

ALCOA INC.
Form 424B5
July 23, 2015
Table of Contents

FILED PURSUANT TO RULE 424(B)(5)

REGISTRATION NO. 333-197371

PROSPECTUS SUPPLEMENT

(To Prospectus Dated July 30, 2014)

Alcoa Inc.

39,414,844 Shares of Common Stock

We are registering (i) a total of up to 39,244,729 shares of our common stock that we may issue upon conversion of two series of existing convertible notes of RTI International Metals, Inc. (RTI) and (ii) a total of up to 170,115 shares of our common stock that are issuable to certain former employees of RTI upon the exercise of certain stock options issued under RTI s stock incentive plans that we have agreed to assume in connection with our acquisition of RTI. The exercise prices of the stock options we have assumed range from approximately \$4.91 to \$27.15 per share of our common stock. If the holders of all such stock options purchase all of the shares of our common stock subject to the assumed options, we will receive aggregate net proceeds of up to approximately \$2.7 million.

Our common stock is listed for trading on the New York Stock Exchange (the NYSE) under the symbol AA. On July 22, 2015, the last reported sale price of our common stock on the NYSE was \$9.99 per share.

See Risk Factors beginning on page S-8 of this prospectus supplement to read about important factors you should consider before investing in our common stock.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense.

Edgar Filing: ALCOA INC. - Form 424B5
Prospectus Supplement dated July 23, 2015

Table of Contents

TABLE OF CONTENTS

Prospectus Supplement

	Page
<u>ABOUT THIS PROSPECTUS SUPPLEMENT</u>	S-1
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	S-2
<u>NOTE REGARDING FORWARD-LOOKING STATEMENTS</u>	S-3
<u>SUMMARY</u>	S-5
<u>OUR COMPANY</u>	S-5
<u>THE OFFERING</u>	S-7
<u>RISK FACTORS</u>	S-8
<u>USE OF PROCEEDS</u>	S-11
<u>RTI S CONVERTIBLE NOTES</u>	S-11
<u>RTI S STOCK INCENTIVE PLANS</u>	S-11
<u>PLAN OF DISTRIBUTION</u>	S-14
<u>LEGAL MATTERS</u>	S-14
<u>INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM</u>	S-14
Prospectus	

	Page
<u>About this Prospectus</u>	3
<u>Where You Can Find More Information</u>	4
<u>Alcoa Inc.</u>	5
<u>Risk Factors</u>	5
<u>Forward-Looking Statements</u>	5
<u>Ratio of Earnings to Fixed Charges</u>	7
<u>Use of Proceeds</u>	8
<u>Description of Senior Debt Securities</u>	9
<u>Description of Subordinated Debt Securities</u>	22
<u>Description of Preferred Stock</u>	29
<u>Description of Depositary Shares</u>	33
<u>Description of Common Stock</u>	36
<u>Description of Warrants</u>	38
<u>Description of Stock Purchase Contracts and Stock Purchase Units</u>	40
<u>Plan of Distribution</u>	41
<u>Legal Matters</u>	43
<u>Independent Registered Public Accounting Firm</u>	43

Table of Contents

ABOUT THIS PROSPECTUS SUPPLEMENT

As used in this prospectus supplement, unless otherwise specified or unless the context indicates otherwise, the terms Company, Alcoa, we, us, and our refer to Alcoa Inc. and its consolidated subsidiaries and the term RTI refers to International Metals, Inc. and its consolidated subsidiaries.

This document is in two parts. The first part is this prospectus supplement, which contains specific information about the terms of this offering of common stock. This prospectus supplement also adds and updates information contained in, or incorporated by reference into, the accompanying prospectus. The second part, the accompanying prospectus, provides more general information about us and securities we may offer from time to time, some of which may not apply to this offering. This prospectus supplement and the accompanying prospectus incorporate by reference important business and financial information about us that is not included in or delivered with this prospectus supplement. You should read both this prospectus supplement and the accompanying prospectus together with the additional information below under the heading Where You Can Find More Information. If there is any inconsistency between the information in this prospectus supplement and the accompanying prospectus or any document incorporated herein or therein by reference, you should rely on the information in this prospectus supplement.

We are responsible for the information contained and incorporated by reference in this prospectus supplement and the accompanying prospectus. We have not authorized anyone to give you any other information, and we take no responsibility for any other information that others may give you. We are not making an offer of common stock in any jurisdiction where the offer or sale is not permitted. You should not assume that the information contained in this prospectus supplement, the accompanying prospectus or the documents incorporated by reference in this prospectus supplement or the accompanying prospectus is accurate as of any date other than their respective dates. Our business, financial condition, results of operations and prospects may have changed since those dates.

Table of Contents

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the Securities and Exchange Commission (the "SEC"). You may read and copy any document that we file at the Public Reference Room of the SEC at 100 F Street N.E., Room 1580, Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains an Internet site at <http://www.sec.gov>, from which interested persons can electronically access our SEC filings, including the registration statement (of which this prospectus forms a part) and the exhibits and schedules thereto.

The SEC allows us to incorporate by reference the information we file with them, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is an important part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") (other than, in each case, documents or information deemed to have been furnished but not filed in accordance with SEC rules), on or after the date of this prospectus until the termination of the offering under this prospectus:

- (a) Annual Report on Form 10-K for the year ended December 31, 2014;
- (b) Quarterly Reports on Form 10-Q for the quarters ended March 31, 2015 and June 30, 2015;
- (c) Proxy Statement on Schedule 14A filed on March 19, 2015; and
- (d) Current Reports on Form 8-K and 8-K/A filed on January 22, 2015, February 25, 2015, March 9, 2015, May 5, 2015 (two filings), May 13, 2015, July 6, 2015, July 13, 2015 and July 23, 2015 (two filings) (in each case, except to the extent furnished but not filed).

You may request a copy of our filings, at no cost, by requesting them in writing or by telephone from the Company at the following address:

Alcoa Inc.

390 Park Avenue

New York, New York 10022-4608

Attention: Investor Relations

Telephone: (212) 836-2674

Table of Contents

NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement and the accompanying prospectus contain or incorporate by reference forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the Securities Act), and Section 21E of the Exchange Act. Forward-looking statements include those containing such words as anticipates, believes, could, estimates, expects, forecasts, intends, may, outlook, plans, projects, seeks, 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 acquisition of the Firth Rixson business, TITAL, and 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 subject to a number of known and unknown risks, uncertainties, and other factors and are not guarantees of future performance. Actual results, performance, or outcomes may differ materially from those expressed in or implied by those forward-looking statements. Important factors that could cause actual results to differ materially from those in the forward-looking statements include:

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 index-based and spot prices for alumina;

deterioration in global economic and financial market conditions generally;

unfavorable changes in the markets served by Alcoa, including aerospace, automotive, commercial transportation, building and construction, packaging, defense, and industrial gas turbine;

the impact on costs and results of changes in foreign currency exchange rates, particularly the Australian dollar, Brazilian real, Canadian dollar, euro, and Norwegian kroner;

increases in energy costs or the unavailability or interruption of energy supplies;

increases in the costs of other raw materials;

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;

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;

risks relating to operating globally, including geopolitical, economic, and regulatory risks and unexpected events beyond Alcoa's control, such as unfavorable changes in laws and governmental policies, civil unrest, imposition of sanctions, expropriation of assets, major public health issues, and terrorism;

the outcome of contingencies, including legal proceedings, government or regulatory investigations, and environmental remediation;

S-3

Table of Contents

adverse changes in discount rates or investment returns on pension assets;

the impact of cyber attacks and potential information technology or data security breaches;

unexpected events, unplanned outages, supply disruptions, or failure of equipment or processes to meet specifications;

the risk that acquisitions (including the Firth Rixson, TITAL and RTI acquisitions) will not be integrated successfully or that such integration may be more difficult, time-consuming or costly than expected;

the loss of customers, suppliers and other business relationships as a result of acquisitions, competitive developments, or other factors;

the potential failure to retain key employees of Alcoa or acquired businesses;

the effect of an increased number of Alcoa shares outstanding, and the potential sales of such shares, as a result of the acquisition of RTI; and

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, whether due to competitive developments, changes in the regulatory environment, trends and developments in the aerospace, metals engineering and manufacturing sectors, or other factors.

The above list of factors is not exhaustive or necessarily in order of importance. Additional information concerning factors that could cause actual results to differ materially from those in forward-looking statements include those discussed under **Risk Factors** beginning on page S-8 of this prospectus supplement, in **Forward-Looking Statements** beginning on page 5 of the accompanying prospectus, and in our periodic reports referred to in **Where You Can Find More Information** above, including the risk factors summarized in our Annual Report on Form 10-K for the year ended December 31, 2014. Alcoa disclaims any intention or obligation to update publicly any forward-looking statements, whether in response to new information, future events, or otherwise, except as required by applicable law.

Table of Contents

SUMMARY

This summary contains basic information about us and this offering. Because it is a summary, it does not contain all of the information that you should consider before investing in our common stock. You should read this entire prospectus supplement, the accompanying prospectus and the documents incorporated by reference carefully, including the section entitled Risk Factors in our Annual Report on Form 10-K and any updates to such risks in subsequently filed Quarterly Reports on Form 10-Q and our financial statements and the notes thereto incorporated by reference into this prospectus supplement before making an investment decision.

OUR COMPANY

Alcoa is a global leader in lightweight metals engineering and manufacturing. Alcoa's multi-material products, which include aluminum, titanium, and nickel, are used worldwide in aircraft, automobiles, commercial transportation, packaging, building and construction, oil and gas, defense, consumer electronics, and industrial applications. Alcoa is also the world leader in the production and management of primary aluminum, fabricated aluminum, and alumina combined, through its participation in all major aspects of the industry: technology, mining, refining, smelting, fabricating, and recycling. Alcoa operates in 30 countries, with investments and operating activities in, among others, Australia, Brazil, China, Guinea, Iceland, Russia, and Saudi Arabia. Alcoa is incorporated under the laws of the Commonwealth of Pennsylvania and headquartered in New York, New York.

Alcoa's operations consist of the following segments:

Engineered Products and Solutions: This segment represents Alcoa's downstream operations and includes titanium, aluminum, and super alloy investment castings; fasteners; aluminum wheels; integrated aluminum structural systems; architectural extrusions; and forgings and hard alloy extrusions. These products, which are used in the aerospace, automotive, building and construction, commercial transportation, power generation, and industrial products end markets, are sold directly to customers and through distributors. On July 23, 2015, Alcoa announced a realignment of its downstream segment as the Company's value-add portfolio expands. Alcoa's downstream portfolio will become two segments, one with a core focus on aerospace (the Engineered Products and Solutions segment), and the other centered on the construction and commercial wheels markets (the Transportation and Construction Solutions segment).

Global Rolled Products: This segment represents Alcoa's midstream operations, whose principal business is the production and sale of aluminum plate and sheet. This segment includes sheet and plate used in the aerospace, automotive, commercial transportation, building and construction, and industrial products (mainly used in the production of machinery and equipment and consumer durables) end markets, which is sold directly to customers and through distributors. This segment also includes rigid container sheet, which is sold directly to customers in the packaging and consumer market and is used to produce aluminum beverage cans.

Alumina: This segment represents a portion of Alcoa's upstream operations and consists of Alcoa's worldwide refinery system, including the mining of bauxite, which is then refined into alumina. Alumina is mainly sold directly to internal and external smelter customers worldwide or is sold to customers who process it into industrial chemical products.

Primary Metals: This segment represents a portion of Alcoa's upstream operations and consists of Alcoa's worldwide smelter system. Primary Metals receives alumina, mostly from the Alumina segment, and produces primary aluminum used by Alcoa's fabricating businesses, as well as sold to external customers and traders. Results from the sale of aluminum powder, scrap, and excess power are also included in this segment, as well as the results of aluminum derivative contracts and buy/resell activity.

S-5

Table of Contents

Alcoa's principal executive offices are located at 390 Park Avenue, New York, New York 10022-4608. The telephone number of its investor relations office is (212) 836-2674, and the telephone number of the office of the secretary is (212) 836-2732. Alcoa's website can be accessed at <http://www.alcoa.com>. Information contained on Alcoa's website does not constitute part of, and is not incorporated into, this prospectus supplement.

On July 23, 2015, we acquired RTI in accordance with the terms of the Agreement and Plan of Merger (the Merger Agreement), dated as of March 8, 2015, by and among RTI, Alcoa and Ranger Ohio Corporation, a direct wholly owned subsidiary of Alcoa. The effective date of the merger was July 23, 2015. On the effective date of the merger, each outstanding share of RTI's common stock, par value \$0.01 per share (RTI common stock), was converted into the right to receive 2.8315 shares of Alcoa's common stock, par value \$1.00 per share (Alcoa common stock), with cash paid in lieu of fractional shares.

Pursuant to the Merger Agreement, on and following the effective date of the merger, the following two series of convertible notes are exchangeable into Alcoa common stock: (i) \$114.4 million aggregate principal amount of 3.000% Convertible Senior Notes due 2015, (the 2015 Notes), and (ii) \$402.5 million aggregate principal amount of 1.625% Convertible Senior Notes due 2019, (the 2019 Notes and, together with the 2015 Notes, the RTI Convertible Notes). The 2015 Notes are convertible at a conversion rate of 98.3884 shares of Alcoa common stock per \$1,000 principal amount of 2015 Notes, which will decrease to 78.8499 shares of Alcoa common stock per \$1,000 principal amount of 2015 Notes after August 21, 2015. The 2019 Notes are convertible at a conversion rate of 69.5428 shares of Alcoa common stock per \$1,000 principal amount of 2019 Notes. The RTI Convertible Notes are subject to further conversion rate adjustments in the future under their terms.

Pursuant to the Merger Agreement, each RTI stock option (whether vested or unvested) was converted on the effective date of the merger into an option to purchase, on the same terms and conditions (including with respect to vesting), the number of shares of Alcoa common stock (rounded down to the nearest whole number of shares) equal to the number of shares of RTI common stock subject to such option multiplied by the exchange ratio of 2.8315, at an exercise price per share of Alcoa common stock (rounded up to the nearest whole cent) equal to the exercise price per share of RTI common stock subject to such option divided by the exchange ratio of 2.8315.

Table of Contents

THE OFFERING

Issuer	Alcoa Inc., a Pennsylvania corporation.
Common stock offered	39,414,844 shares of common stock, par value \$1.00 per share, all of which are issuable to (i) former employees of RTI pursuant to stock options assumed by us in connection with the Merger and (ii) the holders of the RTI Convertible Notes upon conversion thereof.
Use of proceeds	If all of the assumed stock options described in this prospectus supplement are exercised in full, we will receive aggregate net proceeds of up to approximately \$2.7 million. We intend to use any such proceeds for general corporate purposes. We will not receive any proceeds from the exchange of the RTI Convertible Notes as all proceeds relating thereto were received by RTI at the time the RTI Convertible Notes were originally issued.
New York Stock Exchange symbol	AA

S-7

Table of Contents

RISK FACTORS

Your investment in our common stock involves certain risks. In consultation with your own financial and legal advisers, you should carefully consider, among other matters, the discussion set forth below and under Item 1A. Risk Factors in our Annual Report on Form 10-K for the fiscal year ended December 31, 2014, which is incorporated by reference herein, before deciding whether an investment in our common stock is suitable for you. If any of these risks actually occurs, our business, results of operations and financial condition may suffer. As a result, the trading price of our common stock may decline, and you might lose part or all of your investment.

This prospectus supplement, the accompanying prospectus and the documents incorporated by reference also contain forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in the forward-looking statements as a result of a number of factors, including the risks described below and elsewhere in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference. See Note Regarding Forward-Looking Statements beginning on page S-3.

Risks Relating to Our Common Stock

The trading price of our common stock may be volatile, which may make it difficult for you to resell the common stock when you want or at prices you find attractive.

The market price and volume of our common stock have been and may continue to be subject to significant fluctuations due not only to general stock market conditions but also to a change in sentiment in the market regarding our operations, business prospects, or liquidity. During the period from January 1, 2013 to the date of this prospectus supplement, our common stock has fluctuated from a high of \$17.75 per share to a low of \$7.63 per share. The price and volume volatility of our common stock may be influenced by many factors, some of which are beyond our control, including the following:

the factors described above under the heading Note Regarding Forward-Looking Statements ;

the risk factors described in our Annual Report on Form 10-K for the year ended December 31, 2014, which are incorporated into this prospectus supplement by reference;

operating results that vary from expectations of management, securities analysts and investors;

changes in stock market analyst recommendations regarding us, our competitors or our industry generally, or lack of analyst coverage of our common stock;

hedging or arbitrage trading activity involving our common stock;

sales of our common stock by our executive officers, directors, and significant shareholders; or sales of substantial amounts of our common stock; and

announcements of strategic developments, acquisitions and other material events by us or our competitors. **Sales of substantial amounts of our common stock in the public market, or the perception that these sales may occur, could cause the market price of our common stock to decline.**

Sales of substantial amounts of our common stock in the public market, including the shares issued in the RTI merger and the shares being offered pursuant to this prospectus supplement, or the perception that these sales may occur, could cause the market price of our common stock to decline. Future sales or the availability for sale of substantial amounts of our common stock in the public market, or the perception that such sales may occur, could adversely affect the prevailing market price of our common stock.

S-8

Table of Contents

The availability of our common stock for sale in the future could reduce the market price of our common stock.

In the future we may issue additional securities to raise capital. We may also acquire interests in other companies by using a combination of cash and our common stock or solely our common stock. We may also issue securities convertible into our common stock. Any of these events may dilute your ownership interest in our Company and have an adverse impact on the price of our common stock.

Our common stock ranks junior to our outstanding preferred stock with respect to dividends and amounts payable in the event of our liquidation.

