



2016 ANNUAL REPORT

CHAIRMAN & PRESIDENT'S MESSAGE: CHARTING A SUSTAINABLE COURSE

n a year full of significant progress on several top industry priorities, the Aluminum Association led the charge in 2016—speaking with a strong, united voice for the entire aluminum value chain in North America. As we enter a dynamic political environment next year, the importance of an engaged membership working together toward a common goal will only grow. The regulatory framework under which we've been operating for the better part of a decade will change, creating both opportunities and challenges. How we position ourselves will have lasting impacts on our member companies, and the industry as a whole, for years to come.

As you'll read in these pages, we accomplished much over the past 12 months. One of our signature issues—global aluminum overcapacity—was at the forefront of the national political discussion and even a topic during the final presidential debate. Our work educating policymakers on the benefits of automotive aluminum helped ensure that lightweight materials are central to the ongoing conversation around vehicle fuel economy. Our Casthouse Safety Workshop program educated nearly 200 industry employees on safety best practices. And our market-shaping sustainability research—on auto recycling, green buildings and beverage packaging—drove hundreds of views and downloads by customers and other stakeholders

We still have a great deal of work ahead of us. The domestic aluminum industry is a cornerstone of the American manufacturing economy. And as the second largest market for the metal outside of China, we in the U.S. have a leadership role to play. There is no question that segments of the industry are struggling. An economic impact study commissioned this year by the Association showed that jobs in the primary sector have declined to their lowest levels in decades.

Yet many downstream producers are investing and the industry's overall impact on the U.S. economy grew to \$75 billion in 2016—up 15 percent from just three years ago. Couple that with a headline demand number that is up for the seventh straight year and we have every reason to expect a bright

future. But only if we are smart, strategic and—importantly—committed to working together on the issues that impact us all.

Through our 83-year history, we've always found that the Association is strongest when its members are engaged. This year, we saw members up and down the value chain step up by educating Congressional Aluminum Caucus leaders through aluminum plant tours; advocating on key public policy decisions in front of agencies, regulators and NGOs; and testifying about the challenge of aluminum overcapacity during a high-profile hearing at the U.S. International Trade Commission.

Through your continued leadership, all of us can chart a sustainable course for the domestic aluminum value chain. We thank you for your continued support in 2017 and beyond.

Sincerely,

Garney B. Scott, III

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Haid Brown

President & CEO of Scepter & Aluminum Association Chairman

Heidi Brock

President & CEO of the Aluminum Association



BY THE NUMBERS

THE VISION & MISSION

112 member companies

412

in the United States

40

states with aluminum plant presence

385,000

unique visitors to www.aluminum.org (up 25% yoy)

19,000

(up 14% yoy)









4% twitter

of the Congressional Aluminum Caucus

541 alloys registered by the Aluminum Association since 1954

184

industry employees trained on safety in 2016

raised in 2016 election cycle by AluminumPAC

\$2.8 billion invested or committed for U.S. plant expansions since 2013

ongoing statistical

713,000

jobs supported by U.S. aluminum industry

\$186 billion in economic output supported by U.S. aluminum industry (1% of U.S. GDP)

The Aluminum Association promotes the production and use of aluminum as the sustainable material of choice.

The Aluminum Association will:

- Drive communications that aggressively promote aluminum, while developing stakeholder champions for its sustainability advantages.
- Provide timely, relevant industry statistics and information on emerging issues for enhanced industry transparency.
- · Create, maintain, monitor and advocate for standards and technical documents that encourage the use of aluminum.
- Successfully advance regulatory and legislative policy in state, federal and international arenas.
- · Convene forums on emerging and relevant issues in order to strengthen the industry.
- Facilitate the sharing of best practices in enhancing global health, environment and safety performance.

Approved by the Board of Directors, April 2013

ADVANCING ALUMINUM IN THE MARKET

s the world strives to reduce its overall environmental impact by decreasing the carbon footprint of products of all sizes, aluminum continues to be part of the solution for a more sustainable future. With the aluminum industry continuing to innovate through technological advancements and investments, the Association promotes aluminum as the sustainable material of choice to key stakeholders through research and reporting. To that end, in 2016, the Association commissioned various reports and publications that detail the advantages of aluminum when it comes to sustainability. By producing robust and transparent information, the Association contributes to sustainable and innovative market development.

