Presidential Policy Brief: Recommendations for a Strong U.S. Aluminum Industry



Presidential Policy Brief: Infrastructure



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Aluminum Workers Need Sustainable Infrastructure Investments

The U.S. aluminum industry strongly supports increased public and private infrastructure investment and incentives for operational efficiencies and sustainable material choices.

Electrical Grid Modernization

For decades, aluminum has been used for wiring power grids, including long distance power transmission lines as well as local power distribution systems. Further adding to the aging grid's challenges is the fact that Americans are utilizing more distributed power technologies than ever before. Investments in the electrical grid will support further development of clean energy opportunities and help support the modernization needed to ensure U.S. electricity supply stability.

Department of Energy should:

- Carry out projects related to the modernization of the electric grid, including for distributed system technologies, and accommodating rapidly increasing renewable electricity generations.
- Promote the development of microgrid systems for isolated communities and increase the resilience of critical infrastructure.

Establish a strategic transformer reserve to improve grid resilience.

Electric Vehicle Infrastructure

Despite the growing demand for electric vehicles, the nation does not yet have the necessary charging infrastructure to support widespread adoption.

The Council on Environmental Quality should:

Lead an interagency working group to develop a strategy to transition the vehicle fleets of the Federal agencies to electric vehicles where practical.

The Department of Transportation should:

Incentivize states and cities to strategically deploy alternative fuel vehicle charging and fueling infrastructure.

The Department of Energy should:

- Update model building codes to account for electric vehicle supply equipment, electric vehicle parking and electric vehicle power.
- Provide financial assistance to states that are incorporating electric vehicles into their energy plan.

Public Transportation Building Construction

Aluminum is used extensively as a building material in large public transportation building projects, with a high strength-to-weight ratio, corrosion resistance and desirable thermal properties – plus the durability to serve for decades, reducing maintenance costs. Our nation's airports will require an estimated \$130 billion of investment by 2023, with more than half of that investment directed at aging terminals. Sustainable investments in our nation's transportation infrastructure will increase capacity while reducing carbon pollution.

The Department of Transportation should:

- Utilize the Airport and Airway Trust Fund to create a new Airport and Airway Investment Program to invest in airport and airspace capacity.
- Support the buildout of charging infrastructure at airport facilities to assist rental car fleets to transition toward electric vehicles.
- Support investments in bus and transit facilities.
- If efforts are undertaken to strengthen "Buy America" requirements, to allow domestic industries to benefit from federal investments in infrastructure, it is vital to the U.S. aluminum industry that global and regional supply chains are taken into consideration.

Recycling Infrastructure Revitalization

Recycling is a core business operation of the aluminum industry, and the industry recycles more than 5 million tons of aluminum each year across the United States and Canada – most of which goes back directly into aluminum manufacturing operations as a feedstock material. And yet, Americans throw away more than \$700 million worth of aluminum cans every year. More efficient and cost-effective recycling will reduce waste and emissions, save energy, and return a critical input material to U.S. manufacturers. Federal investment could increase recycling rates, expand curbside recycling programs and collection points and improve recycled material quality through material segregation.

The Environmental Protection Agency should:

- Establish a recycling infrastructure fund that awards grants on a competitive basis to state and local governments to support and expand recycling infrastructure and recycling programs.
- Provide grants or tax credits for capital investment into recycling equipment by manufacturers.

The Department of Energy should:

Promote the efficient production, use and recycling of designated critical minerals by providing grants for capital expenditures by secondary aluminum producers as well as accelerated tax treatment for investments in new recycling technology.

Trade



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The U.S. Aluminum Industry Needs New Rules, Tough Enforcement & Access to Global Markets

The past decade of demand growth for aluminum in North American has fueled billions of dollars in domestic investments and new jobs in the mid- and downstream segment of the U.S. aluminum industry. Unfortunately, fair competition through the entire value chain is being undermined by industrial subsidies that have resulted in massive overcapacity in China that initially resulted in large volumes of unfairly traded products entering the United States and more recently has resulted in third-countries selling aluminum products in the United States at unfairly low prices as a means of avoiding direct competition with Chinese products. Left unaddressed, U.S. companies will not be able to compete in the domestic market or export products – ultimately reducing investment and innovation in the industry, threatening growth and reducing jobs.

