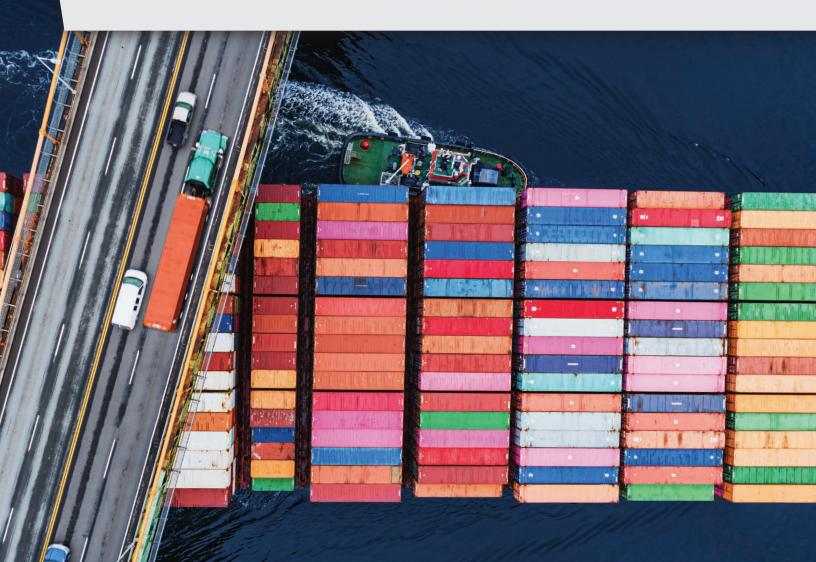
# Political Tailwinds: Examining Trade Policy for the U.S. Aluminum Industry

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### **KEY TAKEAWAYS**

- Over the last decade, aluminum trade has been disputed, tariffed, monitored, traced, capped, and greened. Administrations have dealt with it multilaterally, continentally, bilaterally, and independently.
- As the Biden-Harris administration puts its own spin on aluminum trade with the Global Arrangement on Sustainable Steel and Aluminum (GASSA), a historical context is needed to see how this iteration stands up against aluminum's fundamental challenge: energy.
- The GASSA and other actions reflect three consistent priorities of the Biden-Harris administration on trade: (1) boosting U.S. investment in key industries and technologies, (2) working with allied and like-minded countries, and (3) advancing climate commitments.
- Despite the Trump-Pence administration's Section 232 aluminum tariffs complementing the current administration's agenda and in part leading to the creation of GASSA, the Biden administration inherited pending trade disputes with key security and economic partners, necessitating resolution action.
- With pressure from allies, both the last and current administration negotiated managed trade (voluntary export restraint, monitoring, and quotas) of aluminum, slowly unwinding the tariffs country by country.
- Meanwhile, the Obama-Biden administration tackled aluminum trade through diplomatic channels and multilateral forums. Their efforts remain suspended in the World Trade Organization (WTO) today, but their predecessors have leveraged their research and tools.
- One thread runs through these unique approaches: they all narrow in on aluminum's price problem (Chinese overcapacity), while overlooking domestic smelter's cost problem (energy).
- GASSA differs in making market access contingent on high standards, including trade, and clean production of aluminum, likely leading to trade restrictions on high-carbon imports.
- This new sustainable market capitalizes on increased traceability in aluminum trade but introduces new complexities and challenges with the potential to detract from support needed for smelters at home.

### CONTEXT

The U.S. aluminum industry is at a tipping point. Aluminum has a crucial role to play in the clean energy transition, yet carbon emissions from primary aluminum production detract from this potential. At the same time, long-term challenges to the domestic aluminum industry persist. China's primary aluminum overcapacity suppresses aluminum prices, hindering transparent price discovery needed for markets to function properly, and making it harder for all forms of U.S. aluminum to compete. Simultaneously, a lack of abundant, stable, and affordable energy for U.S. smelters is pushing them into decline. SAFE's Center for Strategic Industrial Materials (C-SIM) released a report, "Aluminum's Energy Problem and Energy Solution" (February 2023), which elucidates how the U.S. clean energy transition is a make-or-break moment for this once thriving domestic industry.

As a global commodity used across multiple industries, aluminum production problems evolve with changes to domestic policies and international trade. U.S. policies, such as the Inflation Reduction Act, Infrastructure Investment and Jobs Act, and CHIPS Act, are shifting the backdrop of the aluminum production challenges, and not always for the better. All the while, other aluminum producing countries are dealing with the same China and energy problems, testing different policy responses. C-SIM is publishing a series of reports on how aluminum's energy problem and energy solution are playing out overseas and within a new policy landscape at home. These reports aim to answer the following questions:

- "Legislative Analysis for the U.S. Aluminum Industry" (May 2023): Now with an infrastructure law, a climate law, and other laws clearly linking commodity supply chain weak points to national security threats, where does U.S. aluminum stand? Do these new laws help or hurt the aluminum energy problem?
- "Political Tailwinds: Examining Trade Policy for the U.S. Aluminum Industry" (June 2023):
   Domestic politics have sept into aluminum trade policy for the last three administrations. How will the Global Arrangement on Sustainable Steel and Aluminum effort learn from previous attempts to use trade to remedy these complex issues? Will this trade mechanism provide relief from the energy cost problem and China price problem?

 "Global Insights: Innovative Energy and Environmental Aluminum Solutions" (August 2023): How are other countries able to produce aluminum in the face of these shared challenges? What unique energy and climate policies can the United States learn from to help sustain its much-needed primary sector?

The answers to these questions will help industry and government determine an effective pathway forward. A pathway that ensures the domestic aluminum industry can sustain the clean energy transition. As huge transformational investments shift supply chains and decrease manufacturing and power emissions, it is paramount that component parts, like aluminum, are not overlooked. Aluminum is the foundation of the current U.S. economy and the fuel for new energy sources and technologies of the future. The United States needs aluminum, whether it is made domestically or not. These reports aim to inform how government and industry can come together to ensure the former.



## Introduction

Despite aluminum's critical role across consumer, industrial, renewable energy, and technological goods, the United States is not self-sufficient in producing this critical material. In fact, aluminum made the cut for the 2022 U.S. Geological Survey (USGS) critical minerals list for exactly this reason. It meets USGS' dual criteria of being essential to economic and national security, while also having a supply chain vulnerable to disruption.<sup>1</sup> In 2022, the United States imported almost seven times more primary aluminum than it produced.<sup>2</sup> With aluminum demand expected to climb 70 percent by 2050, largely due to the clean energy transition, this dynamic is untenable.<sup>3</sup>

The international context of aluminum production is not only critical to understanding the metal's market and competition, but also partially to blame for domestic smelters' declining production. C-SIM's initial report, "Aluminum's Energy Problem & Energy Solution," underscores the universal equalizer across aluminum producing countries is the China problem, through which excess capacity in China drives down prices globally. The only countries who can compete against Chinese overproduction have abundant, reliable, and affordable sources of energy, which equates to 40 percent of primary aluminum production cost.<sup>4</sup> The United States, therefore, also has a cost problem. U.S. smelters struggle with high electricity rates and older inefficient smelters.

Facing diminishing aluminum production during their administrations, but hamstrung with years of divided Congress, former Presidents Donald Trump and Barack Obama took the U.S. aluminum problem abroad. Taking very different pages out of the same book, these administrations leveraged trade authorities to deal with Chinese aluminum dumping. President Joe Biden inherited these policies, and several unhappy allies, left-over from previous administrations' efforts on aluminum. To date, President Biden has unwound parts of President Trump's policies and defended others, while letting his former running mate's multilateral attempts at combating the Chinese price problem hang in WTO limbo.

Concurrently, the Biden administration had a majority in the 117th Congress, though brief and narrow, passing their legislative agenda. While the *CHIPS Act, Inflation Reduction Act,* and the *Infrastructure Investment and Jobs Act* provide some supply-side relief for U.S. smelters, their net impact of these policies is an even bigger divide between demand and supply. C-SIM's report, "Legislative Analysis for the U.S. Aluminum Industry," stresses more is needed on the supply side.