With respect to the payment of dividends and amounts payable in the event of our liquidation, dissolution or winding up, our common stock ranks junior to our outstanding preferred stock, which currently comprises our \$3.75 Cumulative Preferred Stock and our 5.375% Class B Mandatory Convertible Preferred Stock, Series 1 (the Mandatory Convertible Preferred Stock). This means that, unless full cumulative dividends have been paid or set aside for payment on all outstanding preferred stock for all accrued dividend periods, no dividends may be declared or paid on our common stock. Likewise, in the event of our voluntary or involuntary liquidation, dissolution or winding up, no distribution of our assets may be made to holders of our common stock until we have paid to our preferred stock holders the liquidation preference relating to such preferred stock, plus in each case any accrued and unpaid dividends. The Statement with Respect to Shares designating our \$3.75 Cumulative Preferred Stock provides that the dividend rate per annum on such stock is \$3.75 per share, and that in the event of any voluntary or involuntary liquidation, winding up or dissolution of the Company, holders of each share are entitled to receive a liquidation preference of \$100 per share plus any accrued and unpaid dividends. The Statement with Respect to Shares designating our Mandatory Convertible Preferred Stock provides that the dividend rate per annum is 5.375% of the liquidation preference per share of Mandatory Convertible Preferred Stock (equivalent to \$26.8750 per annum per share), and that in the event of any voluntary or involuntary liquidation, winding up or dissolution of the Company, holders of each share are entitled to receive a liquidation preference of \$500 per share plus any accrued and unpaid dividends.

Offerings of debt, which would be senior to our common stock upon liquidation, or preferred equity securities which may be senior to our common stock for purposes of dividend distributions or upon liquidation, may adversely affect the market price of our common stock.

We may increase our capital resources or raise additional capital by making additional offerings of debt, such as senior or subordinated notes, or by offering preferred stock. Upon liquidation, holders of our debt securities and shares of preferred stock and lenders with respect to other borrowings will receive distributions of our available assets prior to the holders of our common stock. Additional equity offerings may dilute the holdings of our existing shareholders or reduce the market price of our common stock, or both. Holders of our common stock are not entitled to preemptive rights or other protections against dilution.

Our Articles of Incorporation authorize our board of directors to issue preferred stock without shareholder approval. Our board of directors also has the power, without shareholder approval, subject to our Articles of Incorporation, to set the terms of any such preferred stock that may be issued, including the preferences over our common stock with respect to dividends or upon our dissolution, winding-up and liquidation and other terms. If we issue preferred stock in the future that has a preference over our common stock with respect to the payment of dividends or upon our liquidation, dissolution, or winding up, the rights of holders of our common stock or the market price of our common stock could be adversely affected.

Dividends on our common stock could be reduced or eliminated in the event of material future deterioration in business conditions.

Under the Pennsylvania Business Corporation Law (the "PBCL"), holders of our common stock are only entitled to receive such dividends payable on our common stock as our board of directors may declare out of

S-9

Table of Contents

funds legally available for such payments. Our board of directors reviews the appropriateness of the dividend on our common stock each quarter. The determination of the amount of future dividends on our common stock will depend on our future earnings, capital requirements, financial condition and other relevant factors. Our board may determine to reduce or eliminate our common stock dividend in the event of material future deteriorations in business conditions.

Anti-takeover provisions could enable our management to resist a takeover attempt by a third party and limit the power of our shareholders.

Provisions of Pennsylvania law and of our Articles of Incorporation and By-laws could make it more difficult for a third party to acquire control of us or have the effect of discouraging, delaying or preventing a third party from attempting to acquire control of us, even if an acquisition might be in the best interest of our shareholders. For example, we are subject to Subchapters E-J of Chapter 25 and Section 2538 of Subchapter D of Chapter 25 of the PBCL, which could make it more difficult for another party to acquire us. Additionally, our Articles of Incorporation authorize our board of directors to issue preferred stock or adopt other anti-takeover measures without shareholder approval. The existence and adoption of these provisions could adversely affect the voting power of holders of common stock and limit the price that investors might be willing to pay in the future for shares of our common stock. See *Description of Common Stock* in the accompanying prospectus.

Risks Relating to Our Acquisition of RTI

The market price of Alcoa common stock may be affected by factors different from those that affected only Alcoa or only RTI.

On July 23, 2015, we completed our acquisition of RTI by means of the merger of a wholly owned subsidiary of ours with and into RTI (the *merger*). On the effective date of the merger, each outstanding share of RTI common stock was converted into the right to receive 2.8315 shares of Alcoa common stock, with cash paid in lieu of fractional shares. Upon completion of the merger, holders of RTI common stock became holders of Alcoa common stock. Alcoa's business differs from that of RTI, and, accordingly, the results of operations of the combined company and the market price of the combined company's shares of common stock may be affected by factors different from those that affected the independent results of operations of each of Alcoa and RTI.

Integration of RTI may be more difficult, costly or time-consuming than expected.

The success of the merger will depend, in part, on Alcoa's ability to successfully combine the businesses of Alcoa and RTI. To realize these anticipated benefits, Alcoa expects to integrate RTI's business into its own. It is possible that the integration process could result in the loss of key employees, the disruption of ongoing businesses or inconsistencies in standards, controls, procedures and policies that adversely affect the ability to maintain relationships with customers and employees or to achieve the anticipated benefits of the merger. The loss of key employees could adversely affect Alcoa's ability to successfully conduct business in the markets in which RTI previously operated, which could have an adverse effect on Alcoa's financial results and the value of its common stock. If Alcoa experiences difficulties with the integration process, the anticipated benefits of the merger may not be realized fully or at all, or may take longer to realize than expected. There also may be business disruptions that cause the loss of customers. Integration efforts may also divert management attention and resources. These integration matters could have an adverse effect on Alcoa for an indeterminate period after the merger.

Alcoa may fail to realize the cost savings expected from the merger.

Alcoa estimates that it will achieve cost savings from the merger when RTI has been fully integrated. The cost savings estimates assume Alcoa's ability to integrate RTI in a manner that permits those cost savings to be realized. If the estimates turn out to be incorrect or Alcoa is not able to integrate RTI successfully, the anticipated cost savings may not be fully realized or realized at all, or may take longer to realize than expected.

S-10

Table of Contents

USE OF PROCEEDS

If all of the assumed stock options granted to former employees of RTI are exercised in full, we will issue 170,115 shares of our common stock and we will receive aggregate net proceeds of up to approximately \$2.7 million. We intend to use any proceeds from any exercises of these options for general corporate purposes. Prior to their application, such proceeds may be invested in short-term investments. We will not receive any proceeds from the exchange of the RTI Convertible Notes as all proceeds relating to the RTI Convertible Notes were received by RTI at the time the RTI Convertible Notes were originally issued.

RTI CONVERTIBLE NOTES

As of the date of this prospectus supplement, the following two series of convertible notes are exchangeable into Alcoa common stock: (i) \$114.4 million aggregate principal amount of 3.000% Convertible Senior Notes due 2015, and (ii) \$402.5 million aggregate principal amount of 1.625% Convertible Senior Notes due 2019. The 2015 Notes are convertible at a conversion rate of 98.3884 shares of Alcoa common stock per \$1,000 principal amount of 2015 Notes, which will decrease to 78.8499 shares of Alcoa common stock per \$1,000 principal amount of 2015 Notes after August 21, 2015. The 2019 Notes are convertible at a conversion rate of 69.5428 shares of Alcoa common stock per \$1,000 principal amount of 2019 Notes. The RTI Convertible Notes are subject to further conversion rate adjustments in the future under their terms.

This prospectus supplement relates to the shares of our common stock that may be issued to the holders of the RTI Convertible Notes upon conversion thereof and to the shares of our common stock that may be issued upon exercise of the stock options held by former employees of RTI, as described below.

RTI S STOCK INCENTIVE PLANS

Overview

On July 23, 2015, we acquired RTI. Pursuant to the Merger Agreement, we agreed to assume certain outstanding options with respect to shares of common stock of RTI held by former employees of RTI. Those stock options were issued by RTI under RTI s 2014 Stock and Incentive Plan, as amended (the 2014 Plan) and RTI s 2004 Stock Plan, as amended (the 2004 Plan) and together with the 2014 Plan, the Plans). Each such stock option was converted on the effective date of the merger into an option (each, an Adjusted Option) to purchase, on the same terms and conditions, the number of shares of Alcoa common stock (rounded down to the nearest whole number of shares) equal to the number of shares of RTI common stock subject to such option multiplied by the exchange ratio of 2.8315, at an exercise price per share of Alcoa common stock (rounded up to the nearest whole cent) equal to the exercise price per share of RTI common stock subject to such option divided by the exchange ratio of 2.8315.

This prospectus supplement discusses only the treatment of the stock options held by former employees of RTI that were assumed by us under the Merger Agreement. Holders of these Adjusted Options are referred to herein as participants .

Description of the Plans

Administration

The Plans were originally administered by the Compensation Committee of RTI s Board of Directors (the RTI Committee). Following the merger, the Compensation and Benefits Committee (referred to herein as the

Administrator) of Alcoa's Board of Directors (the Board) will administer the Plans. Members of the Administrator are appointed by the Board in accordance with the By-Laws of Alcoa, as in effect from time to time.

S-11

Table of Contents

Further information about the Plans and the Administrator is available without charge upon written or oral request to:

Alcoa Inc.

Attention: Investor Relations

390 Park Avenue

New York, New York 10022-4608

Telephone: (212) 836-2674

Eligibility

Employees, non-employee directors and individuals engaged to become employees or non-employee directors of RTI, its affiliates and/or its subsidiaries were eligible to be selected to participate in the Plans prior to the merger. Following the merger, the Administrator does not intend to grant any new awards under the Plans.

Shares Available for Issuance

Up to a total of 170,115 shares of Alcoa common stock may be issued pursuant to the Adjusted Options. Shares of Alcoa common stock delivered pursuant to the Adjusted Options may consist, in whole or in part, of authorized and unissued shares, treasury shares or shares purchased on the open market.

If any Adjusted Options expire or are cancelled or forfeited, it is expected that the shares of Alcoa common stock underlying the unexercised Adjusted Options will no longer be available for issuance under the Plans, since the Administrator does not intend to grant any new awards under the Plans following the merger.

Adjusted Options

RTI stock options granted to former employees of RTI under the Plans represented a right to purchase shares of RTI common stock at a price equal to or greater than the fair market value of the shares on the date of grant on terms and conditions determined by the RTI Committee and evidenced by an award agreement setting forth such terms and conditions. The terms under which the stock options may be exercised, including the manner of payment of the exercise price, and the effect of a participant's termination of employment or service, whether for or without cause, or as a result of death, disability or retirement, on a stock option were determined by the RTI Committee and set forth in the applicable award agreement.

Each such option was converted on the effective date of the merger into an Adjusted Option to purchase, on the same terms and conditions, the number of shares of Alcoa common stock (rounded down to the nearest whole number of shares) equal to the number of shares of RTI common stock subject to such option multiplied by the exchange ratio of 2.8315, at an exercise price per share of Alcoa common stock (rounded up to the nearest whole cent) equal to the exercise price per share of RTI common stock subject to such option divided by the exchange ratio of 2.8315.

Change in Control

Although the merger constitutes a change in control of RTI for purposes of the Plans, it will have no impact on the vesting or exercisability of the Adjusted Options. All Adjusted Options are vested, and will become or remain

exercisable in accordance with their terms as set forth in the applicable award agreements.

Recapitalizations and Reorganizations

The number of shares of Alcoa common stock underlying the Adjusted Options and the exercise price of each Adjusted Option are subject to adjustment in connection with certain transactions or events impacting

S-12

Table of Contents

outstanding Alcoa common stock, including a stock dividend, share exchange, recapitalization or similar transaction or event which the Administrator determines requires an adjustment to prevent dilution or enlargement of the benefits or potential benefits intended to be made available under the Plans.

Forfeiture and Clawbacks

Each Adjusted Option originally granted under the 2014 Plan is subject to forfeiture to the extent provided in any applicable clawback policy adopted by the Company or otherwise required by applicable law.

Amendment or Termination

In general, the Plans may be terminated or amended, and the Adjusted Options may be amended, by the Administrator in the case of the 2014 Plan or the Board of Directors in the case of the 2004 Plan, subject to certain limitations set forth in the Plans, including that, in general, no such termination or amendment may adversely affect the rights of any participant under any outstanding Adjusted Option without such participant's consent, unless certain conditions exist.

CERTAIN FEDERAL INCOME TAX CONSEQUENCES

The following is a brief summary of the principal U.S. federal income and employment tax consequences of the Adjusted Options to participants and the Company. It is based upon an interpretation of present federal income tax laws and regulations and may be inapplicable if such laws and regulations are changed. This summary is not intended to be exhaustive or constitute tax advice and does not describe state, local or foreign tax consequences. The Plans are not subject to the Employee Retirement Income Security Act of 1974, as amended, and are not intended to be qualified under Section 401(a) of the Internal Revenue Code of 1986, as amended (the Code). If you have any questions as to the federal, state or other tax consequences of participating in the Plans, you are advised to consult your personal legal or tax advisors.

Adjusted Options

A participant will recognize ordinary income when an Adjusted Option is exercised, in an amount generally equal to the excess of the fair market value of the shares of Alcoa common stock received over the exercise price paid by the participant. The Company is generally entitled to a tax deduction in an amount equal to the ordinary income recognized by the participant. Upon a subsequent disposition of the shares of Alcoa common stock acquired under an Adjusted Option, the participant will realize short-term or long-term capital gain (or loss) depending on the holding period. The capital gain (or loss) will be short-term if the shares of Alcoa common stock are disposed of within one year after the Adjusted Option is exercised and long-term if the shares of Alcoa common stock were held for more than one year as of the sale date.

Internal Revenue Code Section 409A

The Adjusted Options are intended to comply with an exemption from the requirements of Section 409A of the Code with respect to deferred compensation but there is no guarantee that the Adjusted Options will so comply. Generally, to the extent that the Adjusted Options fail to meet the requirements of the exemption under Section 409A, the participant will be subject to immediate taxation, interest and tax penalties.

RESTRICTIONS ON TRANSFERS AND SALES

Generally, a participant cannot sell, transfer, pledge, assign or otherwise alienate or hypothecate an Adjusted Option, other than by will or the laws of descent and distribution or a qualified domestic relations order, depending on the terms of the Plans and/or the participant's award agreement. Unless otherwise provided in the Plans and/or the applicable award agreement, during a participant's lifetime, only the participant can exercise the rights associated with an Adjusted Option.

S-13

Table of Contents

PLAN OF DISTRIBUTION

This prospectus supplement and the accompanying prospectus covers the shares of our common stock that are issuable upon the conversion of the RTI Convertible Notes as well as the shares of our common stock that are issuable upon the exercise of stock options granted to former employees of RTI and assumed by us in connection with our acquisition of RTI. Former employees include executors, administrators or beneficiaries of the estates of deceased employees, guardians or members of a committee for incompetent former employees, or similar persons duly authorized by law to administer the estate or assets of former employees and directors.

We are offering these shares of our common stock directly to the holders of the RTI Convertible Notes, upon conversion thereof and in accordance with the terms of such notes, and to the holders of the stock options according to the terms of their award agreements. We are not using an underwriter in connection with this offering. These shares will be listed for trading on the New York Stock Exchange.

In order to facilitate the conversion of the RTI Convertible Notes and the exercise of any stock options, we will furnish, at our expense, such reasonable number of copies of this prospectus supplement and the accompanying prospectus to each holder as the holder may request, together, if applicable, with instructions that such copies be delivered to the beneficial owners of the stock options.

RTI has become our wholly owned subsidiary as a result of the merger. On and following the effective date of the merger, the RTI Convertible Notes are exchangeable into shares of Alcoa common stock, with appropriate adjustments to the conversion rate to reflect the consideration for the merger. We have executed a supplemental indenture to the indenture for the RTI Convertible Notes to reflect this change. The 2015 Notes are convertible at a conversion rate of 98.3884 shares of Alcoa common stock per \$1,000 principal amount of 2015 Notes, which will decrease to 78.8499 shares of Alcoa common stock per \$1,000 principal amount of 2015 Notes after August 21, 2015. The 2019 Notes are convertible at a conversion rate of 69.5428 shares of Alcoa common stock per \$1,000 principal amount of 2019 Notes. The RTI Convertible Notes are subject to further conversion rate adjustments in the future under their terms.

LEGAL MATTERS

The validity of the common stock being offered by this prospectus supplement will be passed upon for Alcoa by Thomas F. Seligson, Esq., Counsel of Alcoa. Mr. Seligson is paid a salary by Alcoa, is a participant in various employee benefit plans offered to Alcoa employees, and beneficially owns, or has rights to acquire, an aggregate of less than one percent of the shares of Alcoa common stock.

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The consolidated financial statements and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Report on Internal Control over Financial Reporting), incorporated in this prospectus supplement by reference to the Annual Report on Form 10-K for the year ended December 31, 2014, have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

With respect to the unaudited financial information of Alcoa for the three month periods ended March 31, 2015 and 2014 and the three and six month periods ended June 30, 2015 and 2014 incorporated by reference in this prospectus supplement, PricewaterhouseCoopers LLP reported that they have applied limited procedures in accordance with

professional standards for a review of such information. However, their separate reports dated April 23, 2015 and July 22, 2015, respectively, incorporated by reference herein, states that they did not audit and they do not express an opinion on that unaudited financial information. Accordingly, the degree of reliance on their reports on such information should be restricted in light of the limited nature of the review procedures applied.

S-14

Table of Contents

PricewaterhouseCoopers LLP is not subject to the liability provisions of Section 11 of the Securities Act of 1933 for their reports on the unaudited financial information because those reports are not a report or a part of the registration statement prepared or certified by PricewaterhouseCoopers LLP within the meaning of Sections 7 and 11 of the Securities Act.

S-15

Table of Contents

PROSPECTUS

Alcoa Inc.

\$5,000,000,000

Debt Securities

Class B Serial Preferred Stock

Depositary Shares

Common Stock

Warrants

Stock Purchase Contracts

Stock Purchase Units

We may offer, from time to time, up to \$5,000,000,000 of any combination of the securities described in this prospectus, separately or together in any combination.