Even as recent antidumping and countervailing duty (AD/CVD) orders in the United States have led to significant declines of unfairly traded imports from China, overall imports of semi-fabricated aluminum products continue to grow and to undermine the competitiveness of U.S. producers – driving down demand for primary and secondary, or recycled, aluminum made in the United States. The current WTO rules do not adequately constrain the use of subsidies and other predatory industrial policies that undermine the normal function of the global market. The U.S. government should leverage trade policy and trade remedies to specifically address unfairly subsidized overcapacity and its effects, both on the U.S. market and other market economies.

The Single Biggest Threat to U.S. Aluminum is Unfairly Subsidized Overcapacity in China

As China grows its own aluminum industry by adding new capacity upstream and downstream, it increasingly undermines existing privately owned competition while inhibiting market-driven expansion outside the country. The United States should work cooperatively with its trading partners and allies to update – and enforce – multilateral trade rules to meaningfully thwart unfair subsidies that drive irrational capacity. In the meantime, the U.S. government must block unfairly traded imports with targeted, durable duties and support the domestic industry with a comprehensive policy strategy.



*Data thro ugh Nov. 2020 annuali zed

While the challenges are acute, and escalating, swift policy action can address these challenges and allow the industry to thrive.

The U.S. Trade Representative should:



Initiate a Section 301 evasion investigation focused on aluminum sheet and plate from China entering North America and subsequently entering the U.S. market.

Build a multilateral approach to address unfairly subsidized overcapacity and state-owned enterprises that distort global markets, working with a coalition of international aluminum stakeholders.

- As the new Administration considers foreign policy and multilateral engagement priorities that include exemptions from Section 232 tariffs on aluminum for key trading partners that have a demonstrated commitment to free and fair trade, the Association will make recommendations for negotiating appropriate country-specific exemptions.
- Secure from Mexico a commitment to enact a formal aluminum import monitoring program and to coordinate monitoring across North America, as part of USMCA implementation.

The Commerce Department should:

- Launch the Aluminum Import Monitoring (AIM) program to monitor aluminum imports and address trade flow shifts and trends that threaten the U.S. aluminum industry.
 - Enact significant reforms to the Section 232 exclusion process.
- Strongly enforce AD/CVD orders and swiftly block attempts at evasion or circumvention.

Aluminum AD/CVD Action & Milestones

In recent years, the Aluminum Association has pursued targeted trade enforcement actions to obtain relief from surging volumes of unfairly low-priced imports of aluminum foil. The association filed its first antidumping and countervailing duty petitions on imports of certain aluminum foil from China in 2017. The Commerce Department self-initiated AD/CVD investigations on imports of common alloy aluminum sheet from China – the first such action by the department in more than 25 years. The subsequent application of durable trade remedies brought positive developments for the U.S. aluminum industry. Unfortunately, those existing duty orders prompted Chinese producers to shift exports of common alloy sheet and foil to other foreign markets. Producers in those countries began exporting their own production to the United States, disrupting market conditions.

Common Alloy

In March 2020, the Association's Common Alloy Aluminum Sheet Trade Enforcement Working Group filed AD/CVD petitions alleging that unfairly traded imports of common alloy aluminum sheet from 18 countries are causing material injury to the domestic industry. Commerce announced its preliminary determinations in August and October 2020, finding that imports of common alloy aluminum sheet from the subject countries are being subsidized (imports from Bahrain, Brazil, India, and Turkey) and dumped (imports from all 18 countries), respectively.

- The deadline for Commerce to complete its final AD/CVD determinations in the ongoing investigations is March 1, 2021.
- Typical applications for common alloy aluminum sheet include: gutters and downspouts, building facades, street signs and license plates, electrical boxes, kitchen appliances and tractor-trailers for trucks.

Foil

In September 2020, the Aluminum Association's Foil Trade Enforcement Working Group filed AD/CVD petitions charging that unfairly traded imports of aluminum foil from five countries caused material injury to the domestic industry. The industry's petitions allege that aluminum foil imports from Armenia, Brazil, Oman, Russia and Turkey are being dumped in the United States and that imports from Oman and Turkey benefit from actionable government subsidies.