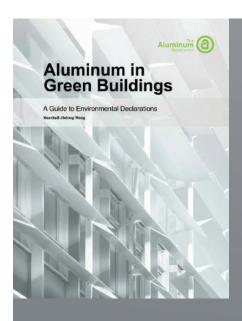


Study Confirms 90+ Percent Recycling Rate for Auto Aluminum:

To help address customer questions, the Association worked with researchers at the Worcester Polytechnic Institute (WPI) to complete a peer-reviewed study examining the end of life recycling rate for automotive aluminum. The study's 91 percent recycling rate finding supports results from earlier third-party reports and confirms aluminum as the most sustainable choice for the environment. Researchers attribute automotive aluminum's high recycling rate to the metal's



economic value, citing the "concerted effort to recover this valuable lightweight commodity from end-of-life vehicles." Industry customers and other stakeholders have downloaded the report more than 200 times since its release this July.



Second Green Building Guide Aids Development of Environmental Declarations:

During Greenbuild 2016, the Association released Aluminum in Green Buildings – A Guide to Environmental Declarations, the second in a series of guidelines for the building and construction sector. Environmental declarations are becoming a key component of the U.S. Green Building Council's Leadership in Energy & Environmental Design (LEED) V4. With the new Guide, builders and designers will gain a better understanding of aluminum's value in achieving LEED requirements.



66 33

Manufacturing businesses like ours have a major and positive role to play in **driving a more** sustainable future.

- HEIDI BROCK,

NAM SUSTAINABILITY FORUM, OCTOBER 2016

ALUMINUM CANS CONTAIN

MORE THAN 3X

THE RECYCLED CONTENT OF GLASS OR PLASTIC BOTTLES



The space efficiency and lower packaging weight during transportation offered by aluminum results in 35% lower emissions than glass bottles.*

ON A PER OUNCE BASIS



Aluminum Cans Top Competitors on Sustainable Use, Recycling: New research conducted by environmental research firm ICF International on behalf of the Aluminum Association found that greenhouse gas emissions associated with transporting and cooling aluminum cans are considerably lower than both glass and plastic bottles. Space efficiency and lower packaging weight are the primary drivers of 7 to 49 percent fewer emissions in the product "use phase." The Association also released a new set of aluminum can Key Performance Indicators in 2016 finding, among other things, far higher recycling rates and recycled content for cans compared to alternative packaging types.

DRIVING ALUMINUM'S FUTURE

ith more than \$2.8 billion invested or committed for domestic plant expansions, Aluminum Association member companies are betting big on increasing demand for



aluminum in lightweight transportation applications—especially in the auto sector. Current projections suggest that the average aluminum content for a car or truck sold in the U.S. will grow from less than 400 pounds today to more than 500 pounds by 2025 as automakers respond to increasing customer and regulatory demands for more fuel efficient vehicles. The Aluminum Association's automotive market committee—the Aluminum Transportation Group (ATG)—pursued a "surround-sound" communications approach to educate regulators, NGOs and other third-party influencers about aluminum as part of the solution for OEMs looking to drive increased fuel economy. These efforts focused on this summer's Technical Assessment Report on 2025 vehicle fuel standards. The government report recognized the benefits of using aluminum to safely reduce vehicle mass and help automakers drive forward the next generation of efficient vehicles.









Transportation and Environmental Leaders Discuss Fuel Economy Regs:

As the midterm review on vehicle fuel economy regulations heated up in Washington, the ATG made sure aluminum solutions were central to the conversation by collaborating with Bloomberg Government on a panel discussion about the new rules. More than 100 attendees from Capitol Hill, various federal agencies, transportation and environmental NGOs heard from then ATG Chairman Tom Boney, former Department of Transportation Secretary Ray Lahood and John Bozzella from the Association of Global Automakers, among others.

The Aluminum Transportation Group hosted an event with Bloomberg Government in June — "Shifting Gears: Meeting the Challenge of Higher Fuel Economy Regulations."



Astronaut Dan Tani Gets the Facts About Aluminum:

As aluminum increased its role as a key material supplier to the automotive industry, many consumers and policymakers have had questions. How durable is the metal? Is it safe? Can it really help reduce global carbon emissions? The ATG enlisted the help of former NASA astronaut Dan Tani to answer these questions and more in a series of online videos. The videos were a key part of the ATG's efforts this year to educate policymakers and influential third party groups about the benefits of automotive aluminum.