Now with less legislative authority and aluminum's domestic and foreign trade problems far from solved, the Biden administration is returning to the international drawing broad. Their Global Arrangement on Sustainable Steel and Aluminum (GASSA), which was born out of the left-over aluminum tariffs on the European Union (EU) and United Kingdom (UK), attempts to resolve the unfair trade practices and emissions issues in aluminum production simultaneously. Success of this arrangement relies on lessons learned from previous attempts and how well they tackle aluminum's energy problem at home, which remains the perennial issue.

<sup>1</sup> U.S. Geological Survey, U.S. Geological Survey Releases 2022 List of Critical Minerals, 2020.

<sup>2</sup> Congressional Research Service, U.S. Aluminum Manufacturing: Industry Trends and Sustainability, 2022.

<sup>3</sup> Hydro, Hydro invests in carbon capture company Verdox to eliminate emissions from aluminium production, 2022.

<sup>4</sup> OECD, Measuring distortions in international markets: The aluminium value chain, 2018.

# **Evaluation of Recent U.S. Trade Policies**

Before the United States rolled out their climate and industrial policies driving aluminum demand, the last two consecutive administrations looked to trade policies to resolve problems in the aluminum sector. These policies underpin President Biden's action on aluminum in the international trade arena.

While President Trump and President Obama's policies tackle the aluminum challenges head on, they received criticism. Allies and even domestic stakeholders question whether protectionist actions can effectively support U.S. industry and consumers. Doubt is cast over the effectiveness of the multilateral trade regime and whether it can benefit the American people. Multiple bilateral negotiations have led to a medley of trade policies for one metal. Even after stirring up the global trade order, these policies have been largely palliative.

In taking office, the Biden administration had to respond to unresolved disputes from the previous administrations. Somewhat surprisingly, they have dug their heals in defending some Trumpian policies. And while GASSA may sound like the exclusive work of this administration, it exists because of President Trump's policies and it leverages their positive outcomes.

In the same vein, the Trump administration's trade policy approach borrowed from Obama administration rhetoric and results. The two governments shared concerns on how unfair trade could negatively impact domestic industry. Even though their methods at dealing with it varied, the Obama and Trump administrations both worked towards increasing transparency and accountability in industrial metals markets. This common theme and their legwork to get there are key building blocks to the current administration's actions on aluminum trade.

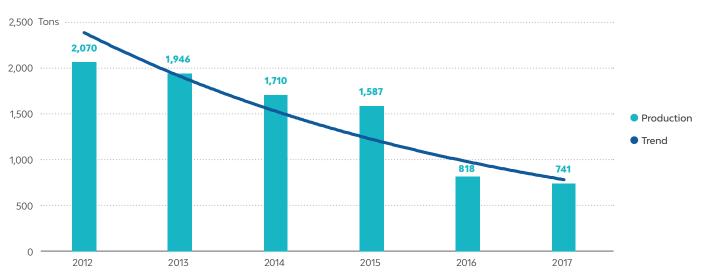


Figure 1 U.S. Primary Aluminum Production, 2012-2017

Source: U.S. Geological Survey, 2017.



Three consecutive administrations have focused on aluminum's price problem of Chinese overcapacity rather than the aluminum cost problem of electricity.

### Obama Builds on International Pressure to Combat Excess Capacity

When campaigning in 2007, then-candidate Barack Obama committed to a new tone to foreign policy. He would lead with "tough-minded diplomacy" by "reaching out to adversaries and giving greater weight to the views of U.S. allies."<sup>5</sup> President Obama stayed true to his word. He dealt with many issues, including Chinese overcapacity of primary aluminum, in multilateral forums. Unfortunately, his administration's actions had little effect at resolving aluminum challenges at home. From the start to the end of President Obama's second term, primary aluminum production fell over 64 percent (see Figure 1).<sup>6</sup>

After years of diplomatic maneuvering on Chinese overcapacity with little return, the Obama administration made a final Hail Mary attempt to help the U.S. aluminum industry. Nine days before leaving office, they launched a trade enforcement challenge at China via the WTO. Chinese overproduction of primary aluminum put strong downward pressure on global aluminum prices that perseveres today. In the filing, the administration attributed China's unfair practices of cheap loans and low-priced inputs for smelters.<sup>7</sup> The latter includes coal and electricity subsidies to

5 Warren Strobel, "Obama favors multilateral approach to foreign policy," *The Gazette*, Mar 8, 2008.

6 U.S. Geological Survey, Aluminum Statistics and Information, 2017

keep smelter costs down.<sup>8</sup> The result has been China swelling out the market at the cost of U.S. producers (see Figure 2).

China uses artificially cheap electricity for its smelters, mostly sourced from coal (80 percent).<sup>9</sup> The Organization for Economic Cooperation and Development (OECD) found Chinese subsidies to their aluminum firms are 35 times higher than comparable support from other countries.<sup>10</sup> Chinese subsidies stabilize their domestic aluminum production when electricity prices dip or skyrocket. By shielding Chinese smelters from cost volatility, they artificially manipulate the market, so prices stay low, even when the biggest cost input (electricity) is high. Beyond undercutting U.S. industry, this practice has drastic effects on the environment. Chinese aluminum production alone generates 1 percent of global greenhouse gas emissions.<sup>11</sup>

The U.S. WTO complaint filing against Chinese aluminum overcapacity came after years of bilateral attempts to combat these unfair practices.<sup>12</sup> The Obama administration's 2016 report on China's WTO compliance asserts: "with regard to aluminum, the United States and China recognized that excess capacity in this industry had increased and had become a global issue requiring collective response,

12 U.S. Trade Representative, Obama Administration Files WTO Complaint on China's Subsidies to Aluminum Producers, 2017.

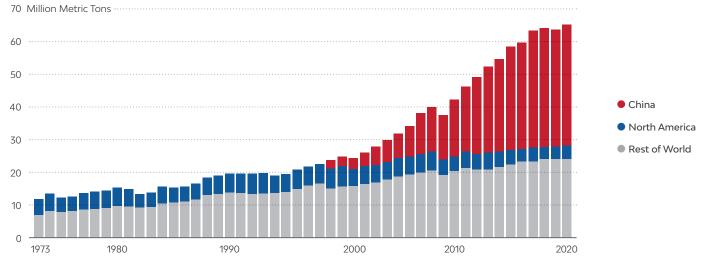
<sup>7</sup> U.S. Trade Representative, Obama Administration Files WTO Complaint on China's Subsidies to Aluminum Producers, 2017.

<sup>8</sup> OECD, Measuring distortions in international markets: The aluminium value chain, 2018.

<sup>9</sup> Ibid.

<sup>10</sup> Ibid

<sup>11</sup> Ali Hasanbeigi et al., "Aluminum Climate Impact An international Benchmarking of Energy and CO2 Intensities," *Global Efficiency Intelligence*, 2022.



### Figure 2 Global Primary Aluminum Production

Source: International Aluminum Institute, 2021.

and accordingly the two sides agreed to work together to address the excess aluminum capacity situation." The document lays out a timeline of the administration's repeated efforts. It surmounts to continual mutual acknowledgment of the overcapacity challenge at the highest levels of government, including heads of state, and commitment to share information. The one tangible outcome from the Obama administration's pressure was guidance out of the Chinese State Council on structural adjustments needed for China's non-ferrous metals industries, like aluminum. But writ large, the Obama administration's diplomatic pushing and China's industry guidance yielded little to no changes and therefore no relief to the declining U.S. aluminum industry during this period. <sup>15</sup>

Simultaneously to their bilateral maneuvering, the Obama administration coalesced other allies feeling the plight of Chinese overproduction across industrial sectors. President Obama's team launched the Global Forum on Steel Excess Capacity, which is housed in the OECD, with 30 other countries signing on to the Terms and Conditions.<sup>14</sup> The administration went on to co-sponsor a steel and aluminum overcapacity study with the EU, Japan, Korea, and Mexico. They presented their findings on the adverse effects of market manipulations on workers and industry around the world to the WTO Subsidies Committee for consideration. Finally, using all this collaboration and research, President Obama's Department of Commerce released the Enhanced Global Steel

14 Ibid.

Monitor to give industry updated information on steel trade flows. This monitor is the basis for the Steel Import Monitoring and Analysis System (SIMA) used today and thereby is key to the strategies employed by the following two administrations on aluminum trade.<sup>15</sup>

The mutual bilateral recognition and multilateral engagement only went so far. The ultimate decision to file the WTO complaint in the final hours in office exposed the limitations of the Obama administration's "tough-minded diplomacy" approach.<sup>16</sup>

In the days following the United States filing the complaint, Japan, the EU, Russia, and Canada all requested to join the WTO consultations against China.<sup>17</sup> Unfortunately, those requests are the last real actions on this case. With the end of the Obama administration, which touted itself for winning every WTO complaint it filed that was ruled on, came the end of the multilateral trade dispute era.<sup>18</sup>

For over a decade, the United States has contested and blocked appointment of judges to the WTO Appellate Body, which settles these disputes. President Trump went on to block all nominations to this high court during his term. The incoming administration could have requested the formation of a panel 60 days after the Obama administration requested consultation and litigated the dispute at the panel level. However, if China lost and appealed, then the dispute would have

17 WTO, Requests to join consultations, 2017.

<sup>13</sup> U.S. Trade Representative, 2016 Report to Congress on China's WTO Compliance, 2017.