Specific terms of any securities to be offered will be provided in a supplement to this prospectus. You should read this prospectus and the applicable prospectus supplement carefully, as well as any document we incorporate by reference into this prospectus and any accompanying prospectus supplement, before you invest. A supplement may also add to, update, supplement or clarify information contained in this prospectus.

We may offer and sell these securities to or through one or more agents, underwriters, dealers or other third parties or directly to one or more purchasers on a continuous or delayed basis.

Our common stock is listed on the New York Stock Exchange under the symbol AA.

The mailing address of our principal executive offices is Alcoa Inc., 390 Park Avenue, New York, New York 10022-4608, and the telephone number is 212-836-2600.

Investing in the offered securities involves risks. See Risk Factors on page 5 of this prospectus and any risk factors described in any applicable prospectus supplement and in the documents we incorporate by reference.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this Prospectus is July 30, 2014.

Table of Contents

TABLE OF CONTENTS

Prospectus

	Page
<u>About this Prospectus</u>	3
<u>Where You Can Find More Information</u>	4
<u>Alcoa Inc.</u>	5
<u>Risk Factors</u>	5
<u>Forward-Looking Statements</u>	5
<u>Ratio of Earnings to Fixed Charges</u>	7
<u>Use of Proceeds</u>	8
<u>Description of Senior Debt Securities</u>	9
<u>Description of Subordinated Debt Securities</u>	22
<u>Description of Preferred Stock</u>	29
<u>Description of Depositary Shares</u>	33
<u>Description of Common Stock</u>	36
<u>Description of Warrants</u>	38
<u>Description of Stock Purchase Contracts and Stock Purchase Units</u>	40
<u>Plan of Distribution</u>	41
<u>Legal Matters</u>	43
<u>Independent Registered Public Accounting Firm</u>	43

Table of Contents

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission (the SEC) using a shelf registration process. By using a shelf registration statement, we are registering an unspecified amount of each class of securities described in this prospectus, and we may sell any combination of the securities described in this prospectus in one or more offerings. In addition, we may use this prospectus and the applicable prospectus supplement in a remarketing or other resale transaction involving the securities after their initial sale. This prospectus provides you with a general description of the securities we may offer. Each time we sell securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement may also add to, update, supplement or clarify information contained in this prospectus. The rules of the SEC allow us to incorporate by reference information into this prospectus and any prospectus supplement. Any information incorporated by reference is considered to be a part of this prospectus and any applicable prospectus supplement, and information that we file later with the SEC will automatically update and supersede this information. See **Where You Can Find More Information**. You should read both this prospectus and any applicable prospectus supplement together with additional information described under the heading **Where You Can Find More Information**, and any free writing prospectus with respect to an offering filed by us with the SEC.

We are responsible for the information contained and incorporated by reference in this prospectus. We have not authorized anyone to give you any other information, and we take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should not assume that the information contained or incorporated by reference in this prospectus or any prospectus supplement is accurate as of any date other than the date of the document containing the information.

Unless otherwise indicated, or the context otherwise requires, references in this prospectus to **Alcoa**, **the company**, **we**, **us** and **our** are to Alcoa Inc. and its consolidated subsidiaries.

Table of Contents

WHERE YOU CAN FIND MORE INFORMATION

Available Information

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy any document we file with the SEC at the SEC's Public Reference Room in Washington, D.C. located at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the Public Reference Room. The SEC maintains an Internet site at <http://www.sec.gov> which contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC. Our SEC filings are available to the public from the SEC's Internet site. Information about us is also available at our Internet site at <http://www.alcoa.com>. The information on our Internet site is not a part of this prospectus or any prospectus supplement.

This prospectus is part of a registration statement that we have filed with the SEC relating to the securities to be offered. This prospectus does not contain all of the information we have included in the registration statement and the accompanying exhibits and schedules in accordance with the rules and regulations of the SEC, and we refer you to the omitted information. The statements this prospectus makes pertaining to the content of any contract, agreement or other document that is an exhibit to the registration statement necessarily are summaries of their material provisions and do not describe all provisions, exceptions and qualifications contained in those contracts, agreements or documents. You should read those contracts, agreements or documents for information that may be important to you. The registration statement, exhibits and schedules are available at the SEC's Public Reference Room or through its Internet site.

Incorporation by Reference

The rules of the SEC allow us to incorporate by reference in this prospectus the information in other documents that we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be a part of this prospectus, and certain information in documents that we file later with the SEC will automatically update and supersede information contained in documents filed earlier with the SEC or contained in this prospectus. We incorporate by reference in this prospectus the documents listed below and any future filings that we may make with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Securities Exchange Act of 1934, as amended (the Exchange Act), on or after the date of this prospectus and before the termination of the offering (except that we are not incorporating by reference, in any case, any document or information that is not deemed to be filed and that is not specifically incorporated by reference in this prospectus):

Our Annual Report on Form 10-K for the year ended December 31, 2013;

Our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2014 and June 30, 2014; and

Our Current Reports on Form 8-K filed January 10, 2014 (Item 1.01 and Exhibit 99.1 of Item 9.01), January 21, 2014, January 23, 2014, February 21, 2014, March 18, 2014, April 14, 2014 (Item 8.01), May 8, 2014 (Item 5.07) and June 27, 2014 (Items 1.01 and 3.02 and Exhibits 2.1, 10.1 and 10.2 of Item 9.01).

Edgar Filing: ALCOA INC. - Form 424B5

You may obtain a copy of any or all of the documents referred to above which have been or will be incorporated by reference in this prospectus (including exhibits specifically incorporated by reference in those documents), as well as a copy of the registration statement of which this prospectus is a part and its exhibits, at no cost to you by writing or telephoning us at the following address:

Alcoa Inc.

390 Park Avenue

New York, New York 10022-4608

Attention: Investor Relations

Telephone: (212) 836-2674

You also may review a copy of the registration statement of which this prospectus is a part and its exhibits at the SEC's Public Reference Room at the address listed above, as well as through the SEC's Internet site at <http://www.sec.gov>.

Table of Contents

ALCOA INC.

Formed in 1888, Alcoa is a Pennsylvania corporation with its principal office at 390 Park Avenue, New York, New York 10022-4608 (telephone number (212) 836-2600).

Alcoa is a global leader in lightweight metals technology, engineering and manufacturing. Alcoa's innovative, multi-material products, which include aluminum, titanium, and nickel, are used worldwide in aircraft, automobiles, commercial transportation, packaging, building and construction, oil and gas, defense, consumer electronics, and industrial applications.

Alcoa is also the world leader in the production and management of primary aluminum, fabricated aluminum, and alumina combined, through its active participation in all major aspects of the industry: technology, mining, refining, smelting, fabricating, and recycling. Aluminum is a commodity that is traded on the London Metal Exchange (LME) and priced daily. Aluminum (primary and fabricated) and alumina represent approximately 80% of Alcoa's 2013 revenues, and the price of aluminum influences the operating results of Alcoa.

Alcoa is a global company operating in 30 countries. Based upon the country where the point of sale occurred, the U.S. and Europe generated 51% and 26%, respectively, of Alcoa's sales in 2013. In addition, Alcoa has investments and operating activities in, among others, Australia, Brazil, China, Guinea, Iceland, Russia, and Saudi Arabia, all of which present opportunities for substantial growth. Governmental policies, laws and regulations, and other economic factors, including inflation and fluctuations in foreign currency exchange rates and interest rates, affect the results of operations in these countries.

RISK FACTORS

Investing in our securities involves risks. Before deciding to purchase any of our securities, you should carefully consider the discussion of risks and uncertainties under the heading "Risk Factors" contained in our Annual Report on Form 10-K for the fiscal year ended December 31, 2013 and our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2014 and June 30, 2014, which are incorporated by reference in this prospectus, and under similar headings in our subsequently filed quarterly reports on Form 10-Q and annual reports on Form 10-K, as well as the other risks and uncertainties described in any applicable prospectus supplement and in the other documents incorporated by reference in this prospectus. See the section entitled "Where You Can Find More Information" in this prospectus. The risks and uncertainties we discuss in the documents incorporated by reference in this prospectus are those we currently believe may materially affect our company. Additional risks and uncertainties not presently known to us or that we currently believe are immaterial also may materially and adversely affect our business, financial condition and results of operations.

FORWARD-LOOKING STATEMENTS

This prospectus, information incorporated by reference in this prospectus, any applicable prospectus supplement, and any oral communications made by Alcoa may contain "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Exchange Act. These statements relate to future events and expectations and can be identified by the use of predictive, future-tense or forward-looking terminology, such as "anticipates," "believes," "estimates," "expects," "should," "hopes," "forecasts," "outlook," "plans," "projects," "seeks," "should," "targets," "will," "will likely result," or other similar expressions. All such statements reflect Alcoa's expectations, assumptions or projections about the future other than statements of historical fact and are forward-looking statements, including, without limitation, forecasts concerning aluminum industry growth or other trend projections, anticipated financial results or operating performance, and statements regarding Alcoa's strategies,

objectives, goals, targets, outlook, and business and financial prospects. Forward-looking statements are subject to a number of risks, uncertainties and other factors and are not guarantees of future performance. Actual results, performance or outcomes may differ materially from those expressed in or implied by those forward-looking statements. Accordingly, you should not place undue reliance on such forward-looking statements. Any forward-looking statement made by us in this prospectus, any applicable prospectus supplement, any document we incorporate by reference or any free writing prospectus filed by us with the SEC speaks only as of the date on which it is made. Factors or events that could cause our actual results to differ may emerge from time to time, and it is not possible for us to predict all of them. We undertake no obligation to update publicly any forward-looking statements, whether in response to new information, future events or otherwise, except as required by applicable law.

Table of Contents

Factors that could cause actual results to differ materially from those in forward-looking statements include those discussed under **Risk Factors** on page 5 of this prospectus and in our periodic reports referred to in **Where You Can Find More Information** above, including in the following sections of our Annual Report on Form 10-K for the year ended December 31, 2013: Part I, Item 1A (Risk Factors); Part II, Item 7 (Management's Discussion and Analysis of Financial Condition and Results of Operations), including the disclosures under Segment Information and Critical Accounting Policies and Estimates; and Note N (Contingencies and Commitments) and Note X (Derivatives and Other Financial Instruments) to the Consolidated Financial Statements in Part II, Item 8 (Financial Statements and Supplementary Data), as the information in such sections may be updated from time to time by the documents incorporated by reference herein.

Table of Contents**RATIO OF EARNINGS TO FIXED CHARGES**

The following table sets forth the ratio of our earnings to fixed charges for the periods indicated:

	Six Months Ended June 30, 2014	Year Ended December 31,				
Ratio of Earnings to Fixed Charges	(A)	2013 (B)	2012 1.4x	2011 2.5x	2010 1.7x	2009 (C)

- (A) For the six months ended June 30, 2014, there was a deficiency of earnings to cover the fixed charges of \$2.0 million.
- (B) For the year ended December 31, 2013, there was a deficiency of earnings to cover the fixed charges of \$1.792 billion.
- (C) For the year ended December 31, 2009, there was a deficiency of earnings to cover the fixed charges of \$1.594 billion.

The ratios include all earnings from continuing operations and fixed charges of Alcoa. Earnings have been calculated by (i) adding to (deducting from) income (loss) from continuing operations the following: the provision for income taxes; amortization of capitalized interest; interest expense, amortization of debt expense, and an amount representative of the interest factor in rentals; and the distributed income of less than 50% owned entities; and (ii) deducting from (adding to) income (loss) from continuing operations the following: benefit for income taxes; equity income of entities less than 50% owned; and the noncontrolling interests' share in the pretax income of our majority-owned subsidiaries without fixed charges. Fixed charges consist of interest expense, amortization of debt expense, an amount representative of the interest factor in rentals, capitalized interest, and preferred stock dividend requirements of majority-owned subsidiaries.

A ratio of earnings to combined fixed charges and preference dividends is not presented as such ratio does not differ materially from the ratio of earnings to fixed charges presented above. At the time of a new issuance of preferred stock, a ratio of earnings to combined fixed charges and preference dividends will be provided in the related prospectus supplement or incorporated by reference therein from a Current Report on Form 8-K or other document filed under the Exchange Act.

Table of Contents

USE OF PROCEEDS

Unless otherwise specified in an applicable prospectus supplement, we intend to use the proceeds from the sale of the securities offered by this prospectus for general corporate purposes, which may include working capital, capital expenditures, acquisitions, and refinancing of debt, including outstanding commercial paper and other short-term indebtedness. Net proceeds may be temporarily invested prior to use. We may include a more detailed description of the use of proceeds of any specific offering of securities in the prospectus supplement relating to the offering.

Table of Contents**DESCRIPTION OF SENIOR DEBT SECURITIES**

The following description sets forth certain general terms and provisions of the senior debt securities that Alcoa may offer under this prospectus. The particular terms of any senior debt securities and the extent, if any, to which the following general provisions may apply to any series of senior debt securities will be described in a prospectus supplement relating to the issuance of those senior debt securities. For purposes of this description, references to Alcoa, the company, the issuer, we, our and us refer only to Alcoa Inc. and do not include any of Alcoa's current or future subsidiaries.

Senior debt securities may be issued, from time to time, in one or more series under the indenture dated as of September 30, 1993 (the original indenture) between Alcoa and The Bank of New York Mellon Trust Company, N.A. (formerly known as The Bank of New York Trust Company, N.A.), as trustee, as successor to J.P. Morgan Trust Company, National Association (formerly known as Chase Manhattan Trust Company, N.A.), as supplemented by the first supplemental indenture dated as of January 25, 2007 (the first supplemental indenture) between Alcoa and the trustee, the second supplemental indenture dated as of July 15, 2008 (the second supplemental indenture) between Alcoa and the trustee, and the third supplemental indenture dated as of March 24, 2009 (the third supplemental indenture) between Alcoa and the trustee. The original indenture, the first supplemental indenture, the second supplemental indenture, and the third supplemental indenture are incorporated by reference as exhibits to the registration statement of which this prospectus is a part. References in this prospectus to the trustee for our senior debt securities mean The Bank of New York Mellon Trust Company, N.A. The terms of the senior debt securities include those expressly set forth in the original indenture, as supplemented by the first supplemental indenture, the second supplemental indenture, and the third supplemental indenture (the original indenture as so supplemented, the senior indenture), and those made part of the senior indenture by reference to the Trust Indenture Act of 1939, as amended (the Trust Indenture Act). You may obtain a copy of the senior indenture from us without charge by the means described under [Where You Can Find More Information](#).

The following summary of certain provisions of the senior indenture and the senior debt securities that may be offered under this prospectus is not meant to be complete. For more information, you should refer to the full text of the senior indenture and the senior debt securities, including the definitions of terms used and not defined in this prospectus.

General

The senior indenture does not limit the aggregate principal amount of senior debt securities that Alcoa may issue, whether under the senior indenture or any existing indenture or other indenture that Alcoa may enter into in the future or otherwise. Unless otherwise specified in a prospectus supplement relating to an offering of senior debt securities, the senior debt securities offered under this prospectus:

will be unsecured obligations of Alcoa;

may be issued under the senior indenture from time to time in one or more series up to the aggregate amount from time to time authorized by Alcoa for each series; and

will rank on a parity with all other unsecured and unsubordinated indebtedness of Alcoa.

A prospectus supplement will describe the following terms of any series of senior debt securities that Alcoa may offer:

the specific designation, aggregate principal amount being offered and purchase price;

any limit on the aggregate principal amount of such senior debt securities that Alcoa may issue;

whether the senior debt securities are to be issuable as registered securities or bearer securities or both, whether any of the senior debt securities are to be issuable initially in temporary global form and whether any of the senior debt securities are to be issuable in permanent global form;

the date(s) on which the principal is payable and any right to extend such date(s);

the rate(s) at which the senior debt securities being offered will bear interest or method of calculating any interest rate(s);

the date(s) from which interest will accrue, or the manner of determination of interest payment dates;

Table of Contents

the regular record date for any interest payable on any senior debt securities being offered which are registered securities on any interest payment date and the extent to which, or the manner in which, any interest payable on a temporary global senior debt security on an interest payment date will be paid if other than in the manner described under Temporary Global Securities below;

the person to whom any interest on any registered security of the series will be payable if other than the person in whose name the registered security is registered at the close of business on the regular record date for the interest as described under Payment and Paying Agents below, and the manner in which any interest on any bearer security will be paid if other than in the manner described under Payment and Paying Agents below;

any right to defer payments of interest by extending the interest payment periods and the duration of such extensions;

any mandatory or optional sinking fund or analogous provisions;

each office or agency where, subject to the terms of the senior indenture as described below under Payment and Paying Agents, the principal of and any premium and interest on the senior debt securities will be payable and each office or agency where, subject to the terms of the senior indenture as described below under Form, Exchange, Registration and Transfer, the senior debt securities may be presented for registration of transfer or exchange;

the date(s) after which and the period(s) within which, the price(s) at which and the terms and conditions upon which the senior debt securities may be redeemed, in whole or in part, at the option of Alcoa;

any obligation of Alcoa to redeem or purchase the senior debt securities at the option of the holder thereof and the date(s) after which and the period(s) within which, the price(s) at which and the terms and conditions upon which the senior debt securities will be redeemed or purchased, in whole or in part, under such obligations;

the denominations in which any senior debt securities that are registered securities will be issuable, if other than denominations of \$1,000 and any integral multiple thereof, and the denomination or denominations in which any senior debt securities that are bearer securities will be issuable, if other than the denomination of \$5,000;

the currency, currencies or currency units of payment of principal of and any premium and interest on the senior debt securities and the manner of determining the U.S. dollar equivalent for purposes of determining outstanding senior debt securities of the series;

any index used to determine the amount of payments of principal of and any premium and interest on the senior debt securities;

the portion of the principal amount of the senior debt securities, if other than the principal amount, payable upon acceleration of maturity;

if other than the trustee, the person who will be the security registrar of the senior debt securities;

whether the senior debt securities will be subject to defeasance or covenant defeasance as described below under Defeasance and Covenant Defeasance ;

any terms and conditions under which the senior debt securities of the series may be convertible into or exchangeable for other securities of Alcoa or another issuer;

whether the senior debt securities of the series will be issuable in whole or in part in the form of one or more book-entry securities and, in such case, the depository or depositories for such book-entry debt security or book-entry securities and any circumstances other than those set forth in the senior indenture in which any such book-entry security may be transferred to, and registered and exchanged for senior debt securities registered in the name of, a person other than the depository for such book-entry security or a nominee thereof and in which any such transfer may be registered;

any and all other terms, including any modifications of or additions to the events of default or covenants, and any terms that may be required by or advisable under applicable laws or regulations not inconsistent with the senior indenture;

whether the senior debt securities are issuable as a global security, and in such case, the identity of the depository;

Table of Contents

any applicable material U.S. federal income tax consequences;

any other terms of the senior debt securities not inconsistent with the provisions of the senior indenture (Section 301); and

any special provisions for the payment of additional amounts with respect to the senior debt securities.