All-New DriveAluminum.org Raises the Bar:

The ATG launched a fully redesigned website in 2016 at www.drivealuminum.org. The site features improved visuals, cleaner navigation and tighter integration with various social channels. The ATG also increased its use of sharable visuals online, including original art, animation, videos and infographics. Ramped up social media efforts drove an 18 percent follower increase on the @drivealuminum Twitter handle and a 17 percent bump in sign-ups to the ATG's e-newsletter.



DRIVE JOBS

DriveAluminum.org

Aluminum

DRIVE

STR

DriveAluminum.org

Inside-the-Beltway Advertising Reaches Key Decision Makers: The ATG ran an integrated digital advertising campaign targeted at transportation and environmental policy professionals in Washington, D.C. in 2016. The ads featured messages promoting the many advantages of automotive aluminum,

with safety and carbon emissions driving the most interest. The campaign led to nearly 23,000 video views and visits to the ATG website from a highly targeted audience of policy influencers.

INDUSTRY LEADERSHIP ON INTERNATIONAL TRADE

n what continues to be a dynamic market, the Aluminum Association is speaking with a strong, united voice along the value chain. Our message is driving for a free and fair, rules-based global trading system in which all aluminum producers can compete on a level playing field. Working with the membership and with industry partners, the Association is pursuing a multi-pronged approach to address the ongoing problem of Chinese aluminum overcapacity which is challenging the full value stream in a number of ways. The industry made significant progress in 2016—moving aluminum overcapacity toward the top of the U.S.-China bilateral trade agenda and initiating an investigation by the U.S. International Trade Commission (USITC), among other key outcomes.



U.S. ITC Kicks Off Investigation into Global Aluminum Trade

Issues: This spring, the USITC launched an investigation to examine how global industry trends, including metal overcapacity, are impacting producers across the full value chain. The House Ways & Means Committee called for the investigation at the behest of the bipartisan Congressional Aluminum Caucus—a big win for the industry. The Association is engaging with the membership and USITC staff to provide information for the final report—Aluminum: Competitive Conditions Affecting the U.S. Industry—slated for release in June of 2017.



Industry Speaks Up at U.S. ITC Hearing in Washington:

The Aluminum Association and its member companies joined nearly three-dozen industry stakeholders spanning the entire aluminum value chain in front of a standing-room only crowd to testify before USITC Commissioners in late September. The day-long hearing was part of the investigation initiated by Congress to assess the factors impacting the competitiveness of the domestic aluminum industry. The hearing received extensive media attention including coverage in *The Wall Street Journal*, Reuters, Bloomberg, *POLITICO* and once again shone a bright light on the global challenge of Chinese aluminum overcapacity. This followed Association testimony in the spring before the U.S. Trade Representative. USITC and other key trade officials.



What we cannot do — and what we will no longer do — is compete directly with a foreign government and with producers who don't play by the same set of rules.

- GARNEY SCOTT,

KNOXVILLE NEWS-SENTINEL, NOVEMBER 2016





Government Puts Aluminum Overcapacity High on Trade Agenda:

The Aluminum Association is advocating for a negotiated agreement between the U.S. and Chinese governments to address metal overcapacity. In 2016, the industry made a good deal of progress raising this issue toward the top of the bilateral trade dialogue between the two countries. Aluminum was on the agenda for the U.S.-China Strategic & Economic Dialogue in June, and in September officials announced a "shared commitment" to address aluminum overcapacity following the G-20 Summit. Much work remains but progress toward a negotiated solution is moving forward.

The Aluminum Association testified in front of U.S. trade officials on China overcapacity in April.

POLITICO

Aluminum Association steps up on trade

Wall Street Journal

Aluminum Sector Presses U.S. On Chinese Exports

Pittsburgh Post-Gazette

Trade groups oppose treating China as market economy

Reuters

U.S. trade barrier report hits China on industrial overcapacity

Bloomberg

U.S. Aluminum Producers Step Up Calls for China Policy Probe



Cross-Industry Partnership Creates Manufacturers for Trade Enforcement: The Aluminum Association made common cause with partners from the steel, textile, chemicals, recycling and other industries to form the Manufacturers for Trade Enforcement advocacy group. In December, the U.S. government confirmed that it would not grant MES to China until certain statutory requirements are met. Granting MES prematurely would remove a key tool for industries seeking government relief from unfair trade practices.