<sup>15</sup> Ibid.

<sup>16</sup> Warren Strobel, "Obama favors multilateral approach to foreign policy," The Gazette, March 8, 2008.

<sup>18</sup> The White House, FACTSHEET: The Obama Administration's Record on the Trade Enforcement,, 2017.



The stated goal of the Section 232 aluminum tariffs was to boost domestic primary production to 80 percent capacity. Production peaked at 64 percent.

gone nowhere.<sup>19</sup> Concerns over the WTO overstepping its authority and a shift towards protectionism measures remain important considerations preventing the President Biden from resolving this issue via the WTO in present day. The current administration thus has followed in their predecessor's footsteps in not appointing judges to the Appellate Body. As such, the 2017 complaint remains in limbo. <sup>20</sup>

### Trump Administration Invokes Section 232

President Trump did not opt for the multilateralinstitution route nor diplomatic cooperation, having run for office on an anti-trade platform. Instead, President Trump dusted off the *Trade Expansion Act of 1962* and employed powers under Section 232 to impose import restrictions on aluminum.<sup>21</sup> Somewhat similar to the *Defense Production Act Title III*, which President Biden has recently levied to support domestic critical mineral production, Section 232 is linked to assuring national defense. The President can only access this authority following an investigation and determination by the U.S. Department of Commerce on whether there is a threat to national security.<sup>22</sup>

The 232 tactic is a pivot away from decades of free trade. In 2017, when the tariffs were being considered, U.S. primary aluminum producers were operating

22 Ibid.

at 55 percent of their capacity, meaning they could produce 1.56 Megatons (Mts), but only were producing 0.89 Mts.<sup>23</sup> The administration's goal was to make imported aluminum more expensive, reduce import volumes, and jumpstart idled capacity. The target threshold for success was 80 percent or higher of production capacity. Foreign aluminum received 10 percent tariffs, though President Trump said he was willing to cut deals.<sup>24</sup>

Unlike the Obama-Biden administration WTO complaint, the use of 232 authorities was not Chinaspecific in its reach. The tariffs were initially applied across all import countries, though with some brief temporary exemptions for national security partners (Canada, Mexico, the EU, South Korea, and Brazil).<sup>25</sup> As the United States' largest aluminum trading partner, Canada stood the most to lose from these tariffs. Canada sends 84 percent of its primary aluminum to the United States, where it is "used as an input for further processing into products for U.S. domestic and export markets."<sup>26</sup> Canada is one of these export markets, buying 42.5 percent of aluminum imports back from the United States.<sup>27</sup>

Following retaliatory tariffs, WTO litigation, a deal removing both sides' tariffs, and the reapplication of tariffs in 2020, aluminum trade between Canada and the United States now moves relatively freely.

- 26 Natural Resources Canada, Aluminum Facts, 2022.
- 27 Ibid.

<sup>19</sup> Climate Leadership Council, stakeholder interview, 2023.

<sup>20</sup> Yuka Hayashi, "U.S. Seeks to Fix WTO's Broken Trade Dispute Process," *Wall Street Journal*, July 11, 2022.

<sup>21</sup> Congressional Research Service, Section 232 of the Trade Expansion Act, 2022.

<sup>23</sup> U.S. Geological Survey, Aluminum Statistics and Information, 2022.

<sup>24</sup> Congressional Research Service, U.S. Aluminum Manufacturing: Industry Trends and Sustainability, 2022.

<sup>25</sup> Ambassador Susan Esserman et al., "Section 232 Update: Explained Tariffs, Quotas, and International Retaliation," *Steptoe*, June 12, 2018.





Source: Financial Times, 2022.

The final deal led to the United States establishing the Aluminum Import Monitoring and Analysis (AIM) System, through which Canada and its industry agree to closely surveil trade levels. The AIM System was built off the Obama administration's enhanced global steel monitor, which is known today as the SIMA system. Steel was also caught in these crossfires for the first round of tariffs but survived the 2020 without reapplication of tariffs.<sup>28</sup>

Canada's escape of the tariffs was not exclusively due to bilateral negotiation. The domestic political backdrop played a great deal in the initial tariff removal. The final deal with Canada, alongside Mexico, was cut to appease Congress during the U.S. Canada Mexico Agreement (USMCA) authorization. USCMA is the region's modernized free trade agreement (FTA), following over two decades of an unchanged North American Free Trade Agreement (NAFTA). FTAs require legislative branch approval and, given Canada's retaliatory tariffs pinpointed specific goods produced in key lawmaker's districts and states (Kentucky bourbon, Florida orange juice, etc.), many in Congress were keen to end the trade war over aluminum. Removal of the Section 232 tariffs was also a major Canadian and Mexican demand in the negotiations. Canada, in particular, was deeply offended at being branded a threat to U.S. national security, given their smelters were built by American companies as part of the allied effort in World War II; smelters in Saguenay, Quebec

alone supplied 40 percent of the aluminum allies used in the war.<sup>29</sup>

A few weeks after USMCA was enacted, President Trump announced a return of the tariffs exclusively on Canada to deal with a "surge" of supply from their Northern neighbor. The 2020 resurrection of the tariffs on Canada was the first test of the monitoring system. With the pandemic driving down demand for aluminum end-uses, like construction materials and automotive inputs, prices took a nosedive (see Figure 3). Canada was thus accused of flooding the U.S. market and undermining U.S. aluminum competitiveness, as the United States slapped tariffs back on right before the 2020 elections.

The threat of retaliatory tariffs and anticipation of a 50 percent decline in Canadian imports prompted the administration to remove these tariffs as swiftly as they reapplied them.<sup>30</sup> This reaction showcases the kinks of well-intentioned monitoring systems in application. Primary aluminum production is a complicated process. So complicated, that in the worst of economic downturns, smelters don't just shut off. Producers curtail production, meaning the companies intentionally limit the power and production of the facilities to weather the downturn and to be able to ramp back up once market conditions improve. To turn off the power and production at a smelter completely is to shut down the facility. The whiplash of tariff application during an unpredicted recession

<sup>29</sup> Patrick Chevalier, "Aluminum in Canada," The Canadian Encyclopedia, Published February 6, 2006, edited May 20, 2020.

<sup>28</sup> The White House, FACTSHEET: The Obama Administration's Record on the Trade Enforcement, 2017.

<sup>30</sup> U.S. Trade Representative, USTR Statement on Canadian Aluminum, September 15, 2020.