Senior debt securities may be issued at a substantial discount below their stated principal amount. Certain U.S. federal income tax considerations applicable to senior debt securities issued at a discount and to senior debt securities that are denominated in a currency other than U.S. dollars will be described in the applicable prospectus supplement.

Senior debt securities may also be issued under the senior indenture upon the exercise of warrants, in connection with a stock purchase contract or as part of a stock purchase unit. See [Description of Warrants](#) and [Description of Stock Purchase Contracts and Stock Purchase Units](#).

Form, Exchange, Registration and Transfer

Senior debt securities may be issued in registered form or bearer form or both, as specified in the terms of the series. Senior debt securities will not be issued in bearer form after March 18, 2012. Unless otherwise indicated in an applicable prospectus supplement, definitive bearer securities will have interest coupons attached. (Section 201) Senior debt securities of a series may also be issuable in temporary and permanent global form. (Section 201) See [Permanent Global Securities](#) below.

In connection with its sale during the restricted period (as defined in U.S. Treasury Regulations Section 1.163-5(c)(2)(i)(D)(7)), no bearer security, including a senior debt security in permanent global form, may be mailed or otherwise delivered to any location in the United States or its possessions. No bearer security other than a temporary global bearer security may be delivered, nor may interest be paid on any bearer security unless the person entitled to receive the bearer security or interest furnishes written certification, in the form required by the senior indenture, to the effect that such person:

is not a U.S. person;

is a foreign branch of a U.S. financial institution purchasing for its own account or for resale, or is a U.S. person who acquired the senior debt security through such a financial institution and who holds the senior debt security through such financial institution on the date of certification. In either of such cases, such financial institution must provide a certificate to Alcoa or the distributor selling the senior debt security to it stating that it agrees to comply with the requirements of Section 165(j)(3)(A), (B) or (C) of the Internal Revenue Code of 1986, as amended, and the U.S. Treasury Regulations thereunder; or

is a financial institution holding for purposes of resale during the restricted period (as defined in U.S. Treasury Regulations Section 1.163-5(c)(2)(i)(D)(7)).

A financial institution holding for purposes of resale during the restricted period, whether or not also satisfying the other two prongs of the above sentence, must certify that it has not acquired the senior debt security for purposes of

resale directly or indirectly to a U.S. person or to a person within the United States or its possessions. In the case of a bearer security in permanent global form, such certification must be given in connection with notation of a beneficial owner's interest therein. (Section 303) See Temporary Global Securities below.

Senior debt securities may be presented for exchange as follows:

Registered securities will be exchangeable for other registered securities of the same series.

If senior debt securities have been issued as both registered securities and bearer securities, subject to certain conditions, holders may exchange bearer securities for registered securities of the same series of any authorized denominations and of a like aggregate principal amount and tenor.

Bearer securities surrendered in exchange for registered securities between a regular record date or a special record date and the relevant date for payment of interest must be surrendered without the coupon relating to such date for payment of interest and interest will not be payable in respect of the registered security issued in exchange for such bearer security, but will be payable only to the holder of such coupon when due in accordance with the terms of the senior indenture.

Table of Contents

Bearer securities will not be issued in exchange for registered securities.

Each bearer security other than a temporary global bearer security will bear a legend substantially to the following effect: Any U.S. Person who holds this obligation will be subject to limitations under U.S. income tax laws, including the limitations provided in Sections 165(j) and 1287(a) of the Internal Revenue Code.

Registered securities may be presented for registration of transfer, with the form of transfer endorsed thereon duly executed, if so required by Alcoa or the trustee or any transfer agent, at the office of the security registrar or at the office of any transfer agent designated by Alcoa for that purpose with respect to any series of senior debt securities and referred to in the applicable prospectus supplement, without service charge and upon payment of any taxes and other governmental charges as described in the senior indenture. Any transfer or exchange will be effected once the security registrar or transfer agent, as the case may be, is satisfied with the documents of title and identity of the person making the request. (Section 305)

If a prospectus supplement refers to any transfer agents, in addition to the security registrar, initially designated by Alcoa with respect to any series of senior debt securities, Alcoa may at any time rescind the designation of any additional transfer agent or approve a change in the location through which any transfer agent acts. If senior debt securities of a series are issuable solely as registered securities, Alcoa will be required to maintain a transfer agent in each place of payment for the series. If senior debt securities of a series are issuable as bearer securities, Alcoa will be required to maintain, in addition to the security registrar, a transfer agent in a place of payment for the series located outside the United States. Alcoa may at any time designate additional transfer agents with respect to any series of senior debt securities. (Section 1002)

If debt securities of a series are redeemed in part, Alcoa will not be required to:

issue, register the transfer of or exchange senior debt securities of the series during a period beginning at the opening of business 15 days before any selection of senior debt securities of that series to be redeemed and ending at the close of business on:

if senior debt securities of the series are issuable only as registered securities, the day of mailing of the relevant notice of redemption, and

if senior debt securities of the series are issuable as bearer securities, the day of the first publication of the relevant notice of redemption or, if senior debt securities of the series are also issuable as registered securities and there is no publication, the mailing of the relevant notice of redemption;

register the transfer of or exchange any registered security, or portion thereof, called for redemption, except the unredeemed portion of any registered security being redeemed in part; or

exchange any bearer security called for redemption, except to exchange such bearer security for a registered security of that series and like tenor which is immediately surrendered for redemption. (Section 305)

Payment and Paying Agents

Unless otherwise indicated in an applicable prospectus supplement, payment of principal of and any premium and interest on registered securities will be made at the office of the paying agent(s) designated by Alcoa from time to time. At the option of Alcoa, payment of any interest may instead be made by check mailed to the address of the person entitled thereto as such address appears in the security register. Unless otherwise indicated in an applicable prospectus supplement, payment of any installment of interest on registered securities will be made to the person in whose name the registered security is registered at the close of business on the regular record date for that interest. (Section 307)

Unless otherwise indicated in an applicable prospectus supplement, payment of principal of and any premium and interest on bearer securities will be payable, subject to any applicable laws and regulations, at the offices of paying agents outside the United States as Alcoa may designate from time to time by check or by transfer, at the option of the holder, to an account maintained by the payee with a bank located outside the United States. Unless otherwise indicated in an applicable prospectus supplement, payment of interest on bearer securities on any interest payment date will be made only against surrender outside the United States, to the paying agent, of the coupon relating to that interest payment date. (Section 1001) No payment with respect to any bearer security will be

Table of Contents

made at any office or agency of Alcoa in the United States or by check mailed to any address in the United States or by transfer to an account maintained with a bank located in the United States. Notwithstanding the foregoing, payments of principal of and any premium and interest on bearer securities denominated and payable in U.S. dollars will be made at the office of Alcoa's paying agent in the Borough of Manhattan, the City of New York, if, but only if, payment of the full amount thereof in U.S. dollars at all offices or agencies outside the United States is illegal or effectively precluded by exchange controls or other similar restrictions. (Section 1002)

Unless otherwise indicated in an applicable prospectus supplement, the corporate trust office of the trustee in Pittsburgh, Pennsylvania will be designated as a paying agent for Alcoa for payments with respect to senior debt securities which are issuable solely as registered securities. Alcoa will maintain a paying agent outside of the United States for payments with respect to senior debt securities, subject to the limitations described above on bearer securities, which are issuable solely as bearer securities, or as both registered securities and bearer securities. Any paying agents outside the United States and any other paying agents in the United States initially designated by Alcoa for the senior debt securities will be named in an applicable prospectus supplement. Alcoa may at any time designate additional paying agents or rescind the designation of any paying agent or approve a change in the office through which any paying agent acts. If senior debt securities of a series are issuable solely as registered securities, Alcoa will be required to maintain a paying agent in each place of payment for the series. If senior debt securities of a series are issuable as bearer securities, Alcoa will be required to maintain:

a paying agent in the Borough of Manhattan, the City of New York, for payments with respect to any registered securities of the series and for payments with respect to bearer securities of the series in the circumstances described above, but not otherwise; and

a paying agent in a place of payment located outside the United States where senior debt securities of the series and any coupons appertaining thereto may be presented and surrendered for payment. If the senior debt securities of such series are listed on The Stock Exchange of the United Kingdom and the Republic of Ireland or the Luxembourg Stock Exchange or any other stock exchange located outside the United States and such stock exchange so requires, Alcoa will maintain a paying agent in London or Luxembourg or any other required city located outside the United States, as the case may be, for the senior debt securities of such series. (Section 1002)

All monies paid by Alcoa to a paying agent for the payment of principal of and any premium or interest on any senior debt security that remain unclaimed at the end of two years after such principal, premium or interest becomes due and payable will be repaid to Alcoa. Thereafter, the holder of any such senior debt security or any coupon may look only to Alcoa for payment. (Section 1003)

Book-Entry Securities

The senior debt securities of a series may be issued in the form of one or more registered securities that will be registered in the name of a depository or its nominee and bear a legend as specified in the senior indenture. These senior debt securities will be known as book-entry securities. Unless otherwise indicated in the applicable prospectus supplement, a book-entry security may not be registered for transfer or exchange to any person other than the depository or its nominee unless:

the depository notifies Alcoa that it is unwilling to continue as depository or ceases to be a clearing agency registered under the Exchange Act;

Alcoa executes and delivers to the trustee a company order that the transfer or exchange of the book-entry security will be registrable; or

there has occurred and is continuing an event of default, or an event that after notice or lapse of time, or both, would be an event of default, with respect to the senior debt securities evidenced by the book-entry security.

Upon the occurrence of any of the conditions specified above or other conditions as may be specified as contemplated by the senior indenture, the book-entry security may be exchanged for senior debt securities of the series registered in the names of, and the transfer of the book-entry security may be registered to, such persons, including persons other than the depository with respect to such series and its nominees, as the depository may direct.

Table of Contents

The specific terms of the depository arrangement with respect to any portion of a series of registered book-entry securities to be represented by a book-entry security will be described in the applicable prospectus supplement. Alcoa expects that the following provisions will apply to depository arrangements.

Unless otherwise specified in the applicable prospectus supplement, senior debt securities that are to be represented by a book-entry security to be deposited with or on behalf of a depository will be represented by a book-entry security registered in the name of the depository or its nominee. Upon the issuance of a book-entry security, and the deposit of the book-entry security with or on behalf of the depository, the depository will credit, on its book-entry registration and transfer system, the respective principal amounts of the senior debt securities represented by the book-entry security to the accounts of institutions that have accounts with the depository or its nominee. The accounts to be credited will be designated by the underwriters or agents of the senior debt securities or by Alcoa if the senior debt securities are offered and sold directly by Alcoa. Ownership of beneficial interests in a book-entry security will be limited to the institutions that have accounts with the depository or persons that may hold interests through the institutions. Ownership of beneficial interests by the institutions in the book-entry security will be shown on, and the transfer of that ownership interest will be effected only through, records maintained by the depository or its nominee for the book-entry security. Ownership of beneficial interests in the book-entry security by persons that hold through the institutions will be shown on, and the transfer of that ownership interest within the institution will be effected only through, records maintained by that institution. The laws of some jurisdictions require that certain purchasers of securities take physical delivery of securities in certificated form. The foregoing limitations and such laws may impair the ability to transfer beneficial interests in book-entry securities.

So long as the depository for a book-entry security, or its nominee, is the registered owner of that book-entry security, the depository or nominee, as the case may be, will be considered the sole owner or holder of the senior debt securities represented by the book-entry security for all purposes under the senior indenture. Unless otherwise specified in the applicable prospectus supplement, owners of beneficial interests in a book-entry security:

will not be entitled to have senior debt securities of the series registered in their names;

will not receive or be entitled to receive physical delivery of senior debt securities in certificated form; and

will not be considered the holders of debt securities for any purposes under the senior indenture. (Sections 204 and 305)

Accordingly, each person owning a beneficial interest in a book-entry security must rely on the procedures of the depository and, if such person does not have an account with the depository, on the procedures of the institution through which such person owns its interest, to exercise any rights of a holder under the senior indenture. The senior indenture provides that the depository may grant proxies and otherwise authorize participants to give or take any request, demand, authorization, direction, notice, consent, waiver or other action that a holder is entitled to give or take under the senior indenture. (Section 104) Alcoa understands that under existing industry practices, if Alcoa requests any action of holders, or if an owner of a beneficial interest in such book-entry security desires to give any notice or take any action a holder is entitled to give or take under the senior indenture, the depository would authorize the participants to give such notice or take such action, and participants would authorize beneficial owners owning through such participants to give such notice or take such action or would otherwise act upon the instructions of beneficial owners owning through them.

Temporary Global Securities

If so specified in an applicable prospectus supplement, all or any portion of the senior debt securities of a series that are issuable as bearer securities may initially be represented by one or more temporary global senior debt securities, without interest coupons, to be deposited with a common depository in London for the Euroclear System (Euroclear) and Clearstream Banking Luxembourg S.A. (Clearstream) for credit to the designated accounts. On and after the date determined as provided in any temporary global senior debt security and described in an applicable prospectus supplement, each temporary global senior debt security will be exchanged for an interest in a permanent global bearer security as specified in an applicable prospectus supplement, but, unless otherwise specified in an applicable prospectus supplement, only upon receipt of:

written certification from Euroclear or Clearstream, as the case may be, in the form and to the effect required by the senior indenture (a Depository Tax Certification); and

written certification to Euroclear or Clearstream from the person entitled to receive such senior debt securities in the form and to the effect described above under Form, Exchange, Registration and Transfer.

Table of Contents

No definitive bearer security, including a senior debt security in permanent global form that is either a bearer security or exchangeable for bearer securities, delivered in exchange for a portion of a temporary or permanent global senior debt security may be mailed or otherwise delivered to any location in the United States in connection with such exchange. (Section 304)

Unless otherwise specified in an applicable prospectus supplement, interest in respect of any portion of a temporary global senior debt security payable in respect of an interest payment date occurring before the issuance of securities in permanent global form will be paid to each of Euroclear and Clearstream with respect to the portion of the temporary global senior debt security held for its account following the receipt by Alcoa or its agent of a Depository Tax Certification. Each of Euroclear and Clearstream will undertake in such circumstances to credit such interest received by it in respect of a temporary global senior debt security to the respective accounts for which it holds such temporary global senior debt security only upon receipt in each case of certification in the form and to the effect described under Form, Exchange, Registration and Transfer with respect to the portion of such temporary global senior debt security on which such interest is to be so credited. Receipt of the certification described in the preceding sentence by Euroclear or Clearstream, as the case may be, will constitute irrevocable instructions to Euroclear or Clearstream to exchange such portion of the temporary global senior debt security with respect to which such certification was received for an interest in a permanent global senior debt security.

Permanent Global Securities

If any senior debt securities of a series are issuable in permanent global form, the applicable prospectus supplement will describe any circumstances under which beneficial owners of interests in any such permanent global senior debt security may exchange their interests for senior debt securities of the series and of like tenor and principal amount in any authorized form and denomination. No bearer security delivered in exchange for a portion of a permanent global senior debt security may be mailed or otherwise delivered to any location in the United States in connection with the exchange. (Section 305)

A person having a beneficial interest in a permanent global senior debt security will, except with respect to payment of principal of and any premium and interest on the permanent global senior debt security, be treated as a holder of the principal amount of outstanding senior debt securities represented by the permanent global senior debt security as is specified in a written statement of:

the holder of the permanent global senior debt security, or

in the case of a permanent global senior debt security in bearer form, the operator of Euroclear or Clearstream,

which is produced to the trustee by such person. (Section 203)

Principal of and any premium and interest on a permanent global senior debt security will be payable in the manner described in the applicable prospectus supplement.

Certain Limitations

The senior indenture contains the covenants and limitations summarized below. These covenants and limitations will be applicable, unless waived or amended, so long as any of the senior debt securities are outstanding, unless stated

otherwise in the prospectus supplement.

Liens. Alcoa covenants that it will not create, incur, assume or guarantee, and will not permit any Restricted Subsidiary to create, incur, assume or guarantee, any indebtedness for borrowed money secured by a mortgage, security interest, pledge, charge or similar encumbrance (mortgages) upon any Principal Property (as defined below) of Alcoa or any Restricted Subsidiary (as defined below) or upon any shares of stock or indebtedness of any Restricted Subsidiary without equally and ratably securing the senior debt securities. The foregoing restriction, however, will not apply to:

mortgages on property, shares of stock or indebtedness of any corporation existing at the time such corporation becomes a Restricted Subsidiary;

mortgages on property existing at the time of acquisition of such property by Alcoa or a Restricted Subsidiary or mortgages to secure the payment of all or any part of the purchase price of such property upon the acquisition or to secure any indebtedness incurred before, at the time of, or within 180 days after, the acquisition of such property for the purpose of financing all or any part of the purchase price thereof, or mortgages to secure the cost of improvements to such acquired property;

Table of Contents

mortgages to secure indebtedness of a Restricted Subsidiary to Alcoa or another Restricted Subsidiary;

mortgages existing at the date of the senior indenture;

mortgages on property of a corporation existing at the time such corporation is merged into or consolidated with Alcoa or a Restricted Subsidiary or at the time of a sale, lease, or other disposition of the properties of a corporation as an entirety or substantially as an entirety to Alcoa or a Restricted Subsidiary;

certain mortgages in favor of governmental entities; or

extensions, renewals or replacements of any mortgage referred to in the above listed exceptions. (Section 1009)

Notwithstanding the restrictions outlined in the preceding paragraph, Alcoa or any Restricted Subsidiary will be permitted to create, incur, assume or guarantee any indebtedness secured by a mortgage without equally and ratably securing the senior debt securities, if after giving effect thereto, the aggregate amount of all indebtedness so secured by mortgages, not including mortgages permitted under the listed exceptions above, does not exceed 15% of Consolidated Net Tangible Assets (as defined below). (Section 1009)

Sale and Leaseback Arrangements. Alcoa covenants that it will not, nor will it permit any Restricted Subsidiary to, enter into any arrangement with any person providing for the leasing to Alcoa or any Restricted Subsidiary of Principal Property, where such Principal Property has been or is to be sold or transferred by Alcoa or such Restricted Subsidiary to such person, unless either:

Alcoa or such Restricted Subsidiary would be entitled to create, incur, assume or guarantee indebtedness secured by a mortgage on such Principal Property at least equal in amount to the Attributable Debt (as defined below) with respect to such arrangement, without equally and ratably securing the senior debt securities pursuant to the limitation in the senior indenture on liens; or

Alcoa applies an amount equal to the greater of the net proceeds of such sale or the Attributable Debt with respect to such arrangement to the retirement of indebtedness that matures more than twelve months after the creation of such indebtedness.