USITC made a unanimous preliminary determination in November 2020 that there is a reasonable indication that imports of certain aluminum foil from Armenia, Brazil, Oman, Russia and Turkey are a cause of injury to U.S. producers. As a result, the U.S. Department of Commerce will continue to conduct its investigations on imports of certain aluminum foil from the five countries. Commerce's preliminary determinations concerning countervailing duties on Oman and Turkey are due to be completed on February 26, 2021. The current deadline for Commerce to complete its preliminary antidumping determinations is March 8, 2021, although this deadline will likely be extended.

Energy



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As a lightweight, infinitely recyclable and durable material with a remarkable variety of industrial and consumer applications, aluminum provides an innovative solution to many 21st century challenges. The industry has been recognized by the EPA as a leader in addressing climate change, due to the material's energy efficient properties and the ability – and existing capacity – to recycle it over and over again without losing any performance characteristics.

Global demand for aluminum is expected to grow by more than 50 percent by 2050. The U.S. aluminum industry needs federal energy policies that promote energy efficiency and recycling; provide for a stable, predictably priced electricity supply and natural gas access; and enable growth of our nation's vibrant manufacturing base. The Biden Administration can promote high-paying and sustainable domestic manufacturing jobs in the aluminum industry with strategic policy decisions and smart deployment of resources.

Energy Should be Affordable, Predictable & Renewable

Aluminum is an energy-intensive industry, requiring a significant amount of electricity to operate a primary aluminum smelter as well as reliable access to energy to operate the cast houses where aluminum is melted and formed into products. The boom in shale gas supply has been a driving force for the manufacturing renaissance and has helped to keep aluminum jobs in the United States.

U.S. aluminum producers have a long history of investing time and resources to improve energy efficiency and reduce environmental impact. In fact, primary aluminum production in North America has reduced its greenhouse gas emissions by 49 percent since 1991.

The Department of Energy should:

- Accelerate investments that advance research, development and installation of new technologies that improve energy efficiency.
- Facilitate industrial access to affordable and reliable energy and maximize the nation's natural gas benefit for U.S. manufacturers and producers.
- Promote renewable energy sources and the expansion of Electric Vehicles.
- Prioritize implementation of projects related to the modernization of the electric grid, including for distributed system technologies and hybrid microgrid systems.

Recycling is a Green Solution with Real Energy Efficiency Gains

Every effort to increase the recycling rate of aluminum will pay dividends to improve energy efficiency. The production of secondary, or recycled, aluminum can save more than 90 percent of the energy involved in the smelting of primary aluminum. Moreover, aluminum has been designated by the U.S. government as a critical mineral – it's one of only nine designated critical minerals that are essential to all industrial sectors, including defense – and the United States has no viable commercial mining of the bauxite that is a raw material for aluminum production. Consumer and industrial recycling will be increasingly important to a resilient and thriving U.S. aluminum industry in the years ahead.

More efficient and cost-effective recycling will reduce waste and emissions, reduce energy consumption, and return a significant input material to U.S. manufacturers. Aluminum companies have been glad to partner with DOE on research projects to increase the efficiency of aluminum recycling even further and determine optimal methods of recycling aluminum – particularly for vehicles at end of life.

Federal investment and strategic policy choices could drastically increase recycling rates, expand curbside recycling programs and collection points, and improve recycled material quality through material segregation and sorting technology.

The Department of Energy should:

- Establish a program to promote the efficient production, use and recycling of critical minerals, and to provide grants for capital expenditures or R&D in new recycling technology. New equipment or technology upgrades could help manufacturers:
 - Process low-grade (contaminated) scrap material in existing facilities.
 - Improve quality of scrap by sorting recyclable materials and segregating alloys.
- Promote innovation for casting alloy applications, in collaboration with DOE's Critical Materials Institute and other public-private partnerships like the REMADE Institute, to maximize the use of recycled aluminum. Provide grants or research partnerships to better utilize scrap material and develop innovative alloys.