### Table 1 Aluminum Producing Countries Trade Status

Country	Primary Production (2020)	Trade Status with U.S. (as of 2023)
China	37.00	Tariff (10 percent ad valorem)
India	3.60	Tariff (10 percent ad valorem)
Russia	3.60	Tariff (200 percent ad valorem)
Canada	3.12	Import Monitoring System
UAE	2.67	Tariff (10 percent ad valorem)
Australia	1.60	Exemption (no quantitative restrictions)
Bahrain	1.50	Tariff (10 percent ad valorem)
Norway	1.40	Tariff Quota System
United States	1.10	N/A
Iceland	0.84	Tariff Quota System
United Kingdom	0.48	Tariff Quota System
South Korea		Tariff (10 percent ad valorem)
Argentina		Absolute Quota
Other countries	9.00	Tariff (10 percent ad valorem) except other EU countries and Japan, which have TRQ system in place, and Mexico, which has an import monitoring system in place

Note: The Trump administration negotiated a quota with the UAE before leaving office citing the important national security relationship via proclamation. The Biden administration "nullified" this proclamation when entering office. Source: Congressional Research Service, U.S. Tariff Policy: Overview, 2023.) Iceland, Norway, and other EU countries are under the tariff rate quota system.

Source: USGS, 2020 and CRS, 2023

from the pandemic shows the misalignment of the monitoring system design with the actual aluminum production process.

Some smaller U.S. aluminum trading partners, such as Mexico and Australia, struck similar deals with the Trump administration to remove the 232 tariffs.<sup>31</sup> Argentina opted for absolute quotas, so they cannot surpass their allotted amount of exports at all.<sup>32</sup> However, several allies, like the EU and the UK, were not able to make such agreements until the government changed, discussed in the next section. As such, they also took punitive action on the United States. Their actions include a slew of targeted retaliatory tariffs, as well as multiple cases brought against the United States' use of 232 at the WTO. For countries without negotiated deals, the tariffs remain in place today.<sup>33</sup> (See Table 1)

The effects of 232 aluminum tariffs on U.S. industry remain divisive. The U.S. Aluminum Association advocated against the tariffs, claiming the fundamental problem is illegally subsidized Chinese overcapacity, not trade with Europe and Canada. Some U.S. smelters were able to increase production and even reopen, in one case, due to the aluminum tariffs (see Figure 4). These producers, namely Magnitude Metals 7 and Century Aluminum, even created a separate American Primary Aluminum Association (APPA) to advocate for maintenance of domestic protections. The APAA CEO, Mark Duffy, not only stood with the administration through the original 232 tariffs, but also advocated for tariff reapplication on Canada in 2020.<sup>34</sup> Regardless of this ideological split amongst industry on the tariffs, their benefits petered out before hitting the Trump administration goal. Primary aluminum capacity peaked at 64 percent, never nearing the 80 percent target threshold.<sup>35</sup>

The combination of retaliatory tariffs and cross border supply chains for aluminum goods, particularly with Canada and Mexico, may have negated net economic gains the tariffs provided. Some analyses point to the 2018 tariffs on Canada as the reason industry was damaged in 2020, prompting the second round of tariffs. Economists call this "cascading protectionism."<sup>36</sup>

<sup>31</sup> Inside Trade, Sources: Australia Averted 232 quotas, tariffs in exchange for weekly monitoring, August 20, 2018.

<sup>32</sup> Chad P. Bown and Katheryn N. Russ, "Biden and Europe remove Trump's steel and aluminum tariffs, but it's not free trade," *PIIE Trade and Investment Policy Watch*, November 11, 2021.

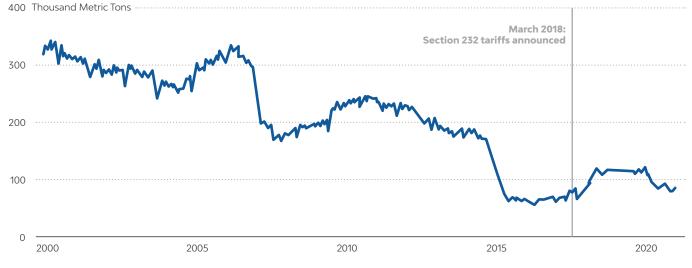
<sup>33</sup> Erica York, "Tracking the Economic Impact of U.S. Tariffs and Retaliatory Actions," *Tax Foundation*, April 1, 2022.

<sup>34</sup> American Primary Producers Association, American Primary Aluminum Producers Launch Official Association to Protect Long-Term Interest of Industry, 2018.

<sup>35</sup> Chad P. Bown and Katheryn N. Russ, "Biden and Europe remove Trump's steel and aluminum tariffs, but it's not free trade," *PIIE Trade and Investment Policy Watch*, November 11, 2021.

<sup>36</sup> Chad P. Bown, Trump's steel and aluminum tariffs are cascading out of control, PIIE, February 4, 2020.

### Figure 4 U.S. Primary Production, 2000-2021



Source: The CRU Group, 2022

One complaint levied against the 232 tariffs is where does this money go? When imported aluminum enters the United States, Customs and Border Patrol (CBP) collects the 10 percent ad valorem or penalties, as well as administrative fees.<sup>37</sup> Tariff revenue is then deposited in the General Fund of the United States. Known as America's Checkbook, the General Fund is used to finance the daily and longterm operations of the U.S. government.<sup>38</sup> In FY2020, "CBP collected \$74.4 billion in tariffs, accounting for approximately 2.2% of total federal revenue."39 Unsurprisingly, tariff revenue doubled from President Obama's administration to President Trump's, but none of the \$2.9 billion in aluminum tariff revenue circulated back to a struggling industry still dealing with high and unstable energy costs.<sup>40</sup>

### Biden Administration Maintains Managed Trade

#### **EU & UK Voluntary Export Restraints**

The current administration assumed power with the WTO complaint and 232 tariffs on several countries, including the EU, still in place. Even though some Biden officials were involved in the Obama administration's efforts on aluminum trade and criticized the use of Section 232 before taking office, the administration seemed to initially tip toe around these ongoing aluminum disputes. European partners continued to mount pressure, but it took introducing a key priority of the Biden administration to ultimately get them to the table.

In October of 2021, United States agreed to remove the 10 percent tariffs on EU aluminum, if the EU agreed to voluntary export restraints (VERs). VERs essentially meant replacing the tariffs with a managed tariff-rate quota (TRQ) system.<sup>41</sup> Similar to the agreement Canada and Mexico reached with the United States, the TRQ system includes monitoring agreements with a strong focus on dealing with overcapacity. Within this new system, the EU can export 18 thousand metric tons of unwrought aluminum and 366 thousand metric tons of semi-finished aluminum, tariff free. If the EU surpasses these levels, their aluminum exports are subjected to tariffs. A very similar agreement was struck with the UK the following year. <sup>42</sup>

This system is a far cry from a return to free trade. The TRQs are broken down into subcategories, which are administered quarterly for aluminum. The United States can review and adjust these TRQs annually. Further, the TRQ system is part of Section 232. So, while the Biden administration implied criticism of the use of 232 tariffs against allies when campaigning, they are not keen to reject this broad executive trade authority all together.<sup>43</sup>

In exchange for the semi-removal of tariffs, the EU lifted their retaliatory tariffs and suspended their complaint against the U.S. use of Section 232 in the WTO. The retaliatory tariffs covered 180 products

<sup>37</sup> Congressional Research Service, U.S. Tariff Policy: Overview, 2023.

<sup>38</sup> Treasury, The General Fund, 2023.

<sup>39</sup> Congressional Service Review, U.S. Tariff Policy: Overview, 2023.40 Ibid.

<sup>41</sup> Congressional Service Review, Section 232 of the Trade Expansion Act, 2023.

<sup>42</sup> Congressional Service Review, What's in the New U.S.-EU Steel and Aluminum Deal?, 2021.

<sup>43</sup> Congressional Service Review, What's in the New U.S.-EU Steel and Aluminum Deal?, 2021.