This restriction on sale and leaseback transactions does not apply to any transaction:

involving a lease for a term of not more than three years; or

between Alcoa and a Restricted Subsidiary or between Restricted Subsidiaries. (Section 1010)

Highly leveraged transactions. The senior indenture does not contain provisions that would afford protection to the holders of the senior debt securities in the event of a highly leveraged transaction involving Alcoa.

Certain Definitions

The following are definitions of certain capitalized words used in this summary. These and other definitions are set forth in their entirety in the senior indenture.

Attributable Debt when used in connection with a sale and leaseback transaction referred to above means, at the time of determination, the lesser of:

the fair value of such property as determined by Alcoa's board of directors; or

the present value, discounted at the annual rate of 9%, compounded semi-annually, of the obligation of the lessee for net rental payments during the remaining term of the lease, including any period for which such lease has been extended.

Consolidated Net Tangible Assets means, as of any particular time, the aggregate amount of assets, less applicable reserves and other properly deductible items, adjusted for inventories on the basis of cost, before application of the last-in first-out method of determining cost, or current market value, whichever is lower, and deducting therefrom:

all current liabilities except for:

notes and loans payable,

Table of Contents

current maturities of long-term debt, and

current maturities of obligations under capital leases; and

all goodwill, tradenames, patents, unamortized debt discount and expenses, to the extent included in such aggregate amount of assets, and other like intangibles, all as set forth on the most recent consolidated balance sheet of Alcoa and its consolidated Subsidiaries and computed in accordance with generally accepted accounting principles.

Principal Property means any manufacturing plant or manufacturing facility that is:

owned by Alcoa or any Restricted Subsidiary; and

located within the continental United States of America.

However, any plant that, in the opinion of Alcoa's board of directors, is not of material importance to the total business conducted by Alcoa and the Restricted Subsidiaries taken as a whole will not constitute a Principal Property.

Restricted Subsidiary means any Subsidiary substantially all the property of which is located within the continental United States, but excluding any Subsidiary that:

is principally engaged in leasing or in financing receivables, or

is principally engaged in financing Alcoa's operations outside the continental United States, or

principally serves as a partner in a partnership.

Subsidiary means any corporation of which more than 50% of the outstanding stock having the voting power to elect a majority of the board of directors of such corporation as at the time is owned, directly or indirectly, by Alcoa or by one or more Subsidiaries.

Events of Default

Unless otherwise provided in the applicable prospectus supplement, the following are events of default under the senior indenture with respect to senior debt securities:

(a) failure to pay any interest when due, and this failure continues for 30 days;

(b) failure to pay any principal or premium when due;

- (c) failure to deposit any sinking fund payment when due and this failure continues for 30 days;
- (d) failure to perform any other covenant of Alcoa in the senior indenture (other than a covenant included in the senior indenture solely for the benefit of a series of senior debt securities other than that series), and this failure continues for 90 days after written notice as provided in the senior indenture;
- (e) default resulting in acceleration of any indebtedness for money borrowed by Alcoa in a principal amount in excess of \$50,000,000 under the terms of the instrument(s) under which such indebtedness is issued or secured if such acceleration is not rescinded or annulled within 10 days after written notice as provided in the senior indenture, provided that, the resulting event of default under the senior indenture will be cured or waived if such other default is cured or waived;
- (f) certain events in bankruptcy, insolvency or reorganization involving Alcoa; and
- (g) any other event of default provided with respect to senior debt securities of a series. (Section 501)

Because the applicable threshold amount of indebtedness the acceleration of which would give rise to an event of default under the senior indenture is lower for each series of senior debt securities issued under the senior indenture before January 25, 2007 (the date of the first supplemental indenture), the acceleration of outstanding indebtedness of Alcoa may constitute an event of default with respect to one or more of such previously issued series, but may not constitute an event of default under the respective terms of any series of senior debt securities issued after the date of the first supplemental indenture.

If an event of default with respect to senior debt securities occurs and is continuing, either the trustee or the holders of at least 25% in aggregate principal amount of the outstanding senior debt securities of that series by notice as provided in the senior indenture may declare the principal amount (or, if the senior debt securities of that series are original issue discount securities, such portion of

Table of Contents

the principal amount as may be specified in the terms of that series) of all the senior debt securities of that series to be due and payable immediately. At any time after a declaration of acceleration with respect to senior debt securities of any series has been made, but before a judgment or decree for payment of money has been obtained by the trustee, the holders of a majority in aggregate principal amount of the outstanding senior debt securities of that series may, under certain circumstances, rescind and annul such acceleration. (Section 502)

Subject to the duty of the trustee during default to act with the required standard of care, the trustee will be under no obligation to exercise any of its rights or powers under the senior indenture at the request or direction of any of the holders, unless such holders have offered to the trustee reasonable indemnity. (Sections 601 and 603)

The holders of a majority in aggregate principal amount of the outstanding senior debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee, or exercising any trust or power conferred on the trustee, with respect to the senior debt securities of that series. (Section 512)

Conversion and Exchange Rights

The senior debt securities of any series may be convertible into or exchangeable for other securities of Alcoa or another issuer on the terms and subject to the conditions set forth in the applicable prospectus supplement.

Defeasance and Covenant Defeasance

Unless otherwise indicated in the applicable prospectus supplement with respect to the senior debt securities of a series, Alcoa, at its option:

- (a) will be discharged from any and all obligations in respect of the senior debt securities of that series, except for certain obligations to:

issue temporary senior debt securities pending preparation of definitive senior debt securities,

register the transfer or exchange of senior debt securities of such series,

replace stolen, lost or mutilated senior debt securities of such series, and

maintain paying agents and hold monies for payment in trust,

or

- (b) need not comply with the covenants that are set forth above under **Certain Limitations** and below under **Consolidation, Merger and Sale of Assets**, and the occurrence of an event described under clause (d) of **Events of Default** with respect to any defeased covenant and clauses (e) and (g) of **Events of Default** (see

above) will no longer be events of default, if, in each case, Alcoa irrevocably deposits with the trustee, in trust, money and/or U.S. government obligations that through the scheduled payment of interest thereon and principal thereof in accordance with their terms will provide money in an amount sufficient to pay all the principal of and any premium and interest on the senior debt securities of such series on the dates such payments are due, which may include one or more redemption dates designated by Alcoa, in accordance with the terms of the senior indenture and the senior debt securities. (Sections 1301, 1302, 1303 and 1304) The trust may only be established if, among other things:

no event of default, or event that with the giving of notice or lapse of time, or both, would become an event of default, under the senior indenture has occurred and is continuing on the date of such deposit, and no event of default, or event that with the giving of notice or lapse of time, or both, would become an event of default, under clause (f) of Events of Default (see above) has occurred and is continuing at any time during the period ending on the 91st day following such date of deposit, and

Alcoa has delivered an opinion of counsel based, in the event of a defeasance of the type described in clause (a) above, upon a ruling from the Internal Revenue Service or a change in applicable U.S. federal income tax law from the date of the senior indenture, to the effect that the holders of the senior debt securities will not recognize income, gain or loss for U.S. federal income tax purposes as a result of such deposit or defeasance and will be subject to U.S. federal income tax in the same manner as if such defeasance had not occurred. (Section 1304)

Table of Contents

If Alcoa omits to comply with its remaining obligations under the senior indenture after a defeasance of the senior indenture with respect to the senior debt securities of any series as described under clause (b) above and the senior debt securities of such series are declared due and payable because of the occurrence of any undefeased event of default, the amount of money and/or U.S. government obligations on deposit with the trustee may be insufficient to pay amounts due on the senior debt securities of such series at the time of the acceleration resulting from such event of default. However, Alcoa will remain liable in respect of such payments.

Meetings, Modification and Waiver

Alcoa and the trustee may make modifications and amendments of the senior indenture with the consent of the holders of not less than 50% in aggregate principal amount of the outstanding senior debt securities of each series affected by the modification or amendment. However, Alcoa and the trustee may not make any of the following modifications or amendments without the consent of the holder of each outstanding senior debt security affected:

change the Stated Maturity of the principal of, or any installment of principal of or interest on, any senior debt security;

reduce the principal amount of, or premium or interest on, any senior debt security;

change any obligation of Alcoa to pay additional amounts;

reduce the amount of principal of an original issue discount security payable upon acceleration of the maturity thereof;

change the coin or currency in which any senior debt security or any premium or interest thereon is payable;

impair the right to institute suit for the enforcement of any payment on or with respect to any senior debt security;

reduce the percentage in principal amount of outstanding senior debt securities of any series, the consent of whose holders is required for modification or amendment of the senior indenture or for waiver of compliance with certain provisions of such senior indenture or for waiver of certain defaults;

reduce the requirements contained in the senior indenture for quorum or voting;

change any obligation of Alcoa to maintain an office or agency in the places and for the purposes required by the senior indenture; or

modify any of the above provisions. (Section 902)

The holders of at least 50% of the outstanding senior debt securities of a series may waive compliance by Alcoa with certain restrictive provisions of the senior indenture. (Section 1012)

The holders of not less than a majority in aggregate principal amount of the outstanding senior debt securities of each series may, on behalf of all holders of senior debt securities of that series and any coupons appertaining thereto, waive any past default under the senior indenture with respect to senior debt securities of that series, except a default:

in the payment of principal of, or any premium or interest on, any senior debt security of the series; and

in respect of a covenant or provision of the senior indenture that cannot be modified or amended without the consent of the holder of each outstanding senior debt security of the series affected. (Section 513)

In determining whether the holders of the requisite principal amount of the outstanding senior debt securities have given any request, demand, authorization, direction, notice, consent or waiver thereunder or are present at a meeting of holders of senior debt securities for quorum purposes:

the principal amount of an original issue discount security that will be deemed to be outstanding will be the amount of its principal that would be due and payable as of the date of such determination upon acceleration of its maturity;

the principal amount of a senior debt security denominated in a foreign currency or currencies will be the U.S. dollar equivalent, determined on the date of original issuance of that security, of the principal amount of the senior debt security (or, in the case of an original issue discount security, the U.S. dollar equivalent, determined on the date of original issuance of the senior debt security, of the amount determined as provided above); and

Table of Contents

senior debt securities owned by Alcoa or an affiliate of Alcoa will not be deemed outstanding. (Section 101) The senior indenture contains provisions for convening meetings of the holders of senior debt securities of a series if senior debt securities of that series are issuable as bearer securities. (Section 1401) A meeting may be called at any time by the trustee, and also, upon request, by Alcoa or the holders of at least 10% in principal amount of the outstanding senior debt securities of a series, in any case upon notice given in accordance with Notices below. (Section 1402)

To be entitled to vote at any meeting of holders of senior debt securities of any series, a person must be:

a holder of one or more outstanding senior debt securities of the series; or

a person appointed by an instrument in writing as proxy of a holder, including proxies given to beneficial owners of book-entry securities by the depository or its nominee. (Section 1403)

Except for any consent that must be given by the holder of each outstanding senior debt security affected thereby, as described above,

any resolution presented at a meeting or adjourned meeting at which a quorum is present may be adopted by the affirmative vote of the holders of a majority in principal amount of the outstanding senior debt securities of that series; and

any resolution with respect to any request, demand, authorization, direction, notice, consent, waiver or other action that may be made, given or taken by the holders of a specified percentage, which is less than a majority, in principal amount of outstanding senior debt securities of a series may be adopted at a meeting or adjourned meeting duly reconvened at which a quorum is present by the affirmative vote of the holders of such specified percentage in principal amount of the outstanding senior debt securities of that series.

Any resolution passed or decision taken at any meeting of holders of senior debt securities of any series duly held in accordance with the senior indenture will be binding on all holders of senior debt securities of that series and the related coupons.

The quorum at any meeting called to adopt a resolution, and at any reconvened meeting, will be persons holding or representing a majority in principal amount of the outstanding senior debt securities of a series. (Section 1404)

Consolidation, Merger, Sale of Assets and Other Transactions

Alcoa may, without the consent of the holders of any of the outstanding senior debt securities under the senior indenture, consolidate or merge with or into, or transfer or lease its assets substantially as an entirety to, any person that is a corporation, partnership or trust organized and validly existing under the laws of any domestic jurisdiction, or may permit any such person to consolidate with or merge into Alcoa or convey, transfer or lease its properties and assets substantially as an entirety to Alcoa, provided that:

any successor person assumes Alcoa's obligations on the senior debt securities and under the senior indenture;

after giving effect to the transaction, no event of default, and no event that, after notice or lapse of time, would become an event of default, has occurred and is continuing; and

certain other conditions are met. (Section 801)

Notices

Except as otherwise provided in the senior indenture, notices to holders of bearer securities will be given by publication at least twice in a daily newspaper in the City of New York and in such other city or cities as may be specified in such senior debt securities and described in the applicable prospectus supplement. Notices to holders of registered securities will be given by mail to the addresses of such holders as they appear in the security register. (Sections 101 and 106)

Table of Contents

Title

Title to any bearer securities and any coupons will pass by delivery. Alcoa, the trustee and any agent of Alcoa or the trustee may treat the bearer of any bearer security and the bearer of any coupon and the registered owner of any registered security as the absolute owner thereof, whether or not the senior debt security or coupon is overdue and notwithstanding any notice to the contrary, for the purpose of making payment and for all other purposes. (Section 308)

Replacement of Securities and Coupons

Alcoa will replace any mutilated senior debt security or a senior debt security with a mutilated coupon at the expense of the holder upon surrender of the senior debt security to the security registrar.

Alcoa will replace senior debt securities or coupons that become destroyed, stolen or lost at the expense of the holder upon delivery to the trustee of the senior debt security and coupons or evidence of the destruction, loss or theft thereof satisfactory to Alcoa and the trustee. If any coupon becomes destroyed, stolen or lost, that coupon will be replaced by issuance of a new senior debt security in exchange for the senior debt security to which that coupon is attached. In the case of a destroyed, lost or stolen senior debt security or coupon, an indemnity satisfactory to the trustee and Alcoa may be required at the expense of the holder of such senior debt security or coupon before a replacement senior debt security will be issued. (Section 306)

Governing Law

The senior indenture, the senior debt securities and the coupons will be governed by, and construed in accordance with, the laws of the Commonwealth of Pennsylvania, except to the extent that the Trust Indenture Act applies. (Section 113)

Regarding the Trustee

The Bank of New York Mellon Trust Company, N.A. is the trustee under the senior indenture relating to the senior debt securities. The trustee has, and certain of its affiliates may have, from time to time, commercial and investment banking relationships (including other trusteeships) with us and certain of our affiliates in the ordinary course of business.

The trustee under the senior indenture or its affiliates, from time to time, may make loans to us and perform other services for us in the normal course of business. Under the provisions of the Trust Indenture Act, upon the occurrence of a default under the senior indenture, if a trustee has a conflicting interest (as defined in the Trust Indenture Act), the trustee must, within 90 days, either eliminate such conflicting interest or resign. Under the provisions of the Trust Indenture Act, an indenture trustee shall be deemed to have a conflicting interest, among other things, if the trustee is a creditor of the obligor. If the trustee fails either to eliminate the conflicting interest or to resign within 10 days after the expiration of such 90-day period, the trustee is required to notify security holders to this effect and any security holder who has been a bona fide holder for at least six months may petition a court to remove the trustee and to appoint a successor trustee.

Table of Contents

DESCRIPTION OF SUBORDINATED DEBT SECURITIES

The following description sets forth certain general terms and provisions of the subordinated debt securities that Alcoa may offer under this prospectus. The particular terms of the subordinated debt securities and the extent, if any, to which the following general provisions may apply to the subordinated debt securities will be described in a prospectus supplement related to the issuance of those subordinated debt securities. For purposes of this description, references to Alcoa, the company, the issuer, we, our and us refer only to Alcoa Inc. and do not include any of Alcoa's current or future subsidiaries.

The subordinated debt securities may be issued under an indenture between Alcoa and The Bank of New York Mellon Trust Company, N.A., as trustee, or such other trustee that is named in a prospectus supplement (the subordinated indenture). The form of the subordinated indenture is filed as an exhibit to the registration statement of which this prospectus is a part. The following summary of certain provisions of the subordinated indenture and the subordinated debt securities is not meant to be complete. For more information, you should refer to the full text of the subordinated indenture and the subordinated debt securities, including the definitions of terms used and not defined in this prospectus or the related prospectus supplement.

General

The subordinated debt securities will be unsecured and will rank junior and be subordinate in right of payment to all Senior Debt (as defined below) of Alcoa. The subordinated indenture does not limit the incurrence or issuance of other secured or unsecured debt of Alcoa, whether under the subordinated indenture or any existing or other indenture that Alcoa may enter into in the future or otherwise. See Subordination below.