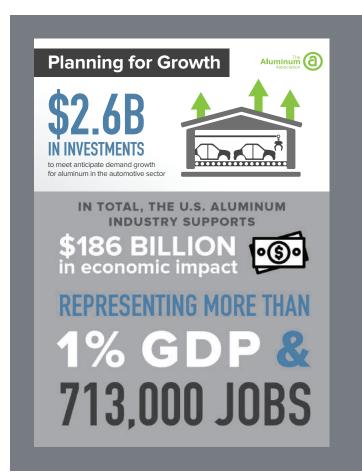
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Product Category				-	Central America	П
Extrusions		Foil			Europe	П
Ingot		Other			Middle East	П
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Scrap		Sheet & Plate			South America	

Product Form	Partner Country	
ACSR & Bare Cable	Afghanistan	
Castings	Albania	
Circles & Discs	Andorra	
Extruded Shapes	Anguilla	
Foil	Antigua & Barbuda	
Forgings	Argentina	
Ingot	Armenia	
Pipe & Tube	Aruba	
Plate	Australia	
-	Austria	
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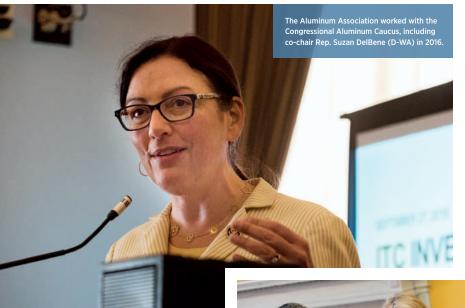
The Aluminum Association introduced a foreign trade statistical dashboard in 2016.

Association Statistics Put Foreign Trade Front & Center with New Dashboard: As a strategic service provider to the industry, the Aluminum Association developed a brand-new statistical report this year to help aluminum watchers better understand metal flows between the U.S. and other aluminum producing countries. The Excel-based Foreign Trade Dashboard uses Global Trade Atlas to provide subscribers quick and easy access to all the latest aluminum import data. The interactive Dashboard allows users to manipulate the trade data to their specific needs, whether for internal analyses, identifying market opportunities, or tracking the impact of key events on the flow of aluminum.



ADVOCATING FOR ALUMINUM COUNTRY

luminum is a key part of the nation's manufacturing base, generating hundreds of thousands of good-paying jobs, driving innovation and increasing the energy efficiency of many products. As policy issues from trade to environmental regulations to recycling grow in importance, the Association is working to develop an industrywide culture of advocacy to engage with key policymakers. The Association has developed a significant advocacy infrastructure through efforts like the bipartisan Congressional Aluminum Caucus, the Aluminum Political Action Committee and the AluminumNation grassroots advocacy tool to achieve positive outcomes for the industry.



Caucus a Key Voice for Aluminum on Capitol Hill: The Association worked with the Aluminum Caucus in 2016 to host briefings for congressional staff on issues ranging from the growth of automotive aluminum to aluminum overcapacity to China's market economy status. The Aluminum Association's work with the Caucus was instrumental in securing a U.S. International Trade Commission investigation into the global competitiveness of aluminum. The bipartisan Caucus also grew to nearly 50 members thanks to the significant recruitment efforts by Association members.



Alcoa's Tim Reyes and the Association's Heidi Brock tell the industry's story on Capitol Hill.

Making Your Voice Heard: The Association ramped up efforts this year to grow AluminumNation, an online tool that enables constituents who live and work in the communities supporting aluminum jobs to connect directly with public officials. Members of the AluminumNation community engaged on a number of campaigns this year—including encouraging their Member of Congress to join the Aluminum Caucus and getting out the U.S. manufacturing vote.







2016

AluminumPAC Contributes to Industry Supporters: The Aluminum Political Action Committee is proving to be an effective tool in raising the profile of the industry and building relationships with elected officials in Washington, D.C. Membership and staff raised more than \$85,000 in the 2015-2016 election cycle, and 21 of the 22 candidates the PAC supported won re-election. The PAC contributed to three candidates up for re-election in 2018, and next year will continue to engage in the elector process.

EDUCATING MARKET STAKEHOLDERS

takeholders across the industry trust the Aluminum Association as a resource for information and data on a broad range of topics. From technical standards and data to industry statistics and safety programs, the Association provides a robust set of resources to promote aluminum's production and use in North America. Addressing misconceptions about the metal, ensuring the safety and well being of employees, and showcasing the increasing importance of the industry to the U.S. manufacturing economy continue to be top priorities for the Association. This year, we pursued these objectives in a variety of ways.