Trade policy overlooks the cost problem of energy for domestic aluminum smelters, leading to declining production and job losses for American workers.

and cost the United States \$3 billion annually.<sup>44</sup> A small portion of overall U.S.-EU trade, which surpassed \$270 billion in 2021, these counter tariffs were politically pointed.<sup>45</sup> Similar to the Canada's retaliation, the 25 percent premium was applied to Harley Davidson motorcycles, bourbon, orange juice, and corn, all of which are produced in states where lawmakers had a political stake in the tariff conversation. The threat of another round of these tariffs likely motivated the timing of the negotiation.<sup>46</sup>

The removal of the EU WTO complaint played to the United States hand down the line. At the end of 2022, the WTO finally ruled on the remaining six cases against the United States' 232 national security tariffs for steel and aluminum. Asserting these tariffs were not employed during a time of war, the panel claimed they violated global trade rules. The WTO ultimately recommended the United States remove the tariffs to bring its measures into conformity with its WTO obligations.<sup>47</sup>

President Biden's Trade Representative and Secretary of Commerce condemned the WTO deliberation immediately. For over 70 years, the United States has pushed back against efforts to adjudicate national security at the WTO.<sup>48</sup> They appealed the decision to the defunct Appellate Body and continued negotiating bilaterally. These moves reflect another layover from the Trump administration: questioning the sovereign overreach of multilateral dispute resolutions. The appealed decision will remain in the void of WTO disputes until the system is reformed, which is nowhere near the top of the Biden-Harris priority list.

The effects of the TRQ arrangements are still to be seen. The war in Ukraine, which has devastated the European primary aluminum industry due to rising energy costs, may constrain new exports. Overall though, the commitment to monitor trade flows for potential overcapacity is likely to have a larger impact than any increased trade flows, as major EU producing countries represented less than five percent of aluminum imports before tariffs were applied.<sup>49</sup> Stronger monitoring will increase the ability of the United States and allies to counter Chinese price gouging going forward.

A distinguishing factor between the steel TRQs and the aluminum TRQs may move the United States further away from countering Chinese market flooding. In the former, steel must be "melted and poured" in the EU. This requirement ensures European steel companies do not obtain cheaper raw steel from China that they then process for export to the United States.<sup>50</sup> Given U.S. concerns of pass-through countries for Chinese aluminum exports, it surprising there is no safeguard for aluminum TRQs.<sup>51</sup>

<sup>44</sup> Shannon Van Sant and Bill Chappell, "EU Tariffs Take Effect, Retaliating for Trump's Tariffs on Steel and Aluminum," *NPR*, June 22, 2018.

<sup>45</sup> Bureau of Industry and Security, U.S. Trade with European Union, 2021.

<sup>46</sup> Chad P. Bown and Katheryn N. Russ, "Biden and Europe remove Trump's steel and aluminum tariffs, but it's not free trade," *PIIE Trade and Investment Policy Watch*, November 11, 2021.

<sup>47</sup> Ashley Bodden, "WTO 232 Ruling Criticized by Washington," Barnes Richardson Global Trade Law, December 20, 2022.

<sup>48</sup> Inside Trade, U.S. appeals national security case to defunct WTO Appellate Body, 2023.

<sup>49</sup> U.S. Geological Survey, Aluminum Statistics and Information, 2017.

<sup>50</sup> Chad P. Bown and Katheryn N. Russ, "Biden and Europe remove Trump's steel and aluminum tariffs, but it's not free trade," *PIIE Trade and Investment Policy Watch*, November 11, 2021.

<sup>51</sup> Ibid.

#### **Russia's New Tariffs Under 232**

Another example of how the Biden administration has leaned into the Section 232 authority of the *Trade Expansion Act* is the 2023 proclamation on Adjusting Imports of Aluminum into the United States. The imports in question here are exclusively from Russia.

This decree works in two phases. As of March 10, 2023, there is a 200 percent duty on downstream aluminum articles made in Russia and made elsewhere with Russian aluminum. The second phase, which started on April 10, 2023, takes this a step further. It adds a 200 percent duty encompassing primary aluminum smelted in Russia. Together, the two-part tariffs hit Russian primary aluminum and downstream products made from that primary. Cornering both sides of Russia's supply chain gives this policy real teeth. <sup>52</sup>

The Department of Commerce's national security justification, which is required to invoke Section 232, cited three threats:

- Recent increases in U.S. imports of aluminum from Russia—whose market is especially export-oriented—by 53 percent between March and July 2022<sup>53</sup>
- The fact that the Russian aluminum industry is a key part of Russia's defense industrial base, fueling the war effort against Ukraine<sup>54</sup>
- The current strain on U.S. aluminum producers, with two domestic smelters at risk of closing, due to high levels of aluminum imports and high energy prices, the latter of which is linked to the Russian war effort<sup>55</sup>

The proclamation importantly recognizes the cost of these tariffs on third party countries sourcing Russian aluminum for their exports. The President here asserts, "we need to work together with our partners to ensure that the global market distortions caused by Russian aluminum articles do not distort our markets and threaten our national security." As such, other countries who impose a 200% duty on Russian aluminum will be exempt from the U.S. tariffs of this proclamation. To date, only Canada has followed suite. The same day as phase one of the U.S. decree took effect, the Trudeau government banned all imports of Russian aluminum

52 David E. Bond et al., "U.S. Imposes 200 Percent Duties on Russian Aluminum and All Products Containing Russian Aluminum; Takes Other Action Targeting Mining & Metals Sector.," White & Case, February 28, 2023.

55 The White House, A proclamation on Adjusting Imports of Aluminum Into the United States," 2023.

in solidarity with their largest trading partner and aluminum export destination.<sup>56</sup>

Even though Russia is the third largest exporter to the United States on aluminum, the effects of these tariffs on U.S. industries are anticipated to be minimal. This expectation is mostly due to timing and anticipation. Domestic industry began shifting away from Russian imports long before the start of the war. The Trump administration sanctioned Russia's largest aluminum producer, Rusal, in 2018. Ultimately the penalties were lifted less than a year later, after Rusal billionaire founder Oleg Deripaska was forced to relinquish control.<sup>57</sup> But the supply chain and investment shift had the lasting effect of pivoting away from Russian aluminum. This trend spiked again amidst the war. Before the tariffs were even levied, 2022 imports of Russian aluminum fell 40% lower than the four-year average.<sup>58</sup> In October of 2022, when tariff rumors circulated Washington, imports fell to almost zero.59

The challenge with the 200% tariffs on Russia and others issued by executive proclamation, is that the administration can remove them at will. This uncertainty frustrates the market, even those who oppose the tariff. More uncertainty is added to the mix when governments change, and new administrations come into power.

Three trends remain here. The Biden administration capitalizes on the Trump administration's 232 invocations for their own benefits, while simultaneously appealing to their allies and domestic base. Lastly, trade policies on aluminum out of the White House can change from administration to administration.

<sup>53</sup> Ibid.

<sup>54</sup> Ibid.

<sup>56</sup> Ismail Shakil, "Canada bans Russian aluminum and steel imports," *Reuters*, March 10, 2023.

<sup>57</sup> Joe Deaux, "Tariffs on Russian Aluminum to Affect Tiny Slice of US Industry," *Bloomberg News*, February 24, 2023.

<sup>58</sup> U.S. Geological Survey, Aluminum Statistics and Information, 2021 and U.S. Geological Survey, Aluminum Statistics and Information, 2023.

<sup>59</sup> Joe Deaux, "Tariffs on Russian Aluminum to Affect Tiny Slice of US Industry," *Bloomberg News*, February 24, 2023.

## Global Arrangement on Sustainable Steel & Aluminum

One remaining component of the EU and UK negotiations that motivated an otherwise very domestically focused administration to engage in trade was tying the deal to decarbonization. Where President Obama's spin was multilateralism and President Trump's was enforcement, President Biden's is fighting climate change. Given aluminum's high emissions profile, unwinding the tariffs on Europe presented a ripe opportunity for the Biden administration to work with their most climate-conscious partner on two shared challenges at once.

Representing over 40 percent of global output, the United States and Europe's ability to come together via GASSA to tackle multiple complex and shared goals may sound too good to be true. Much remains to be seen about what this sectoral trade mechanism will entail and how effective it will be in countering aluminum market distortion while supporting the competitiveness of both sides' domestic industries.

## **How GASSA Could Function**

Trade experts speculate GASSA will be enforced through a "common external tariff" on emissionsheavy aluminum products. The fee would "protect cleaner U.S. and European producers, discourage U.S. and European firms from moving to locales with less restrictive emission rules, and push trading partners to adopt cleaner production methods."<sup>60</sup> Theoretically, a fee on dirtier producers could give room for U.S. and EU producers, who, overall, are middle-of-thepack in terms of emissions, the flexibility and space to decarbonize by removing unfair competition.