The subordinated debt securities will not be subject to any sinking fund provision.

A prospectus supplement will describe the following terms of any series of subordinated debt securities that Alcoa may offer:

the specific designation, aggregate principal amount being offered and purchase price;

any limit on the aggregate principal amount of such subordinated debt securities that Alcoa may issue;

whether the subordinated debt securities are to be issuable as registered securities or bearer securities or both, whether any of the subordinated debt securities are to be issuable initially in temporary global form and whether any of the subordinated debt securities are to be issuable in permanent global form;

the date(s) on which the principal is payable and any right to extend such date(s);

the rate(s) at which the subordinated debt securities being offered will bear interest or method of calculating any interest rate(s);

the date(s) from which interest will accrue, or the manner of determination of interest payment dates;

the regular record date for any interest payable on any subordinated debt securities being offered which are registered securities on any interest payment date and the extent to which, or the manner in which, any interest payable on a temporary global subordinated debt security on an interest payment date will be paid;

the person to whom any interest on any registered security of the series will be payable if other than the person in whose name the registered security is registered at the close of business on the regular record date for the interest as described below under Payment and Paying Agents, and the manner in which any interest on any bearer security will be paid;

any right to defer payments of interest by extending the interest payment periods and the duration of such extensions;

each office or agency where, subject to the terms of the subordinated indenture as described below under Payment and Paying Agents, the principal of and any premium and interest on the subordinated debt securities will be payable and each office or agency where the subordinated debt securities may be presented for registration of transfer or exchange;

the date(s) after which and the period(s) within which, the price(s) at which and the terms and conditions upon which the subordinated debt securities may be redeemed, in whole or in part, at the option of Alcoa;

any obligation of Alcoa to redeem or purchase the subordinated debt securities at the option of the holder thereof and the date(s) after which and the period(s) within which, the price(s) at which and the terms and conditions upon which the subordinated debt securities will be redeemed or purchased, in whole or in part, under such obligations;

Table of Contents

the denominations in which any subordinated debt securities that are registered securities will be issuable, if other than denominations of \$1,000 and any integral multiple thereof, and the denomination or denominations in which any subordinated debt securities that are bearer securities will be issuable, if other than the denomination of \$5,000;

the currency, currencies or currency units of payment of principal of and any premium and interest on the subordinated debt securities and the manner of determining the U.S. dollar equivalent for purposes of determining outstanding subordinated debt securities of the series;

any index used to determine the amount of payments of principal of and any premium and interest on the subordinated debt securities;

the portion of the principal amount of the subordinated debt securities, if other than the principal amount, payable upon acceleration of maturity;

if other than the trustee, the person who will be the security registrar of the subordinated debt securities;

whether the subordinated debt securities will be subject to defeasance or covenant defeasance;

any terms and conditions under which the subordinated debt securities of the series may be convertible into or exchangeable for other securities of Alcoa or another issuer;

whether the subordinated debt securities of the series will be issuable in whole or in part in the form of one or more book-entry securities and, in such case, the depository or depositories for such book-entry debt security or book-entry securities and any circumstances other than those set forth in the subordinated indenture in which any such book-entry security may be transferred to, and registered and exchanged for subordinated debt securities registered in the name of, a person other than the depository for such book-entry security or a nominee thereof and in which any such transfer may be registered;

any and all other terms, including any modifications of or additions to the events of default or covenants, and any terms that may be required by or advisable under applicable laws or regulations not inconsistent with the subordinated indenture;

whether the subordinated debt securities are issuable as a global security, and in such case, the identity of the depository;

the subordination terms of the subordinated debt securities;

any applicable material U.S. federal income tax consequences;

any other terms of the subordinated debt securities not inconsistent with the provisions of the subordinated indenture (Section 301); and

any special provisions for the payment of additional amounts with respect to the subordinated debt securities. Unless otherwise indicated in the applicable prospectus supplement, the subordinated debt securities will be issued in U.S. dollars in fully registered form without coupons. No service charge will be made for any transfer or exchange of any subordinated debt securities, but Alcoa may require payment of a sum sufficient to cover any tax or other governmental charge payable in connection with a transfer or exchange.

Subordinated debt securities may also be issued under the subordinated indenture upon the exercise of warrants, in connection with a stock purchase contract or as part of a stock purchase unit. See [Description of Warrants](#) and [Description of Stock Purchase Contracts and Stock Purchase Units](#).

Global Securities

If any subordinated debt securities are represented by one or more global securities, the applicable prospectus supplement will describe any circumstances under which beneficial owners of interests in any global security may exchange those interests for subordinated debt securities of like tenor and principal amount in any authorized form and denomination. Principal of, and any premium and interest on, a global security will be payable in the manner described in the applicable prospectus supplement.

Table of Contents

The specific terms of the depository arrangement regarding any portion of subordinated debt securities to be represented by a global security will be described in the applicable prospectus supplement.

Payment and Paying Agents

Payments on subordinated debt securities represented by a global security will be made to the depository for the subordinated debt securities. If subordinated debt securities are issued in definitive form, then the following will take place at the corporate office of the trustee in Pittsburgh, Pennsylvania or at the office of such paying agent(s) as Alcoa may designate:

payment of principal of and any premium and interest on the subordinated debt securities;

registration of the transfer of the subordinated debt securities; and

the exchange of the subordinated debt securities into subordinated debt securities of other denominations of a like aggregate principal amount.

However, at the option of Alcoa, payment of any interest may be made:

by check mailed to the address of the person entitled thereto as such address appears in the securities register; or

by wire transfer to an account maintained by the person entitled thereto as specified in the securities register, provided that proper transfer instructions have been received by the regular record date.

Payment of any interest on subordinated debt securities will be made to the person in whose name the subordinated debt securities are registered at the close of business on the regular record date for the interest, except in the case of defaulted interest. Unless otherwise set forth in the applicable prospectus supplement, the regular record date for the interest payable on any interest payment date will be the 15th day, whether or not a business day, next preceding such interest payment date. Alcoa may at any time designate additional paying agents or rescind the designation of any paying agent. (Section 2.3)

Any monies deposited with the trustee or any paying agent or then held by Alcoa in trust for the payment of the principal of and any premium or interest on any subordinated debt securities and remaining unclaimed for two years after such principal and premium, if any, or interest has become due and payable will, at the request of Alcoa, be repaid to Alcoa. Thereafter, the holder of such subordinated debt securities may look, as a general unsecured creditor, only to Alcoa for payment. (Section 10.3)

Modification of Indenture

Alcoa and the trustee may, without the consent of the holders of subordinated debt securities, amend, waive or supplement the subordinated indenture for specified purposes, including, among other things:

curing ambiguities, defects or inconsistencies, provided that any such action does not materially adversely affect the interest of the holders of the subordinated debt securities; and

qualifying, or maintaining the qualification of, the subordinated indenture under the Trust Indenture Act. (Section 9.1)

Alcoa and the trustee may, with the consent of the holders of not less than a majority in principal amount of the outstanding subordinated debt securities, modify the subordinated indenture in a manner affecting the rights of the holders of the subordinated debt securities. However, no such modification may, without the consent of the holder of each outstanding subordinated debt security so affected:

change the stated maturity of the subordinated debt securities;

reduce the principal amount thereof;

reduce the rate or extend the time of payment of interest thereon, other than deferrals of the payments of interest during any extension period as described in any applicable prospectus supplement;

reduce the premium payable upon redemption;

impair any right to institute suit for the enforcement of any such payment;

adversely affect the subordination provisions of the subordinated indenture or any right to convert or exchange any subordinated debt securities; or

reduce the percentage of principal amount of subordinated debt securities, the holders of which are required to consent to any such modification of the subordinated indenture. (Section 9.2)

Table of Contents

Events of Default

Any one or more of the following described events that has occurred and is continuing constitutes an event of default with respect to the subordinated debt securities:

- (a) failure for 30 days to pay any interest when due (subject to the deferral of any due date in the case of an extension period);
- (b) failure to pay any principal or premium when due whether at maturity, upon redemption, by declaration or otherwise;
- (c) failure by Alcoa to deliver securities upon an appropriate election by holders of subordinated debt securities to convert their subordinated debt securities into those securities;
- (d) failure to observe or perform certain other covenants contained in the subordinated indenture for 90 days after written notice to Alcoa from the trustee or to the trustee and Alcoa from the holders of at least 25% in aggregate outstanding principal amount of the subordinated debt securities; or
- (e) certain events in bankruptcy, insolvency or reorganization of Alcoa. (Section 5.1)

The holders of a majority in aggregate outstanding principal amount of the subordinated debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee or exercising any trust or power conferred on the trustee consistent with the subordinated indenture with respect to the subordinated debt securities of that series. (Section 5.12)

If an event of default with respect to subordinated debt securities occurs and is continuing, either the trustee or the holders of not less than 25% in aggregate principal amount of the outstanding subordinated debt securities of that series may declare the principal of all of the subordinated debt securities of that series due and payable immediately. At any time after a declaration of acceleration with respect to subordinated debt securities of any series has been made, but before a judgment or decree for payment of money has been obtained by the trustee, the holders of a majority in aggregate outstanding principal amount of the subordinated debt securities of that series may annul and rescind such declaration if the default, other than the non-payment of the principal of the subordinated debt securities which has become due solely by such acceleration, has been cured or waived, and a sum sufficient to pay all matured installments of interest and principal due, otherwise than by acceleration, has been deposited with the trustee. (Section 5.2)

The holders of a majority in aggregate outstanding principal amount of the subordinated debt securities of any series may, on behalf of the holders of all the subordinated debt securities of that series, waive any past default under the subordinated indenture with respect to that series. However, they may not waive:

a default in the payment of principal or interest, unless such default has been cured and a sum sufficient to pay all matured installments of interest and principal due otherwise than by acceleration has been deposited with the trustee; or

a default in respect of a covenant or provision that under the subordinated indenture cannot be modified or amended without the consent of the holder of each outstanding subordinated debt security. (Section 5.13)

Alcoa is required to file annually with the trustee a certificate as to whether or not Alcoa is in compliance with all the conditions and covenants applicable to it under the subordinated indenture. (Section 10.5)

Consolidation, Merger, Sale of Assets and Other Transactions

Alcoa may not consolidate with or merge into any other person or convey, transfer or lease its properties and assets substantially as an entirety to any person, and no person may consolidate with or merge into Alcoa or convey, transfer or lease its properties and assets substantially as an entirety to Alcoa, unless:

if Alcoa consolidates with or merges into another person or conveys, transfers or leases its properties and assets substantially as an entirety to any person, the successor person is organized under the laws of the United States or any state or the District of Columbia, and such successor person expressly assumes Alcoa's obligations on the subordinated debt securities and under the subordinated indenture;

immediately after giving effect thereto, no event of default, and no event that, after notice or lapse of time or both, would become an event of default, has happened and is continuing; and

certain other conditions as prescribed in the subordinated indenture are met. (Section 8.1)

Table of Contents

Highly Leveraged Transactions

The general provisions of the subordinated indenture do not afford holders of the subordinated debt securities protection in the event of a highly leveraged or other transaction involving Alcoa that may adversely affect holders of the subordinated debt securities.

Satisfaction and Discharge

The subordinated indenture will cease to be of further effect, and Alcoa will be deemed to have satisfied and discharged the subordinated indenture, when, among other things:

all subordinated debt securities not previously delivered to the trustee for cancellation have become due and payable or will become due and payable at their stated maturity within one year or are to be properly called for redemption within one year; and

Alcoa irrevocably deposits or causes to be deposited with the trustee, as trust funds, money and/or U.S. government obligations sufficient to pay and discharge the entire indebtedness on the subordinated debt securities for the principal and any premium, interest and other sums payable under the subordinated indenture on the dates such payments are due. (Section 4.1)

Subordination

Any subordinated debt securities issued under the subordinated indenture will be subordinate and junior in right of payment to all Senior Debt (as defined below) of Alcoa whether existing at the date of the subordinated indenture or subsequently incurred. Upon any payment or distribution of assets of Alcoa to creditors upon any:

liquidation;

dissolution;

winding-up;

reorganization;

assignment for the benefit of creditors;

marshaling of assets or any bankruptcy;

insolvency; or

debt restructuring or similar proceedings in connection with any insolvency or bankruptcy proceeding of Alcoa,

the holders of Senior Debt will first be entitled to receive payment in full of principal of and any premium and interest on such Senior Debt before the holders of the subordinated debt securities will be entitled to receive or retain any payment in respect of the principal of and any premium or interest on the subordinated debt securities. (Sections 12.1 and 12.2)

Upon the acceleration of the maturity of any subordinated debt securities, the holders of all Senior Debt outstanding at the time of such acceleration will first be entitled to receive payment in full of all amounts due thereon, including any amounts due upon acceleration, before the holders of subordinated debt securities will be entitled to receive or retain any payment in respect of the principal of or any premium or interest on the subordinated debt securities. (Section 12.1)

No payments on account of principal, or any premium or interest, in respect of the subordinated debt securities may be made if:

there has occurred and is continuing a default in any payment with respect to Senior Debt;

there has occurred and is continuing an event of default with respect to any Senior Debt resulting in the acceleration of the maturity thereof; or

any judicial proceeding is pending with respect to any such default or event of default with respect to any Senior Debt. (Section 12.3)

Table of Contents

Certain Definitions

The following are definitions of certain capitalized words used in this summary. These and other definitions are set forth in their entirety in the subordinated indenture.

Debt means, with respect to any person, whether recourse is to all or a portion of the assets of such person and whether or not contingent:

every obligation of such person for money borrowed;

every obligation of such person evidenced by bonds, debentures, notes or other similar instruments, including obligations incurred in connection with the acquisition of property, assets or businesses;

every reimbursement obligation of such person with respect to letters of credit, bankers' acceptances or similar facilities issued for the account of such person;

every obligation of such person issued or assumed as the deferred purchase price of property or services, but excluding trade accounts payable or accrued liabilities arising in the ordinary course of business;

every capital lease obligation of such person; and

every obligation of the type referred to above of another person and all dividends of another person the payment of which, in either case, such person has guaranteed or for which such person is responsible or liable, directly or indirectly, as obligor or otherwise.

Senior Debt means the principal of, and any premium and interest, including interest accruing on or after the filing of any petition in bankruptcy or for reorganization relating to Alcoa, whether or not such claim for post-petition interest is allowed in such proceeding, on Debt of Alcoa, whether incurred on, before or after the date of the subordinated indenture, unless the instrument creating or evidencing the Debt or under which the Debt is outstanding provides that obligations created by it are not superior in right of payment to the subordinated debt securities.

The subordinated indenture will place no limitation on the amount of additional Senior Debt that may be incurred by Alcoa.

Governing Law

The subordinated indenture is governed by and construed in accordance with the laws of the Commonwealth of Pennsylvania, except to the extent that the Trust Indenture Act applies. (Section 1.12)

Information Concerning the Trustee

Unless otherwise indicated in an applicable prospectus supplement, The Bank of New York Mellon Trust Company, N.A. will be the trustee under the subordinated indenture. The trustee is not obligated to exercise any of its powers under the subordinated indenture at the request of any holder of subordinated debt securities, unless the holder offers to indemnify the trustee against any loss, liability or expense, and then only to the extent required by the terms of the subordinated indenture. The trustee is not required to expend or risk its own funds or otherwise incur personal financial liability in the performance of its duties if the trustee reasonably believes that repayment or adequate indemnity is not reasonably assured to it. (Section 6.3)

The Bank of New York Mellon Trust Company, N.A. is the trustee under the senior indenture relating to our senior debt securities. The Bank of New York Mellon Trust Company, N.A. has, and certain of its affiliates may have from time to time, commercial and investment banking relationships (including other trusteeships) with us and certain of our affiliates in the ordinary course of business.

Table of Contents

The trustee under the subordinated indenture or its affiliates, from time to time, may make loans to us and perform other services for us in the normal course of business. Under the provisions of the Trust Indenture Act, upon the occurrence of a default under an indenture, if a trustee has a conflicting interest (as defined in the Trust Indenture Act), the trustee must, within 90 days, either eliminate such conflicting interest or resign. Under the provisions of the Trust Indenture Act, an indenture trustee shall be deemed to have a conflicting interest, among other things, if the trustee is a creditor of the obligor. If the trustee fails either to eliminate the conflicting interest or to resign within 10 days after the expiration of such 90-day period, the trustee is required to notify security holders to this effect and any security holder who has been a bona fide holder for at least six months may petition a court to remove the trustee and to appoint a successor trustee.

Table of Contents

DESCRIPTION OF PREFERRED STOCK

Alcoa's Articles of Incorporation, as amended, authorize Alcoa to issue two classes of preferred stock:

up to 660,000 shares of \$3.75 Cumulative Preferred Stock, par value \$100.00 per share (Class A Stock); and

up to 10,000,000 shares of Class B Serial Preferred Stock, par value \$1.00 per share (Class B Stock). As of June 30, 2014, Alcoa had 546,024 shares of Class A Stock outstanding and no shares of Class B Stock outstanding. No additional shares of Class A Stock may be issued. Alcoa initiated in 1989 an ongoing program to purchase and retire shares of Class A Stock.

The following is a description of Class A Stock and certain general terms and provisions of Class B Stock. The specific terms of a particular series of Class B Stock will be described in the related prospectus supplement. The terms of any series of Class B Stock as set forth in a prospectus supplement may differ from the terms set forth below. The following description of Class A Stock, Class B Stock and the description of the terms of a particular series of Class B Stock set forth in the applicable prospectus supplement are not meant to be complete. For more information, you should refer to Alcoa's Articles of Incorporation and Statement with Respect to Shares relating to such series of Class B Stock, which will be filed or incorporated by reference as an exhibit to the registration statement of which this prospectus is a part.

