

Aluminum is Critical to America

Why Energy Matters for U.S. Aluminum



North America is one of the best places in the world to make aluminum, as demand is growing.

The same facilities that make aluminum for beverage cans and cars often make aluminum products for the front lines of national security, like fighter jets, body armor and more.



An aluminum smelter is extremely energy intensive. A new primary aluminum smelter would need 11 TWh of new, dedicated electricity, which is enough power to supply cities like Detroit, Nashville or Boston for a year.

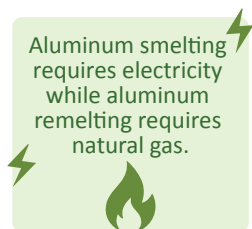


Recycled aluminum uses

95% 

less energy than making new aluminum

Aluminum smelting requires electricity while aluminum remelting requires natural gas.

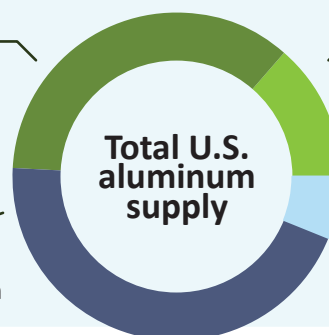


The U.S. aluminum industry is effectively “short” ~4 million tons of raw, unwrought metal that we are unable to supply through primary production or domestic recycling.

4M MT
Ingot/Raw Aluminum Imports

Current U.S. aluminum metal supply gap

5M MT
U.S. Secondary/Recycled Production



1.5M MT
Semi-fabricated Aluminum Imports

700K MT
U.S. Primary Production

The Aluminum industry supports nearly

700,000
American jobs



**Data center/
AI competition**

Demand for electricity from data centers to double by 2030

Data centers can pay up to \$115/MWh

As a globally traded commodity, aluminum produced in the smelting process needs 10 - 20 year electricity contracts at ~\$40/MWh.

Produce

- Grow energy supply with ‘all of the above’ approach to fuel sourcing
- Optimize existing energy supply
- Promote SMR, geothermal and other new electricity generating tech
- Maintain and grow domestic natural gas production

Reform

- Streamline new project construction through permitting reform
- Enhance timeliness, predictability and transparency of regulatory actions
- Enforce project deadlines and penalties for project delays
- Expand FAST-41 Act and similar state-based permitting reforms

Transmit & Distribute

- Expedite interconnection of new electricity generation to the grid
- Promote competitive bidding for transmission line installation
- Expand grid enhancing technologies
- Make electricity transmission rates transparent and public
- Optimize existing natural gas pipeline use and incentivize new construction

Collect

- Capture more aluminum for recycling
- Invest in recycling infrastructure for collection and sorting
- Keep scrap aluminum at home for sorting, melting and re-use

Smart energy policy can power up the next generation of American aluminum supply chain resilience.