GASSA will allow market access based on the emissions profile of the industrial metal product.

60 Jennifer Hillman and Alex Tippett, "A New Transatlantic Agreement Could Hold the Key to Green Steel and Aluminum," *Council on Foreign Relations*, November 19, 2021.

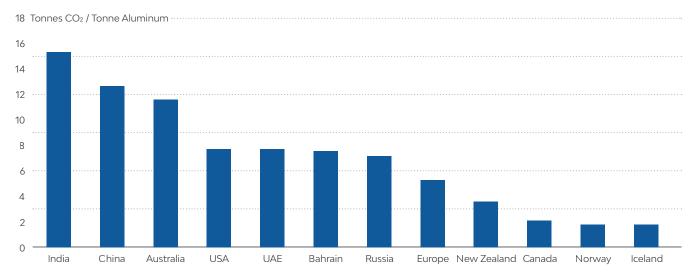


### Figure 5 Carbon Emissions from Aluminum Production

\* 2019 are draft figures.

Source: International Aluminum Institute, 2019

### **Figure 6** Energy-Related CO<sub>2</sub> Intensity of Aluminum Production in Studied Countries/ Regions (2019)



Source: Global Efficiency Intelligence (2021)

Aluminum's carbon intensity has two parts to it. The smelting process requires a constant stream of electricity. As such, it accounts for 68% of energy in primary production and 75% of carbon emissions.<sup>61</sup> The carbon emitted from this process is responsible for 13% of primary production emissions with an estimated carbon intensity of 1.5 tons CO<sub>2</sub> per ton of aluminum.<sup>62</sup> Figure 5 shows how this whole primary process dwarfs secondary and downstream production emissions, making it clear why this segment should be the target of the emissions system.

U.S. aluminum emissions hover around the global middle, emitting 7.8 tons of CO<sub>2</sub> per each ton of aluminum produced (see Figure 6).<sup>63</sup> Fortunately, 60 percent of primary aluminum circulating the U.S. market is produced in Canada with hydroelectricity, so it emits a fourth of that carbon. The U.S. country-wide aggregate veils the higher emissions profiles of some domestic smelters. It remains unclear whether individual producers or countries would be stuck with the fee. These options present trade-offs between helping the climate and helping industry competitiveness. Regardless, further U.S. decarbonization efforts are needed if the nation prioritizes greener aluminum in trade or at home.

Just ahead of Canada, Iceland and Norway lead the world in low carbon aluminum, emitting less than 2 tons of  $CO_2$  per ton of aluminum produced. Their low emissions profile is largely due to their hydroelectricity and geothermal use in the smelting process, but companies in both countries are actively working on eliminating anode emissions as well. Similar to the Canada-U.S. dynamic, Iceland and Norway are the largest suppliers of aluminum to Europe. Without these imports, European primary aluminum still performs well from a carbon perspective, with less than 6 tons of  $CO_2$  per ton produced.

While the carbon math is straightforward, many details on how the United States is going to translate their TRQ system with the European Union into a low emissions market remains to be seen. The potential system gets foggier when considering how the market would integrate with other countries, given the mixed bag of trade restrictions on imported aluminum.

On paper, a system that rewards cleanly produced aluminum benefits the North American and European aluminum markets. It has the added plus of punishing coal-fire powered Chinese aluminum, which is also a shared interest of these markets due to the damaging effects of Chinese overcapacity. But the devil lies in the details. As a white paper on GASSA circulates across the Atlantic, industry is left wondering, how will this system be implemented and monitored? What standards will be used? What trade mechanisms will be employed? What other countries are included? What does this mean for the other U.S. tariffs in place? Will higher EU and U.S. tariffs result in retaliation or violation

<sup>61</sup> Ibid.

<sup>62 &</sup>quot;Decarbonizing Aluminum: Technologies and Costs," *Bloomberg New* Energy Foundation, 2021.

<sup>63</sup> Ali Hasanbeigi et al., "Aluminum Climate Impact An international Benchmarking of Energy and CO2 Intensities," *Global Efficiency Intelligence*, 2022.

of the WTO? C-SIM does not purport to have all these answers, but there are important takeaways from the last decade of aluminum trade conflicts that European and U.S. decisionmakers should consider when finalizing this system.

### Lessons from Previous Administrations

The opportunity to turn a trade irritant into a win-win for the climate and U.S. and allied workers should not be missed. But the system should build upon the experiences of President Obama's diplomacy and multilateral practices and President Trump's protectionism and negotiated trade methods. Absent from both last two administration's efforts on aluminum—to the detriment of industry—was a focus on smelter access to affordable, reliable, and stable energy. Learning from their predecessor's realizations and missteps will be key to the Biden administration's success.

## 1. Confront the overproducing elephant in the room

A carbon-focused tariff for aluminum products would hurt Chinese producers, given their high emissions, but it is still dealing with the China price problem indirectly. The Trump administration's pitfall was taking a blanket approach, punishing all trade. The result of the Trump tariffs hurt trading partners and thereby the U.S. economy via their retaliation. Smelters were able to make some capacity gains, but only because they displaced allied aluminum consumption. Low prices from Chinese overproduction constrained the profits of U.S. producers even as production increased over 22 percent.<sup>64</sup>

The Obama administration's diplomatic approach was more direct on the point of overcapacity from illegal subsidies. However, the bilateral consultations with China, joint reports with allies, and WTO complaint generated no direct benefits to U.S. producers. American primary aluminum smelters closed during this period due to a 50 percent drop in prices, while Chinese aluminum production increased by over 150 percent.<sup>65</sup>

Focusing just on emissions overlooks the shared challenge to smelters in both countries: Chinese overcapacity. China is rolling out a program to decarbonize its aluminum sector, as part of its 2060 carbon neutrality commitment. The government will provide additional financial support to smelters to increase energy efficiency, develop emissionsreductions technology, and migrate to areas with hydroelectricity instead of coal. <sup>66</sup>

China decarbonization commitments are already generating results. There have been production cut backs for smelters in Inner Mongolia, Guanxi, and Xinjiang, all regions with coal power recently. Meanwhile, "the southern province of Yunnan, the region's 70 percent mix of hydroelectric power and cheap energy rates drew millions of tons of new aluminum production over the past few years."67 Even though droughts and continued high aluminum demand may delay Chinese decarbonization efforts, the shift is already underway. As such, further subsidized green Chinese aluminum may penetrate the transatlantic market, putting EU and U.S. producers at a disadvantage yet again. The high standards for trade requirement, however it is measured, will be key to ensuring the economic competitiveness of domestic smelters in both markets.

The U.S. government has been proactive in incorporating provisions into GASSA to counter unfair trade practices. U.S. Trade Representative Katherine Tai's comments on the deal with the EU imply further targeting of Chinese aluminum excess capacity and its resulting market distortions. At the end of 2022, she stressed the deal would elevate high standards, including high trade standards.<sup>68</sup> Given the OECD findings on how illegal Chinese subsidies skew aluminum competitiveness, it is clear who the administration is targeting here.

## 2. Do not prop up domestic industry to the point of retaliation

China's new support to decarbonize its aluminum sector invites a bigger question for GASSA creators: if the goal is a low emissions aluminum market, and decarbonization requires government intervention, where is the line between unfair trade and decarbonization subsidies? When defining the stringent standards for GASSA, the Biden administration should be mindful of this gray area. The administration need look no further than the Trump administration's aluminum trade war for the consequences of overextending domestic protections.

There are currently four nations with retaliatory tariffs

<sup>64</sup> U.S. Geological Survey, Aluminum Statistics and Information, 2010.

<sup>65</sup> Shawn Donnan, "Obama takes parting shot at China with WTO aluminum case," *Financial Times*, January 12, 2017.

still in place on \$6 billion worth of American "China sets carbon reduction plans for steel, aluminum," Argus Media, October 22, 2021.

<sup>67</sup> William Alan Reinsch and Emily Benson, "Decarbonizing Aluminum: Rolling Out a More Sustainable Sector," *Center for Strategic and International Studies*, February 25, 2022.