Aluminum's Impact on U.S. **Manufacturing:** The Association worked with economic research firm John Dunham & Associates to release a brand-new economic impact study for the domestic aluminum industry. The study allowed an apples-to-apples comparison between a report completed in 2013 and detailed a steady increase in downstream jobs, but major job losses in the upstream market. The Association utilized the new data to highlight the continued importance of the aluminum industry to the national manufacturing economy, but also the the economic consequences of unsustainable aluminum production practices in China.

ALUMINUM WIRINGIN AMERICA'S BUILDINGS

Aluminum wiring provides a cost-effective, lightweight & reliable solution for commercial, industrial and residential buildings.



Aluminum is used in electrical systems such as wire, busbar, connections, armor, conduit, and transformer windings.
Aluminum alloys used in electrical equipment include: 1350, 5154, 6061, 8xxx series (8030, 8176) and more.

Since 1987 the U.S. National Electrical Code requires the use of AA-8xxx series electrical-grade aluminum alloys for most building wire applications such as service entrance cables, feeders and branch circuits (Section 310.106(B)).



Tackling Aluminum Wiring Misconceptions:

The Association's Electrical Division produced a number of materials in 2016 to dispel long-standing myths in the marketplace about the safe and effective use of aluminum wire and cable. The Division developed an infographic detailing the benefits of aluminum wiring in buildings—emphasizing how it has been used safely for more than 40 years. A separate video shows that, despite misconceptions in the building and construction world, electricians can terminate aluminum conductors just as quickly and easily as copper conductors.

Working Toward A Zero Safety Incident Industry: The aluminum industry, through the work of the Association's safety programs, has made considerable progress in improving employee safety in recent years. While the overall trendline for safety incidents, particularly major

incidents, has trended downward over the past decade, there is still much work to be done. This year, the revised and enhanced 4th Edition of the Guidelines for Handling Molten Aluminum added 30 percent new content to aid the industry in reducing potential hazards. The release was coupled with two regional Casthouse Safety Workshops where nearly 200 industry employees were trained on best practices.





541
REGISTERED
ALUMINUM ALLOYS



today compared to 75 in 1954



he Aluminum Association is the ANSI-accredited standards setting body for the domestic aluminum industry

COMING TOGETHER TO TOAST ALUMINUM













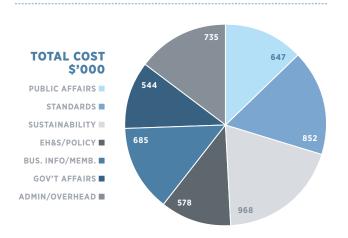




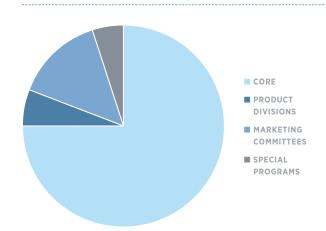


PROGRAM COST 2016 - \$5.01M

OFFSET BY \$291,000 IN CROSS CHARGES



BUDGETED PROGRAM SPENDING 2016 - \$6.2M



ALUMINUM PAC DONOR HONOR ROLL

We would like to thank those who generously contributed to the Aluminum PAC in 2016. Their financial support will greatly help us advance the interests of the domestic aluminum industry.

PAC SUPPORTER (UP TO \$999)

Andrew Fellon. Fellon McCord

David Hazelett. Hazelett Strip Casting

Matt Aboud, Hydro

Mike Belwood, Arconic

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Matt Meenan. Aluminum Association **CONGRESSIONAL SUITE** (\$1,000 - \$2,499)

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Air Products **Political Alliance**

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Aluminum Association

Charles Johnson,

Aluminum Association

Curt Wells.

Aluminum Association

Karen Bowden.

Aluminum Association

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Skana Aluminum

PRESIDENTIAL SUITE (\$2,500 - \$4,999)

Michelle O'Neill, Alcoa

Tim Reyes, Alcoa

Kaiser PAC

THE CHAIRMAN'S CLUB (MAX \$5,000)

Garney Scott, Scepter

Lisa Scheller.

Silberline Manufacturing

Alcoa PAC

Heidi Brock,

Aluminum Association

Erin Fauber, AMCOR

LEADERSHIP

The Aluminum Association expresses its sincere appreciation to all members who served in leadership roles and otherwise on Association Committees, Divisions and the Board of Directors in 2016.

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www.aluminum.org