State Governments should:

- Expand or improve container deposit programs to reflect best practices. The recycling rate for aluminum cans is about 35 percent in states without container deposit laws, while rates average more than 75 percent in the 10 states with these programs.
- Implement The Recycling Partnership's "Accelerating Recycling: Policy to Unlock Supply for the Circular Economy" recommendations to further public-private partnerships in support of recycling. Topline recommendations include:
 - A packaging and printed paper fee that supports education and infrastructure investment.
 - A disposal surcharge to support recycling operations.

The United States could save more than \$810 million per year – and save enough energy to power more than 4.1 million homes for a full year – by simply recycling all of the aluminum cans that consumers buy today.

Recycling



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The Circular Economy Needs Expanded & Improved Aluminum Recycling

Aluminum is infinitely recyclable, and it can operate in a true closed loop by being recycled over and over again without losing its quality. The U.S. aluminum industry relies on the scrap generated by consumer and industrial recycling as a crucial input for aluminum products like sheet, plate, foil and extrusions that are used to make beverage cans, automotive parts or building components. In fact, more than 70 percent of aluminum sheet used in buildings today comes from recycled material and the industrial recycling rate for aluminum used in vehicles, buildings and other industrial projects is over 90 percent.

In particular, aluminum beverage can recycling is vital to the nation's recycling system and overall economy. Most recycled cans are turned into new cans, making the aluminum beverage can a textbook example of the circular economy. The industry continues to use as much recycled material as possible – with an industry leading 73 percent recycled content in the average aluminum can – but too much aluminum is going to landfills at major economic and environmental cost. Consumer recycling rates in the United States are declining.

Capturing all used aluminum beverage cans currently landfilled in the U.S. would generate an additional \$800 million each year, providing much needed revenue for the recycling system as a whole. Aluminum cans represent less than 2.5 percent of a Municipal Recycling Facility (MRF) material stream yet generate up to one-third of MRF revenues, depending on whether the state has container deposit laws. The environmental impact is also profound. If the United States recycled every can lost in landfill, we could save more than 5 million metric tons of greenhouse gas emissions each year – the equivalent of taking more than 1 million vehicles off the road.

More efficient and cost-effective recycling will reduce waste and emissions, save energy and return a critical input material to U.S. manufacturers. We could power about 4 million homes for a full year with saved energy by simply recycling all of our aluminum cans.

Federal investment could increase recycling rates, expand curbside recycling programs and collection points and improve recycled material quality through material segregation.

- **Recycling Infrastructure Fund:** A recycling infrastructure fund should award grants on a competitive basis to support and expand recycling infrastructure and recycling programs operated by state and local governments and to support capital investment into recycling equipment by manufacturers. This, along with our broader agenda on infrastructure, would ensure that the nation can benefit from the sustainable properties of aluminum.
- **Critical Mineral Recycling:** A new Department of Energy program should promote the efficient production, use and recycling of designated critical minerals by providing grants for R&D and capital expenditures as well as accelerated tax treatment for investments in new technology for sorting, segregating and processing material.

- **REMADE Institute:** Strong funding support for the existing DOE programs, such as the REMADE Institute, focused on how best to promote the circular economy through promotion of sustainable manufacturing technologies.
- **Recycling Census:** The EPA should conduct a nationwide recycling census in order to baseline the current situation with the current patchwork of over 9,000 separate recycling systems currently operating in the U.S. and obtain information insight into best practices and opportunities for improvement.
- **Container Deposit Programs:** Well-designed container deposit programs are particularly impactful. While the recycling rate for aluminum cans is about 35 percent in states without container deposit laws, rates average more than 75 percent in the 10 states with these programs. Expanding and improving state programs, or a federal program, would dramatically increase recycling rates.

In partnership with the Can Manufacturer's Institute, the Aluminum Association recently released *"Every Can Counts: An Aluminum Beverage Can Recycling Manifesto,"* which provides recommendations on tracking KPIs, life cycle analysis, impact modeling and literature reviews. It also provides instruction for industry stakeholders to construct more recyclable cans, message more effectively on the cans themselves, boost recycling at convenience stores and advocate for more aluminum can capture equipment at MRFs.

The Association also endorses the Recycling Partnership's "Accelerating Recycling: Policy to Unlock Supply for the Circular Economy" recommendations, to advance public-private partnerships in support of recycling. Topline recommendations include:

- A packaging and printed paper fee that supports education and infrastructure investment.
- A disposal surcharge to support recycling operations.