<sup>68</sup> Simon Lester, "Katherine Tai on the Global Arrangement on Sustainable Steel and Aluminum," *International Economic Law and Policy Blog*, December 14, 2022.

goods from the 232 steel and aluminum tariffs.<sup>69</sup> The total cost of these tariffs to the American people amount to \$1.6 billion. This amount does not include retaliatory tariffs from Mexico, Canada, and the EU, which were removed following bilateral negotiations across two administrations. Those countries' retaliatory tariffs together equated to an additional \$27.5 billion in U.S. goods.<sup>70</sup>

Retaliatory tariffs negate the benefits of intervention for domestic industry and consumers. In building the GASSA, decision makers need to strike a balance in terms of supporting domestic industry and ensuring the market is open enough to incentivize decarbonization abroad. To date, statements by both the U.S. and EU governments have emphasized these markets aim to drive decarbonization in their respective markets and elsewhere. Clearly drawing the line for legal and illegal subsidies through establishing stringent and achievable standards will be integral to achieving that stated goal.

## 3. Draw in private sector capital with certainty and transparency in the market

The Trump administration's tariffs were successful in drawing in private sector investment to resurrect two of the U.S. smelters. However, investment attraction stalled due to a whiplash in the removal and reapplication of tariffs in North America in particular. Missteps were later rectified through increasing traceability in the aluminum supply chain. The Trump administration's AIM system, which built on the Obama administration's enhanced global steel monitor, increases transparency and certainty in the system. Though, caution should be exerted in using monitoring systems for quick enforcement decisions in economic downturns, as seen in the pandemic.

Returning to the standards, the United States and the EU should clearly map out steps for other countries to join GASSA to prevent shaking the market every time a new country or company's aluminum is granted access. Steps to joining the market should take into consideration existing TRQs, tariffs, or absolute quotas currently in place. Ideally, the mechanism used for enforcement, maybe a common border tariff, would replace existing mechanisms to decrease complexities of the market. Similar consistencies between GASSA and Europe's carbon border adjustment mechanism (CBAM) should be considered as well, as European imports, including aluminum products, will soon be

69 Erica York, "Tracking the Economic Impact of U.S. Tariffs and Retaliatory Actions," *Tax Foundation*, April 1, 2022. subject to a carbon border tax depending on their emissions profile.

The Biden administration is already well positioned to prioritize traceability in GASSA. In the face of supply chain crises and national security concerns, they focused on increasing transparency along critical mineral supply chains. The International Trade Agency (ITA) added another layer to the AIM system in creating the Global Aluminum Trade Monitor, which was released in January of 2023. This monitor, which now builds on three administration's efforts, should be leveraged to provide investors and producers updated intelligence about GASSA and resulting aluminum trade flows. It can also be developed to monitor for emissions and social standards, advancing other GASSA priorities.

## 4. Incorporate like-minded countries and promote technology transfer

The Trump administration's aluminum tariffs were controversial amongst stakeholder groups for hurting national security and economic allies. Meanwhile, the Obama administration was proactive in engaging allies to combat illegal subsidies and excess capacity, but with fewer returns at home. Both experiences offer key insights for the development of GASSA. The President Trump's 232 tariffs isolated allies and detracted from the common issue of a loss of global competitiveness. Whereas President Obama's focus was problem oriented, instead of trying to identify ways allies could increase their efficiencies and compete. To support the domestic industries in Europe and United States, GASSA must be designed as forward-looking and with partners in mind. Inclusive promotion of innovation and technology transfer will be key to unlocking competition and sustaining the transatlantic primary industry.

The future of primary aluminum production relies on inert anodes and carbon capture. On average, 13 percent of primary aluminum emissions come from the carbon directly emitted in the smelting process.<sup>71</sup> While some technological innovations are being tested in the certain market, they are not commercially available today.

Decarbonization technologies not only increase the sustainability of smelters, but also increase operational efficiency through energy savings. U.S. and EU companies, Norway's Hydro and the MIT spin off company Verdox, are already in a partnership to incorporate carbon capture technology in Hydro's four

<sup>70</sup> Ibid.

<sup>71</sup> Ali Hasanbeigi et al., "Aluminum Climate Impact An international Benchmarking of Energy and CO2 Intensities," *Global Efficiency Intelligence*, 2022.

aluminum plants.<sup>72</sup> Further, TRINET, which has smelters in Germany and France, is working on an inert anode technology with an Icelandic aluminum company Arctus.<sup>73</sup> As the next frontier of the primary aluminum industry, decarbonization technologies must be a focal area of GASSA.

European companies are not the only ones working on inert anodes. Canada, which supplies the majority of North American aluminum, has moved out of the decarbonization R&D phase for smelters. In partnership with Apple and the Canadian and Quebec governments, Rio Tinto is testing a pilot for inert anode application at one of their Quebec smelters.<sup>74</sup> Given market integration, proximity, and their successful inert anode development, Canada should be included in not only the GASSA market but also discussions.

The information United States has shared on GASSA to date does mention partnering with like-minded countries. Further, the EU-U.S. Trade and Technology Council, which has an active working group on climate and clean tech, creates an important foundation to information exchange.<sup>75</sup> Leveraging allies and new technologies will prevent another race to the bottom, like the aluminum tariffs did, while capitalizing on the collaborations the Obama administration fostered. In so doing, GASSA could be the bridge for these technologies to be deployed in American smelters.

### 5. Smelters will be left behind without affordable, abundant, and reliable energy sources

Action to support affordable, abundant, and reliable energy access for smelters was nonexistent in the last two administration's focus on aluminum. The emphasis on trade without commensurate action at home to help smelters access energy was likely the reason the Trump administration's tariffs only went so far in increasing domestic capacity. The United States must remain attentive to the energy problem as they develop and roll out GASSA, lest domestic aluminum smelters lose market share to cleaner smelters in Europe and elsewhere.

GASSA can go a step further by incentivizing aluminum sourced with clean energy sources. Power from renewable energy is less volatile and increasingly more cost competitive for smelters. Still GASSA's

73 Trimet, CO2-free aluminum production, 2023.

75 European Commission, *EU-US Trade and Technology Council*, see: areas of cooperation, 2023.

confrontation of the core U.S. primary aluminum challenge remains tenuous.

Before implementation, the United States is already at a disadvantage in the GASSA market due to U.S. smelter energy use and age. Primary aluminum emissions are overwhelmingly from electricity use (75 percent).<sup>76</sup> All but one U.S. smelter relies on fossil fuels. European smelters emit almost two tons less of carbon per ton of aluminum produced than U.S. smelters. Those smelters are younger and therefore more energy efficient. To boot, European aluminum companies are also ahead of the United States in terms of eliminating anode emissions, as noted in the previous section.

In order to ensure U.S. smelters are competitive within GASSA, the Biden administration cannot make the same mistake as the last two administrations. A stronger link between clean energy and smelter access of this energy is needed to ensure GASSA meets the Biden administration goals.

76 Aluminum Association, Recycling, 2021.

<sup>72</sup> Hydro, Hydro invests in carbon capture company Verdox to eliminate emissions from aluminium production, 2022.

<sup>74</sup> Joe Deaux, "With a Push From Apple, Rival Aluminum Makers Team Up Against CO2," *Bloomberg*, April 21, 2021.

# Conclusion

When confronted with a deteriorating primary aluminum industry at home due to high energy costs and overcapacities abroad leading to low market prices, the last three Presidents rose to the occasion in very different ways. Self-proclaimed foreign policy wonk, President Obama opted for multilateral and bilateral cooperation. "Art of the Deal" author and businessman, President Trump invoked trade wars and enforcement to prompt negotiation. Life-long politician and climate advocate, President Biden built incentives for a cleaner aluminum market with allies.