General

The board of directors of Alcoa may authorize the issuance of shares of Class B Stock in one or more series and may fix the specific number of shares and, subject to Alcoa's Articles of Incorporation, the relative rights and preferences of any such series so established. All shares of preferred stock must be identical, except with respect to the following relative rights and preferences, any of which may vary between different series:

the rate of dividend, including the date from which dividends will be cumulative, whether such dividend rate will be fixed or variable and the methods, procedures and formulas for the recalculation or periodic resetting of any variable dividend rate;

the price at, and the terms and conditions on, which shares may be redeemed;

the amounts payable on shares in the event of voluntary or involuntary liquidation;

sinking fund provisions for the redemption or purchase of shares in the event shares of any series of preferred stock are issued with sinking fund provisions; and

the terms and conditions on which the shares of any series may be converted in the event the shares of any series are convertible.

Each share of any series of Class B Stock will be identical with all other shares of the same series, except as to the date from which dividends will be cumulative.

The prospectus supplement will set forth the following specific terms regarding the series of Class B Stock it offers:

the designation, number of shares and liquidation preference per share;

the initial public offering price;

the dividend rate(s), or the method of determining the dividend rate(s);

any index upon which the amount of any dividends is determined;

the dates on which any dividends will accrue and be payable, whether dividends will be cumulative, and the designated record dates for determining the holders entitled to dividends;

any redemption or sinking fund provisions;

any conversion or exchange provisions;

provisions for issuance of global securities;

the currency, which may be a composite currency, in which payment of any dividends will be payable if other than U.S. dollars;

Table of Contents

any voting rights, except as otherwise required by law; and

any additional terms, preferences or rights and qualifications, limitations or restrictions.

The shares of Class B Stock will, when issued, be fully paid and nonassessable and will have no preemptive rights.

The transfer agent, registrar, dividend disbursing agent and redemption agent for the Class B Stock will be specified in the related prospectus supplement.

Dividends

The holders of Class A Stock are entitled to receive, when and as declared by Alcoa's board of directors, out of legally available funds, cumulative cash dividends at the annual rate of \$3.75 per share, payable quarterly on the first day of January, April, July and October in each year.

The holders of the Class B Stock of each series will be entitled to receive, when, as and if declared by Alcoa's board of directors, out of legally available funds, cumulative cash or other dividends at such rate(s) and on such dates as the board of directors determines. The applicable prospectus supplement will set forth this dividend right. Rates may be fixed or variable or both. Alcoa's board of directors may not declare dividends in respect of any dividend period on any series of Class B Stock unless all accrued dividends and the current quarter yearly dividend on the Class A Stock are paid in full or the board contemporaneously declares and sets apart such Class A Stock dividends. If Alcoa has not declared and paid or set apart the full cumulative dividends on shares of a series of Class B Stock, dividends thereon will be declared and paid pro rata to the holders of the series. Alcoa will not pay interest on any dividend payment on the Class A Stock or the Class B Stock which is in arrears.

If Alcoa has not declared and paid or set apart when due full cumulative dividends on any class or series of Class A Stock or Class B Stock, including the current quarter yearly dividend for shares of Class A Stock, Alcoa may not declare or pay any dividends on, or make other distributions on or make payment on account of the purchase, redemption, or other retirement, of Alcoa common stock. No restriction applies to Alcoa's repurchase or redemption of Class A Stock or Class B Stock while there is any arrearage in the payment of dividends or any applicable sinking fund installments on Class A Stock or Class B Stock.

Redemption

Alcoa may redeem all or any part of the Class A Stock at any time at the option of its board of directors. Such redemption will be at par, plus accrued dividends. Alcoa must publish notice of such redemption in daily newspapers of general circulation in New York, New York and in Pittsburgh, Pennsylvania, as well as by mail to each record holder. Alcoa must give such notice not less than 30 days nor more than 60 days before the date fixed for redemption. If Alcoa redeems only part of the Class A Stock, Alcoa will select the shares to be redeemed pro rata or by lot, as Alcoa's board of directors determines.

If notice of redemption has been given, from and after the redemption date for the shares of Class A Stock called for redemption, the following will occur, unless Alcoa fails to provide funds for payment of the redemption price:

dividends on the shares of Class A Stock called for redemption will cease to accrue;

such shares will no longer be deemed to be outstanding; and

holders will have no further rights as shareholders of Alcoa, except the right to receive the redemption price. Holders will receive the redemption price for the Class A Stock when they surrender the certificates representing such shares in accordance with the redemption notice (including being properly endorsed or assigned for transfer, if Alcoa's board of directors so requires and the notice so states). If Alcoa redeems fewer than all of the shares represented by any certificate, Alcoa will issue a new certificate representing the unredeemed shares, at no cost to the certificate holder. All shares of Class A Stock which Alcoa redeems will be cancelled and not reissued.

The terms and conditions under which all or any part of any series of the Class B Stock may be redeemed will be established by Alcoa's board of directors before Alcoa issues such series of Class B Stock. Unless Alcoa's board of directors determines otherwise, all shares of Class B Stock which Alcoa redeems or otherwise acquires will return to the status of authorized but unissued shares.

Table of Contents

Liquidation Preference

Upon any liquidation, dissolution or winding up of Alcoa, each holder of Class A Stock will be entitled to receive, out of the assets of Alcoa available for distribution to shareholders, \$100 per share plus accrued and unpaid dividends, before any distribution of assets is made to or set apart for the holders of Class B Stock or common stock.

Upon any liquidation, dissolution or winding up of Alcoa, the holders of shares of each series of Class B Stock will be entitled to receive, out of the assets of Alcoa available for distribution to shareholders, an amount fixed by the board of directors plus any accrued and unpaid dividends, before any distribution is made or set apart for holders of common stock, as described in the prospectus supplement relating to the series of Class B Stock. If Alcoa's assets are insufficient to pay the full amount payable on shares of each series of Class B Stock in any case of liquidation, dissolution or winding up of Alcoa, the holders of shares of the series of Class B Stock will share ratably in any such distribution of assets of Alcoa in proportion to the full respective preferential amounts to which they are entitled. Once holders of shares of the series of Class B Stock are paid the full preferential amounts to which they are entitled, they will not be entitled to participate any further in any distribution of assets by Alcoa, unless indicated otherwise in the applicable prospectus supplement. A consolidation or merger of Alcoa with one or more corporations will not be deemed to be a liquidation, dissolution or winding up of Alcoa.

Conversion and Exchange Rights

Class A Stock is not convertible or exchangeable for common stock. Any terms on which shares of any series of Class B Stock are convertible into or exchangeable for common stock will be set forth in the related prospectus supplement. These terms may include provisions for conversion or exchange, either mandatory, at the option of the holder, or at the option of Alcoa.

Voting Rights

Except as indicated below or in the related prospectus supplement for a particular series of Class B Stock, or except as expressly required by applicable law, the holders of Class A Stock and Class B Stock will not be entitled to vote.

Pennsylvania law requires that holders of outstanding shares of a particular class or series of stock be entitled to vote as a class on an amendment to the Articles of Incorporation that would do any of the following:

authorize Alcoa's board of directors to fix and determine the relative rights and preferences as between any series of any preferred stock or special class of stock;

change the preferences, limitations or other special rights of the shares of a class or series in a manner which is adverse to that class or series;

authorize a new class or series of shares which has a preference as to dividends or assets which is senior to that of shares of a particular class or series; or

increase the number of authorized shares of any particular class or series which has a preference as to dividends or assets which is senior in any respect to the shares of such class or series.

The board of directors, under Alcoa's Articles of Incorporation, may limit or eliminate the voting rights applicable to any series of Class B Stock before the issuance of such series, except as otherwise required by law. Any one or more series of the Class B Stock may be issued with such additional voting rights, which will be exercisable only during extended periods of dividend arrearages, as the board of directors may determine in order to qualify such series for listing on a recognized stock exchange. Such rights may only be granted if there are no shares of Class A Stock outstanding.

Each full share of any series of the Class B Stock will be entitled to one vote on matters on which holders of such series, together with holders of any other series of Class B Stock, are entitled to vote as a single class. Therefore, the voting power of each series will depend on the number of shares in that series, and not on the liquidation preference or initial offering price of such shares.

Table of Contents

Alcoa must obtain the consent of the holders of at least a majority of the outstanding Class A Stock and Class B Stock, voting as a class, to do the following:

authorize any additional class of stock or increase the authorized number of shares of preferred stock or any class of stock which ranks on a parity with the Class A Stock or Class B Stock as to dividends or assets; or

merge or consolidate with or into any other corporation if the corporation surviving or resulting from such merger or consolidation would have any authorized class of stock ranking senior to or on a parity with the Class A Stock or Class B Stock, except the same number of shares of stock with the same rights and preferences as the authorized stock of the corporation immediately before such merger or consolidation.

So long as any shares of Class A Stock or Class B Stock remain outstanding, Alcoa may not, without the consent of the holders of at least two-thirds of the outstanding Class A Stock and Class B Stock, voting as a class:

make any adverse change in the rights and preferences of the Class A Stock or Class B Stock. If such a change would affect any series of Class A Stock or Class B Stock adversely as compared to the effect on any other series of Class A Stock or Class B Stock, no such change may be made without the additional consent of the holders of at least two-thirds of the outstanding shares of such series of Class A Stock or Class B Stock;

authorize any additional class of stock or increase the authorized number of shares of any class of stock which ranks senior to the Class A Stock or Class B Stock as to dividends or assets; or

sell or otherwise part with control of all or substantially all of its property or business or voluntarily liquidate, dissolve or wind up its affairs.

Table of Contents

DESCRIPTION OF DEPOSITARY SHARES

Alcoa may offer depositary shares representing fractional shares of its Class B Stock. The following description sets forth certain general terms and provisions of the depositary shares that Alcoa may offer under this prospectus. The particular terms of the depositary shares, including the fraction of a share of Class B Stock that such depositary share will represent, and the extent, if any, to which the general terms and provisions may apply to the depositary shares so offered will be described in the applicable prospectus supplement.

General

The shares of Class B Stock represented by depositary shares will be deposited under a deposit agreement between Alcoa and a depositary selected by Alcoa. The depositary will be a bank or trust company and will have its principal office in the United States and a combined capital and surplus of at least \$50,000,000. The prospectus supplement relating to a series of depositary shares will set forth the name and address of the depositary. Subject to the terms of the deposit agreement, each owner of a depositary share will be entitled, in proportion to the applicable fractional interest in a share of Class B Stock underlying that depositary share, to all the rights and preferences of the shares of Class B Stock underlying that depositary share. The depositary shares will be evidenced by depositary receipts issued pursuant to the deposit agreement. Depositary receipts will be distributed to those persons purchasing the fractional shares of Class B Stock in accordance with the terms of the offering.

The following description of the terms of the deposit agreement is a summary. You should keep in mind, however, that it will be the deposit agreement entered into with respect to a particular offering of Class B Stock, and not this summary, that will define your rights as a holder of depositary shares. There may be other provisions in the deposit agreement that will also be important to you. You should read the applicable prospectus supplement and the deposit agreement for a full description of the terms of the depositary shares, some of which may differ from the provisions summarized below. The deposit agreement will be filed either by amendment to the registration statement that includes this prospectus or by a Current Report on Form 8-K. See [Where You Can Find More Information](#) for information on how to obtain a copy of the deposit agreement.

Dividends and Other Distributions

If Alcoa pays a cash distribution or dividend on a series of Class B Stock represented by depositary shares, the depositary will distribute these dividends to the record holders of the depositary shares. If the distributions are in property other than cash, the depositary will distribute the property to the record holders of the depositary shares. However, if the depositary determines that it is not feasible to make the distribution of property, the depositary may, with the approval of Alcoa, sell this property and distribute the net proceeds from this sale to the record holders of the depositary shares.

Redemption or Exchange of Class B Stock

If a series of Class B Stock represented by depositary shares is to be redeemed or exchanged, the depositary shares will be redeemed from the proceeds received by the depositary resulting from the redemption, in whole or in part, of such series of Class B Stock held by the depositary, or exchanged for common stock to be issued in exchange for the Class B Stock (as the case may be, in accordance with the terms of such series of Class B Stock). The depositary shares will be redeemed or exchanged by the depositary at a price per depositary share equal to the applicable fraction of the redemption price per share or market value of common stock per depositary share paid in respect of the shares of Class B Stock so redeemed or exchanged. Whenever Alcoa redeems or exchanges shares of Class B Stock held by the depositary, the depositary will redeem or exchange as of the same date the number of depositary shares

representing shares of Class B Stock so redeemed or exchanged. If fewer than all the depositary shares are to be redeemed or exchanged, the depositary shares to be redeemed or exchanged will be selected either by lot or pro rata or by any other equitable method as may be determined by Alcoa.

Withdrawal of Class B Stock

Any holder of depositary shares may, upon surrender of the depositary receipts at the corporate trust office of the depositary (unless the related depositary shares have previously been called for redemption) and payment

Table of Contents

of all taxes and charges provided for in the deposit agreement and compliance with any other requirement of the deposit agreement, receive the number of whole shares of the related series of Class B Stock and any money or other property represented by such depositary receipts. Holders of depositary shares making such withdrawals will be entitled to receive whole shares of Class B Stock on the basis set forth in the related prospectus supplement for such series of Class B Stock, but holders of such whole shares of Class B Stock will not thereafter be entitled to deposit such Class B Stock under the deposit agreement or to receive depositary receipts therefor. If the depositary shares surrendered by the holder in connection with such withdrawal exceed the number of depositary shares that represent the number of whole shares of Class B Stock to be withdrawn, the depositary will deliver to such holder at the same time a new depositary receipt evidencing such excess number of depositary shares.

Voting Deposited Class B Stock

Upon receipt of notice of any meeting at which the holders of any series of deposited Class B Stock are entitled to vote, the depositary will mail the information contained in such notice of meeting to the record holders of the depositary shares relating to such series of Class B Stock. Each record holder of such depositary shares on the record date (which will be the same date as the record date for the relevant series of Class B Stock) will be entitled to instruct the depositary as to the exercise of the voting rights pertaining to the amount of the Class B Stock represented by such holder's depositary shares. The depositary will endeavor, insofar as practicable, to vote the amount of such series of Class B Stock represented by such depositary shares in accordance with such instructions, and Alcoa will agree to take all reasonable action which the depositary deems necessary in order to enable the depositary to do so. The depositary will abstain from voting shares of Class B Stock to the extent it does not receive specific instructions from the holder of the depositary shares representing such Class B Stock.

Conversion Rights of Convertible Depositary Shares

If a series of the Class B Stock underlying the depositary shares is convertible into shares of common stock, Alcoa will accept the delivery of depositary receipts to convert the Class B Stock in accordance with the procedures set forth in the applicable deposit agreement. If the depositary shares represented by a depositary receipt are to be converted in part only, the depositary will issue a new depositary receipt or depositary receipts for the depositary shares not to be converted.

Amendment and Termination of the Deposit Agreement

The forms of depositary receipt evidencing the depositary shares and any provision of the deposit agreement may at any time be amended by agreement between Alcoa and the depositary. However, any amendment which materially and adversely alters the rights of the holders of depositary shares representing Class B Stock of any series will not be effective unless such amendment has been approved by the holders of at least a majority of the depositary shares then outstanding representing Class B Stock of such series. Every holder of an outstanding depositary receipt at the time any such amendment becomes effective, or any transferee of such holder, shall be deemed, by continuing to hold such depositary receipt, or by reason of the acquisition thereof, to consent and agree to such amendment and to be bound by the deposit agreement as amended thereby. The deposit agreement may be terminated if (i) all outstanding depositary shares have been redeemed; (ii) each share of such series of Class B Stock has been converted into common stock or has been exchanged for common stock; (iii) there has been a final distribution in respect of such series of Class B Stock in connection with any liquidation, dissolution or winding up of Alcoa and such distribution has been distributed to the holders of depositary shares; or (iv) at least two-thirds of all holders of the depositary shares then outstanding representing Class B Stock of such series consent to such termination.

Charges of Depositary

Alcoa will pay all transfer and other taxes and governmental charges arising solely from the existence of the depositary arrangements. Alcoa will pay all charges of the depositary in connection with the initial deposit of the relevant series of Class B Stock and any redemption or exchange of such Class B Stock. Holders of depositary receipts will pay other transfer and other taxes and governmental charges and such other charges or expenses as are expressly provided in the deposit agreement to be for their accounts.

Table of Contents

Resignation and Removal of Depositary

The depositary may resign at any time by delivering to Alcoa notice of its election to do so, and Alcoa may at any time remove the depositary, any such resignation or removal to take effect upon the appointment of a successor depositary and its acceptance of such appointment. Such successor depositary must be appointed within 60 days after delivery of the notice of resignation or removal and must be a bank or trust company having its principal office in the United States and having a combined capital and surplus of at least \$50,000,000.

Miscellaneous

The depositary will forward to the holders of depositary shares all reports and communications from Alcoa which are delivered to the depositary and which Alcoa is required to furnish to the holders of the deposited Class B Stock.

Neither the depositary nor Alcoa will be liable if it is prevented or delayed by law or any circumstance beyond its control in performing its obligations under the deposit agreement. The obligations of Alcoa and the depositary under the deposit agreement will be limited to performance in good faith of their duties thereunder and they will not be obligated to prosecute or defend any legal proceeding in respect of any depositary shares, depositary receipts or shares of Class B Stock unless satisfactory indemnity is furnished. They may rely upon written advice of counsel or accountants, or upon information provided by holders of depositary shares or other persons believed to be competent and on documents believed to be genuine.

The deposit agreement and the depositary shares issued pursuant thereto will be governed by, and construed in accordance with, the laws of the Commonwealth of Pennsylvania without giving effect to applicable conflicts of law principles.

Table of Contents

DESCRIPTION OF COMMON STOCK

Alcoa is authorized to issue 1,800,000,000 shares of common stock, par value \$1.00 per share. As of June 30, 2014, there were 1,173,946,419 shares of Alcoa common stock outstanding. In addition, as of the same date, there were approximately 93 million shares of Alcoa common stock issued and held in Alcoa's treasury, and approximately 95 million shares of Alcoa common stock reserved for issuance under Alcoa's stock-based compensation plans.

Dividend Rights

Holders of Alcoa common stock are entitled to receive dividends as declared by Alcoa's board of directors. However, no dividend will be declared or paid on Alcoa's common stock until Alcoa has paid (or declared and set aside funds for payment of) all dividends which have accrued on all classes of Alcoa's outstanding preferred stock, including the current quarter yearly dividend on the Class A Stock.