Further Reading:

The Aluminum Can Advantage Sustainability Key Performance Indicators

This December 2020 report is a result of our partnership with the Can Manufacturer's Institute and provides metrics on the value of aluminum vs competing beverage containers.



Four Keys to Circular Recycling: An Aluminum Container Design Guide

Key #1 – Use Aluminum: To maintain and increase the efficiency and economics of recycling, aluminum container designs should maximize the percentage of aluminum and minimize the use of non-aluminum materials.

Key #2 – Make Plastic Removable: To the extent that designers use non-aluminum material in their designs, this material should be easily removable and labeled to encourage separation.

Key #3 – Avoid the Addition of Non-Aluminum Design Elements Whenever Possible: Minimize the use of foreign materials in aluminum container design. PVC and chlorine-based plastics, which can create operational, safety and environmental hazards at aluminum recycling facilities, should not be used.

Key #4 – Consider Alternative Technologies: Explore design alternatives to avoid adding non-aluminum material to aluminum containers

Environment



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The Aluminum Industry Is a Leading Partner in Addressing Climate Change

The aluminum industry has a long history of successful partnerships with federal regulators and looks to continue these partnerships to further advance the United States' energy, environmental and economic competitiveness. As an energy-intensive industry, aluminum producers have voluntarily worked to reduce greenhouse gas emissions from North American primary production by 49 percent since 1991.

The industry has been recognized by the EPA as a leader in addressing climate change and frequently partners with DOE to get more aluminum into the transportation and building sectors due to its sustainable properties. The EPA has also worked with our industry through the Voluntary Aluminum Industry Program (VAIP) to reduce emissions of perfluorocarbon emissions by 85 percent, and the Association and its members were previously awarded the *Climate Leader* designation by EPA.

Through sensible legislation and regulation, the aluminum industry strongly believes that climate change policy must:

- Provide broadly applicable, market-based mechanisms for greenhouse gas (GHG) reductions.
- Consider the unique effects of climate policy on "Energy Intensive, Trade Exposed (EITE) industries such as aluminum.
- Prevent the unintended consequence of GHG emission and jobs "leakage" to countries where the result would be an overall GHG emissions increase.
- Recognize early and voluntary actions to reduce greenhouse gas emissions.
- Promote aluminum's role in advancing the circular economy's energy efficiency and recycling attributes.

The U.S. aluminum industry continues to work aggressively to reduce greenhouse gas emissions. Climate policy that mandates across the board GHG reductions from all manufacturing sectors will disadvantage industries such as aluminum that have already taken early action to curb their emissions.

Leaving credit for early action out of climate policy punishes manufacturing's good actors, while providing incentives to sectors which have not addressed the issue. Doing this leaves large emissions reductions within easy reach for sectors that have not proactively addressed the issue to date.

Environmental Regulations

The aluminum industry believes that economic growth and environmental protection are mutually achievable and that environmental policies should support this concept through the development and deployment of regulation based on sound science in areas including air and water quality, chemicals management and reporting and vehicle fuel economy standards.



- Maintenance of the existing Ozone and Particulate Matter NAAQS.
- Timely and consistent aluminum manufacturing MACT technology reviews aligned with current science.
- Incorporation of a bioavailable aluminum test method into the EPA's 40 CFR Part 136 water testing approvals.
- Establishment of vehicle GHG emission standards at statutorily required 'maximum feasible' levels.

Recycling Is a Green Solution with Real Environmental Benefit

Increasing the recycle rate of aluminum continues to be the best way to improve energy efficiency. Producing secondary, or recycled, aluminum saves more than 90 percent of the energy involved with making primary, or new, aluminum. More efficient and cost-effective recycling will reduce waste and emissions, save energy and return a critical input material to U.S. manufacturers. Federal investment could increase recycling rates, expand curbside recycling programs and collection points and improve recycled material quality through material segregation.

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 - Improve quality of scrap by sorting recyclable materials and segregating alloys.
- Promote innovation for casting alloy applications, in collaboration with DOE's Critical Materials Institute and other public-private partnerships like the REMADE Institute.

Provide grants or R&D on utilizing scrap material and innovative alloys.

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