3,742	3,550	3,125	795	711	701
Adjusted EBITDA / Production ($ per metric ton)	$418	$398	$784	$626	$392	$(159)	$320	$301	$148	$134	$422	$337	$499	$267

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	2Q14	1Q15	2Q15
After-tax operating income (ATOI)	$290	$300	$317	$151	$(41)	$(106)	$241	$260	$346	$252	$245	$70	$54	$76
Add:														
Depreciation, depletion, and amortization	200	220	223	227	216	227	238	237	229	226	235	58	56	56
Equity loss	1	–	2	–	–	–	–	3	6	13	27	6	9	7
Income taxes	97	135	113	77	14	12	103	98	159	108	89	18	36	25
Other	1	1	20	1	6	(2)	1	1	(2)	–	(1)	2	–	–
Adjusted EBITDA	$589	$656	$675	$456	$195	$131	$583	$599	$738	$599	$595	$154	$155	$164
Total shipments (thousand metric tons) (kmt)	2,136	2,250	2,376	2,482	2,361	1,888	1,755	1,866	1,943	1,989	2,056	533	447	479
Adjusted EBITDA / Total shipments ($ per metric ton)	$276	$292	$284	$184	$83	$69	$332	$321	$380	$301	$289	$289	$347	$342

[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. This revision does not impact the consolidated results of Alcoa. Segment information for all prior 2014 and 2015 periods presented was revised 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 Adjusted EBITDA[1]

($ in millions)	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013[2]	2014[3]	2Q14	1Q15[4]	2Q15[4]
After-tax operating income (ATOI)	$161	$276	$382	$423	$522	$311	$419	$537	$612	$726	$756	$202	$194	$210
Add:														
Depreciation, depletion, and amortization	168	160	152	163	165	177	154	158	158	159	173	41	60	64
Equity loss (income)	–	–	6	–	–	(2)	(2)	(1)	–	–	–	–	–	–
Income taxes	70	120	164	184	215	138	198	258	297	348	368	101	90	99
Other	106	(11)	(2)	(7)	2	1	–	(1)	(9)	(2)	–	–	1	(1)
Adjusted EBITDA	$505	$545	$702	$763	$904	$625	$769	$951	$1,058	$1,231	$1,297	$344	$345	$372
Third-party sales	$4,283	$4,773	$5,428	$5,834	$6,199	$4,689	$4,584	$5,345	$5,525	$5,733	$6,006	$1,502	$1,689	$1,733
Adjusted EBITDA Margin	11.8%	11.4%	12.9%	13.1%	14.6%	13.3%	16.8%	17.8%	19.1%	21.5%	21.6%	22.9%	20.4%	21.5%

(1) Effective in the second quarter of 2015, management removed the impact of metal price lag from the results of the Engineered Products and Solutions 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. This revision does not impact the consolidated results of Alcoa. Segment information for all prior 2014 and 2015 periods presented was revised to reflect this change.
(2) The Adjusted EBITDA Margin for the year ended December 31, 2013 represents the historical high for the Engineered Products and Solutions segment. Alcoa has a 2016 target to exceed this historical high.
(3) In the year ended December 31, 2014, the Third-party sales and Adjusted EBITDA of Engineered Products and Solutions includes $81 and $(10), respectively, related to the acquisition of an aerospace business, Firth Rixson. Excluding these amounts, Adjusted EBITDA Margin was 22.1% for the year ended December 31, 2014.
(4) In the quarters ended March 31, 2015 and June 30, 2015, the Third-party sales and Adjusted EBITDA of Engineered Products and Solutions includes $233 and $27, respectively, and $268 and $42, respectively, related to the acquisition of two aerospace businesses, Firth Rixson and TITAL. Excluding these amounts, Adjusted EBITDA Margin was 21.8% and 22.6% for the quarters ended March 31, 2015 and June 30, 2015, respectively.

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, 2010	December 31, 2011	December 31, 2012	December 31, 2013	December 31, 2014	June 30, 2014	March 31, 2015	June 30, 2015
Cash from operations	$2,261	$2,193	$1,497	$1,578	$1,674	$518	$(175)	$472
Capital expenditures	(1,015)	(1,287)	(1,261)	(1,193)	(1,219)	(258)	(247)	(267)
Free cash flow	$1,246	$906	$236	$385	$455	$260	$(422)	$205

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]**
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
Add: Deferred purchase price receivable[1]	85	144	104	53	50	223	347	339	238	371	438	395	389	421
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
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
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
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
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
Days Working Capital	34	35	36	30	32	29	31	28	30	33	32	28	33	34

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 and June 30, 2015, Working Capital and Sales include $279 and $233, respectively, and $315 and 268 respectively, related to the acquisition of two aerospace businesses, Firth Rixson and TITAL. Excluding these amounts, Days Working Capital was 30 and 31 for the quarters ended March 31, 2015 and June 30, 2015, respectively.

Reconciliation of Net Debt

(in millions)

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

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*
Net income (loss) attributable to Alcoa	$254	$611	$191	$(2,285)	$268	$641	$643
Add:							
Net income (loss) attributable to noncontrolling interests	138	194	(29)	41	(91)	(12)	64
Loss from discontinued operations	8	3	–	–	–	–	–
Provision for income taxes	148	255	162	428	320	623	620
Other expenses (income), net	5	(87)	(341)	(25)	47	10	5
Interest expense	494	524	490	453	473	475	494
Restructuring and other charges	207	281	172	782	1,168	884	991
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
Adjusted EBITDA	$2,704	$3,260	$2,105	$2,546	$3,556	$3,973	$4,139
Total Debt	$9,165	$9,371	$8,829	$8,319	$8,852	$8,817	$8,789
Debt-to-Adjusted EBITDA Ratio	3.39	2.87	4.20	3.27	2.49	2.22	2.12

* The calculation of Adjusted EBITDA for the quarters ended March 31, 2015 and June 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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