Voting Rights

Holders of Alcoa common stock are entitled to one vote per share.

Liquidation Rights

Upon any liquidation, dissolution or winding up of Alcoa, whether voluntary or involuntary, after payments to holders of preferred stock of amounts determined by the board of directors, plus any accrued dividends, Alcoa's remaining assets will be divided among holders of Alcoa common stock. Under Alcoa's Articles of Incorporation, neither the consolidation or merger of Alcoa with or into one or more corporations or any share exchange or division involving Alcoa will be deemed a liquidation, dissolution or winding up of Alcoa.

Preemptive or Other Subscription Rights

Holders of Alcoa common stock will not have any preemptive right to subscribe for any securities of Alcoa.

Conversion and Other Rights

No conversion, redemption or sinking fund provisions apply to Alcoa common stock, and Alcoa common stock is not liable to further call or assessment by Alcoa. All issued and outstanding shares of Alcoa common stock are fully paid and non-assessable.

Other Matters

Alcoa's Articles of Incorporation provide for the following:

a classified board of directors with staggered three-year terms;

special shareholder voting requirements to remove directors; and

certain procedures relating to the nomination of directors, filling of vacancies and the vote required to amend or repeal any of these provisions.

Alcoa's Articles of Incorporation also prohibit Alcoa's payment of green-mail, that is, payment of a premium in purchasing shares of its common stock from a present or recent holder of 5% or more of the common stock, except with the approval of a majority of the disinterested shareholders. This provision and the classified board provision may be amended or repealed only with the affirmative vote of at least 80% of the common stock. In addition, the Articles of Incorporation limit or eliminate to the fullest extent permitted by Pennsylvania law, as from time to time in effect, the personal liability of Alcoa's directors for monetary damages, and authorize Alcoa, except as prohibited by law, to indemnify directors, officers, employees and others against liabilities and expenses incurred by them in connection with the performance of their duties to Alcoa. The classified board article provision and the anti-green-mail provision may have certain anti-takeover effects.

Alcoa is governed by certain anti-takeover provisions in the Pennsylvania Business Corporation Law (the PBCL). Chapter 25 of the PBCL contains several anti-takeover provisions that apply to registered corporations such as Alcoa. Section 2538 of the PBCL requires shareholder approval for certain transactions between a registered corporation and an interested shareholder (generally, a shareholder who owns 20% of the stock entitled to vote in an election of directors). Section 2538 applies if an interested shareholder (together with anyone acting jointly with such shareholder and any affiliates of such shareholder):

is to be a party to a merger or consolidation, a share exchange or certain sales of assets involving such corporation or one of its subsidiaries;

Table of Contents

is to receive a disproportionate amount of any of the securities of any corporation which survives or results from a division of the corporation;

is to be treated differently from others holding shares of the same class in a voluntary dissolution of such corporation; or

is to have his or her percentage of voting or economic share interest in such corporation materially increased relative to substantially all other shareholders in a reclassification.

In such a case, the proposed transaction must be approved by the affirmative vote of the holders of shares representing at least a majority of the votes that all shareholders are entitled to cast with respect to such transaction. Shares held by the interested shareholder are not included in calculating the number of shares entitled to be cast, and the interested shareholder is not entitled to vote on the transaction. This special voting requirement does not apply if the proposed transaction has been approved in a prescribed manner by the corporation's board of directors or if certain other conditions, including the amount of consideration to be paid to certain shareholders, are satisfied or the transaction involves certain subsidiaries.

Section 2555 of the PBCL may also apply to a transaction between a registered corporation and an interested shareholder, even if Section 2538 also applies. Section 2555 prohibits a corporation from engaging in a business combination with an interested shareholder unless one of the following conditions is met:

the board of directors has previously approved either the proposed transaction or the interested shareholder's acquisition of shares;

the interested shareholder owns at least 80% of the stock entitled to vote in an election of directors and, no earlier than three months after the interested shareholder reaches the 80% level,

the majority of the remaining shareholders approve the proposed transaction;

shareholders receive a minimum fair price for their shares in the transaction; and

the other conditions of Section 2556 of the PBCL are met;

holders of all outstanding common stock approve the transaction;

no earlier than 5 years after the interested shareholder acquired the 20%, a majority of the remaining shares entitled to vote in an election of directors approve the transaction; or

no earlier than 5 years after the interested shareholder acquired the 20%, a majority of all the shares approve the transaction, all shareholders receive a minimum fair price for their shares, and certain other conditions are met.

Alcoa's Articles of Incorporation also provide that Alcoa may not repurchase any stock from an interested shareholder at prices greater than the current fair market value. Under the PBCL, a person or group of persons acting in concert who hold 20% of the shares of a registered corporation entitled to vote in the election of directors constitutes a control group. On the occurrence of the transaction that makes the group a control group, any other shareholder of the registered corporation who objects can, under procedures set forth under the PBCL, require the control group to purchase his or her shares at fair value, as defined in the PBCL.

The PBCL also contains certain provisions applicable to a registered corporation such as Alcoa which, under certain circumstances, permit a corporation to:

redeem control shares, as defined in the PBCL;

remove the voting rights of control shares; and

require the disgorgement of profits by a controlling person, as defined in the PBCL.

The transfer agent and registrar for Alcoa common stock is Computershare.

Table of Contents

DESCRIPTION OF WARRANTS

General

Alcoa may issue warrants for the purchase of debt securities, Class B Stock, depositary shares or common stock. Alcoa may issue such warrants independently or together with other securities offered under this prospectus. Alcoa will issue each series of warrants under a separate warrant agreement to be entered into between itself and a bank or trust company, as warrant agent, that it will name in a prospectus supplement relating to the warrants being offered. The warrant agent will act solely as Alcoa's agent in connection with the warrants and will not have any obligation or relationship of agency or trust for or with any holders or beneficial owners of warrants. The form of the warrant agreement relating to warrants to purchase the securities offered by Alcoa, including the form of warrant certificate representing the warrants, will be filed with the SEC as an exhibit to the registration statement that includes this prospectus, either by amendment to the registration statement or by a Current Report on Form 8-K or other document filed under the Exchange Act, in connection with the offering of such warrants. See [Where You Can Find More Information](#) for information on how to obtain copies of these documents. The following summary of certain provisions of the warrants is not complete. You should read the applicable warrant agreement and related warrant certificate for provisions that may be important to you.

Debt Warrants

If Alcoa offers warrants for the purchase of debt securities, a prospectus supplement relating to the warrants being offered will describe the terms of the warrants, the warrant agreement and the warrant certificates, including the following:

the title and aggregate number of the warrants;

the offering price for the warrants, if any;

the designation, aggregate principal amount and terms of the debt securities purchasable upon exercise of the warrants;

the designation and terms of any related debt securities with which the warrants are issued, and the number of warrants issued with each such debt security;

the date, if any, on and after which the warrants and the related debt securities will be separately transferable;

the principal amount of debt securities purchasable upon exercise of one warrant and the price at which such principal amount may be purchased upon such exercise;

the date on which the right to exercise the warrants will commence and the date on which such right will expire;

whether the warrants represented by the warrant certificates will be issued in registered or bearer form, and if registered, where they may be transferred and registered;

information with respect to any book-entry procedures;

if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;

the currency or currency units in which the offering price, if any, and the exercise price are payable;

if applicable, a discussion of material U.S. federal income tax considerations;

anti-dilution provisions of the warrants, if any;

redemption or call provisions, if any, applicable to the warrants; and

any other terms of the warrants.

If debt securities purchasable upon exercise of the warrants are issuable in bearer form, the warrants may not be offered nor constitute an offer to U.S. persons other than to offices outside the United States of certain U.S. financial institutions. Moreover, bearer debt securities issuable upon exercise of the warrants may not be issued to U.S. persons other than to offices outside the United States of certain U.S. financial institutions.

Table of Contents

Stock Warrants

If Alcoa offers warrants for the purchase of common stock, Class B Stock or depositary shares, a prospectus supplement relating to the stock warrants being offered will describe the terms of the common stock warrants, Class B Stock warrants or depositary shares warrants, the warrant agreement and the warrant certificates, including the following:

the title and aggregate number of the warrants;

the offering price for the warrants, if any;

whether common stock, Class B Stock or depositary shares may be purchased upon exercise of the warrants;

the designation and terms of any related securities with which the warrants are issued, and the number of warrants issued with each such security;

the date, if any, on and after which the warrants and the related securities will be separately transferable;

the number of shares of common stock, Class B Stock or depositary shares that may be purchased upon exercise of each warrant and the price at which the shares may be purchased upon exercise;

the date on which the right to exercise the warrants will commence and the date on which such right will expire;

if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;

the currency or currency units in which the offering price, if any, and the exercise price are payable;

if applicable, a discussion of material U.S. federal income tax considerations;

anti-dilution provisions of the warrants, if any;

redemption or call provisions, if any, applicable to the warrants; and

any other terms of the warrants.

Exercise of Warrants

Each warrant will entitle the holder of the warrant to purchase at the exercise price set forth in the applicable prospectus supplement the principal amount of debt securities, shares of Class B Stock, depositary shares or common stock being offered. Holders may exercise warrants at any time up to the close of business on the expiration date set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants are void. Holders may exercise warrants as set forth in the prospectus supplement relating to the warrants being offered.

Until the exercise of their warrants to purchase debt securities, Class B Stock, depositary shares or common stock, holders of warrants will not have any rights as a holder of the debt securities, Class B Stock, depositary shares or common stock, as the case may be, by virtue of such holder's ownership of warrants.

Table of Contents

**DESCRIPTION OF STOCK PURCHASE CONTRACTS
AND STOCK PURCHASE UNITS**

We may issue stock purchase contracts, including contracts obligating holders to purchase from us, and us to sell to the holders, a specified or varying number of shares of our common stock or other securities at a future date or dates, which we refer to in this prospectus as stock purchase contracts. The price per share of the securities and the number of shares of the securities may be fixed at the time the stock purchase contracts are issued or may be determined by reference to a specific formula set forth in the stock purchase contracts. The stock purchase contracts may be issued separately or as part of units consisting of a stock purchase contract and debt securities, Class B Stock, depository shares or warrants of Alcoa, or debt obligations of third parties, including U.S. treasury securities, securing the holders obligations to purchase the securities under the stock purchase contracts, which we refer to herein as stock purchase units. The stock purchase contracts may require holders to secure their obligations under the stock purchase contracts in a specified manner. The stock purchase contracts also may require us to make periodic payments to the holders of the stock purchase units or vice versa, and such payments may be unsecured or funded on some basis.

A prospectus supplement relating to an offering of the particular stock purchase contracts or stock purchase units will describe the terms of any stock purchase contracts or stock purchase units offered under this prospectus. The description in the applicable prospectus supplement will not necessarily be complete, and reference will be made to the stock purchase contracts, and, if applicable, collateral or depository arrangements, relating to the stock purchase contracts or stock purchase units, which will be filed with the SEC each time we issue stock purchase contracts or stock purchase units. Certain U.S. Federal income tax considerations applicable to the stock purchase contracts and stock purchase units will also be discussed in any applicable prospectus supplement.

Table of Contents

PLAN OF DISTRIBUTION

Initial Offering and Sale of Securities

We may sell securities from time to time in one or more of the following ways:

to underwriters, whether or not part of a syndicate, for public offering and sale by them;

directly to purchasers in negotiated sales or in competitively bid transactions;

through agents;

through dealers; or

through a combination of any of the above methods of sale.

Offers to purchase securities may be solicited directly by us or by agents designated by us from time to time. Any agent, who may be deemed to be an underwriter, as that term is defined in the Securities Act, involved in the offer and sale of the securities will be named, and any commissions payable by us to that agent will be provided, in an applicable prospectus supplement. We and our agents may sell the securities at:

a fixed price or prices, which may be changed;

market prices prevailing at the time of sale;

prices related to such prevailing market prices; or

negotiated prices.

Underwriters, dealers and agents participating in the distribution of the securities may be deemed to be underwriters, and any discounts and commissions received by them and any profit realized by them on resale of the securities may be deemed to be underwriting discounts and commissions under the Securities Act. Underwriters, dealers and agents may be entitled, under agreements with us, to indemnification against and contribution toward certain civil liabilities, including liabilities under the Securities Act, and to reimbursement by us for certain expenses. Unless otherwise described in an applicable prospectus supplement, the obligations of the underwriters to purchase offered securities will be subject to conditions, and the underwriters must purchase all of the offered securities if any are purchased.

If an underwriter or underwriters are used in the offer or sale of securities, we will execute an underwriting agreement with the underwriters at the time of sale of the securities to the underwriters, and the names of the underwriters and

the principal terms of our agreements with the underwriters will be provided in an applicable prospectus supplement.

The securities subject to the underwriting agreement may be acquired by the underwriters for their own account and may be resold by them from time to time in one or more transactions, including negotiated transactions, at a fixed offering price or at varying prices determined at the time of sale. Underwriters may be deemed to have received compensation from us in the form of underwriting discounts or commissions and may also receive commissions from the purchasers of these securities for whom they may act as agent. Underwriters may sell these securities to or through dealers. These dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and commissions from the purchasers for whom they may act as agent. Any initial offering price and any discounts or concessions allowed or re-allowed or paid to dealers may be changed from time to time.

In connection with underwritten offerings of the securities, the underwriters may engage in over-allotment, stabilizing transactions, covering transactions and penalty bids in accordance with Regulation M under the Exchange Act, as follows:

Over-allotment transactions involve sales in excess of the offering size, which create a short position for the underwriters;

Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum;

Covering transactions involve purchases of the securities in the open market after the distribution has been completed in order to cover short positions; and

Penalty bids permit the underwriters to reclaim a selling concession from a broker/dealer when the securities originally sold by that broker-dealer are repurchased in a covering transaction to cover short positions.

Table of Contents

These stabilizing transactions, covering transactions and penalty bids may cause the price of the securities to be higher than it otherwise would be in the absence of these transactions. If these transactions occur, they may be discontinued at any time.

If indicated in an applicable prospectus supplement, we will authorize dealers acting as our agents to solicit offers by certain institutions to purchase securities from us at the public offering price set forth in the prospectus supplement under delayed delivery contracts providing for payment and delivery on the date or dates stated in the prospectus supplement. The identity of any such agents, the terms of such delayed delivery contracts and the commissions payable by us to these agents will be set forth in an applicable prospectus supplement.

If indicated in an applicable prospectus supplement, we may sell shares of our common stock under a newly established direct stock purchase and dividend reinvestment plan. The terms of any such plan will be set forth in the applicable prospectus supplement.

Each underwriter, dealer and agent participating in the distribution of any of the securities that are issuable in bearer form will agree that it will not offer, sell or deliver, directly or indirectly, securities in bearer form in the United States or to U.S. persons, other than qualifying financial institutions, during the restricted period, as defined in U.S. Treasury Regulations Section 1.163-5(c)(2)(i)(D)(7).

We may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. If so, the third party may use securities pledged by us or borrowed from us or others to settle those sales or to close out any related open borrowings of securities, and may use securities received from us in settlement of those derivatives to close out any related open borrowings of securities. The third party in such sale transactions will be an underwriter and will be identified in the applicable prospectus supplement (or a post-effective amendment to the registration statement that includes this prospectus).

Except for shares of our common stock or as otherwise described in an applicable prospectus supplement, all of the securities will be a new issue of securities with no established trading market. Any underwriters to whom or agents through whom the securities are sold by us for public offering and sale may make a market in the securities, but such underwriters or agents will not be obligated to do so and may discontinue any market making at any time without notice. No assurance can be given as to the liquidity of the trading market for any such securities.

Certain of the underwriters, dealers or agents and their associates may be customers of, engage in transactions with and perform services for us and our subsidiaries in the ordinary course of business.

In compliance with guidelines of the Financial Industry Regulatory Authority (FINRA), the maximum consideration or discount to be received by any FINRA member or independent broker dealer may not exceed 8% of the aggregate amount of the securities offered pursuant to this prospectus and any applicable prospectus supplement.

If more than 5% of the net proceeds of any offering of common shares made under this prospectus will be received by a FINRA member participating in the offering or affiliates or associated persons of such FINRA member or any other facts and circumstances relating to the participation of a FINRA member in the offering would give rise to a conflict of interest under FINRA rules, the offering will be conducted in accordance with FINRA Rule 5121.

Table of Contents

LEGAL MATTERS

Unless otherwise indicated in the applicable prospectus supplement, the validity of the securities offered by Alcoa will be passed upon for Alcoa by Thomas F. Seligson, Esq., Counsel of Alcoa. Certain matters relating to the securities offered by this prospectus will be passed upon for any underwriters or agents by Cravath, Swaine & Moore LLP, New York, New York. Mr. Seligson is paid a salary by Alcoa, is a participant in various employee benefit plans offered to Alcoa employees, and beneficially owns, or has rights to acquire, an aggregate of less than one percent of the shares of Alcoa common stock. From time to time, Cravath, Swaine & Moore LLP provides legal services to Alcoa and its subsidiaries.

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The consolidated financial statements and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Report on Internal Control over Financial Reporting), incorporated in this prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2013, have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

With respect to the unaudited financial information of Alcoa for the three month periods ended March 31, 2014 and 2013 and the three and six month periods ended June 30, 2014 and 2013 incorporated by reference in this prospectus, PricewaterhouseCoopers LLP reported that they have applied limited procedures in accordance with professional standards for a review of such information. However, their separate report dated April 24, 2014 and July 24, 2014, respectively, incorporated by reference herein states that they did not audit and they do not express an opinion on that unaudited financial information. Accordingly, the degree of reliance on their report on such information should be restricted in light of the limited nature of the review procedures applied. PricewaterhouseCoopers LLP is not subject to the liability provisions of Section 11 of the Securities Act of 1933 for their report on the unaudited financial information because that report is not a report or a part of the registration statement prepared or certified by PricewaterhouseCoopers LLP within the meaning of Sections 7 and 11 of the Act.