Table 2 Aluminum Actions by Presidential Administration

President	Campaign Commitment	Aluminum Action
Barack Obama	Tough-minded diplomacy	Used diplomatic might to push China away from aluminum overproduction
	<ul> <li>Working with adversaries and giving a greater voice to allies</li> </ul>	<ul> <li>Collaborated with allies via multilateral forums and organizations to industrial metals overcapacity</li> </ul>
		Filed WTO complaint against Chinese excess capacity of aluminum
Donald Trump	Leave the World Trade Organization	Dismantled the WTO appellate body
	Promised steep tariffs on imported goods	s • Put forward 10% tariffs on aluminum imports
	Renegotiating NAFTA	Enacted USMCA
Joe Biden ·	<ul> <li>Integrate climate change into foreign policy, national security, and trade</li> </ul>	Created the Global Arrangement on Sustainable Steel and Aluminum
		<ul> <li>Negotiated Tariff Rate Quotas with Japan, EU, and UK</li> </ul>

Each President's approach was also largely dictated by their domestic political agenda. Campaign cries and commitments mirror action in all cases.

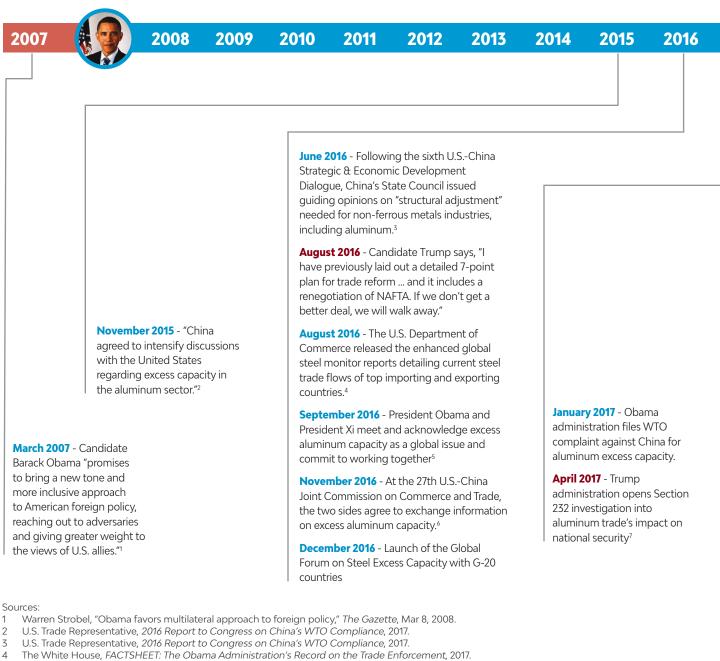
Each President's distinct paths did not begin from the same starting point. President Trump built on the argument in President Obama's WTO case and the Obama administration's steel monitoring system. The main reason President Biden developed TRQs with the EU and UK and the GASSA was because he inherited a trade dispute from his predecessor that was complicating relations with key U.S. security and economic allies.

Despite building on each other, the trade policies of these administrations vary in effect. President Obama's consultations and multilateral pressure led to little response from China on excess capacity. During his second term, domestic primary production sank 64 percent. President Trump set an explicit benchmark of getting primary capacity to 80 percent, but his results were also limited. Two smelters were able to up production, but capacity only scraped up to 64 percent during this time period. President Biden's results are yet to be seen, but so far during his first term two smelters curtailed and one is moving towards complete shutdown. Decrease in primary capacity is not necessarily linked to the current President's actions to date, but it adds to the pressure for Biden administration's policies to respond to smelter needs.

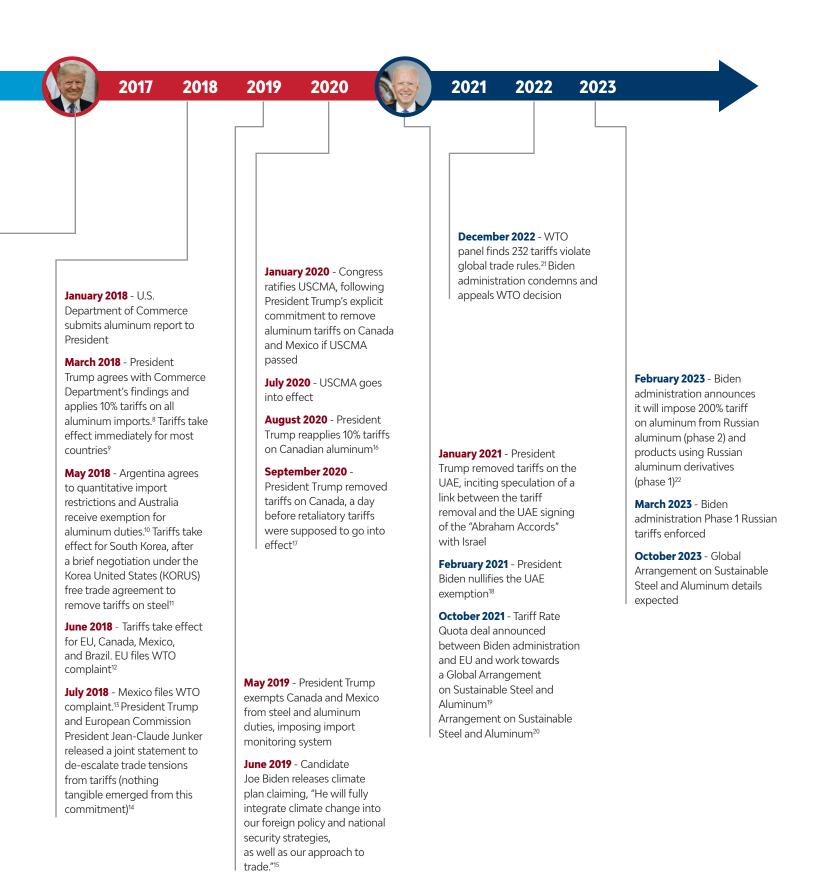
With the loftiest aluminum trade plan to date, President Biden's GASSA will depend on how he leverages the experiences of his predecessors to avoid pitfalls. First, the administration should confront the Chinese capacity problem head on in the development of this new market, rather than fault trade writ large or aspire to cooperation with China. Second, while domestic industry is the focus of all Biden administration policies, GASSA should not be a trojan horse for protectionist interests. Retaliation can have serious consequences and shift the United States away from its domestic and global decarbonization commitments. Third, transparency is crucial for industry and investor certainty, and the administration is fortunate to not have to start from scratch on monitoring aluminum trade. The Department of Commerce has already grown the Trump administration's AIM System into the Global Aluminum Trade Monitor (GATM). The GATM can further evolve to incorporate emissions and social standards, thus increasing market transparency and certainty for investors in the GASSA market. Fourth, GASSA inherently reflects a pivot back to allied collaboration, but it must be more inclusive and focus on a technological race to the top with additional partners to be successful.

Finally, GASSA will only help domestic industry, if there is a domestic industry to be helped. At its core, GASSA focuses on two secondary problems for U.S. smelters: Chinese excess capacity and high emissions. The consistent challenge to U.S. primary production throughout the last three administrations has been energy and no administration has narrowed in on that issue. The Obama and Trump administration's efforts prove trade barriers and trade complaints can only go so far in supporting smelters to increase their capacity. By creating a market where clean aluminum is prioritized, GASSA can increase demand for U.S. aluminum with its medium emissions profile. However, U.S. aluminum will need to get cleaner as the market grows, and that requires further intervention at home.

C-SIM's reports on domestic policies and trade policies all build on the case that current efforts on aluminum in the United States are missing the mark because they don't focus on the energy issue. A final report will look at global policies to see how other countries are able to have consistent aluminum production using energy and environmental policies.



- 5 Ibid.
- 6 Ibid.
- 7 Congressional Research Service, Section 232 of the Trade Expansion Act of 1962, 2022.
- 8 Ibid.
- 9 Ambassador Susan Esserman et al., "Section 232 Update: Explained Tariffs, Quotas, and International Retaliation," Steptoe, June 12, 2018.
   10 Ibid.
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#### center for Strategic Industrial Materials

C-SIM is a policy initiative dedicated to advancing more secure, reliable, and sustainable supply chains for aluminum and other industrial materials critical to America's national and economic security. The Center is exploring new federal government purchasing regulations that prioritize domestic aluminum and developing policy recommendations designed to reduce carbon emissions to net zero by 2035.

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#### **Media Contact**

For media inquiries please contact Ashley Simmons, asimmons@secureenergy.org.

SAFE · 1111 19th Street, NW #406 Washington, DC 20036 · 202.461.2360 · secureenergy.org