# Semi-Fab LCA Report Member Digital Toolkit

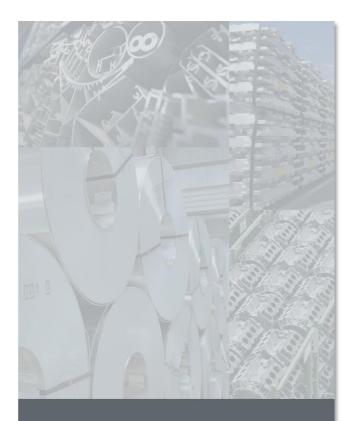


### Life Cycle Assessment

- A new critical-reviewed life cycle assessment (LCA) report documents the life cycle impact of primary, recycled and semi-fabricated aluminum product.
- The report is based on aluminum and aluminum products manufactured in North America in 2016.
- The report shows the overall impacts of North American aluminum production have declined significantly since 1991.







The Environmental
Footprint of SemiFabricated Aluminum
Products in North America

A LIFE CYCLE ASSESSMENT REPORT

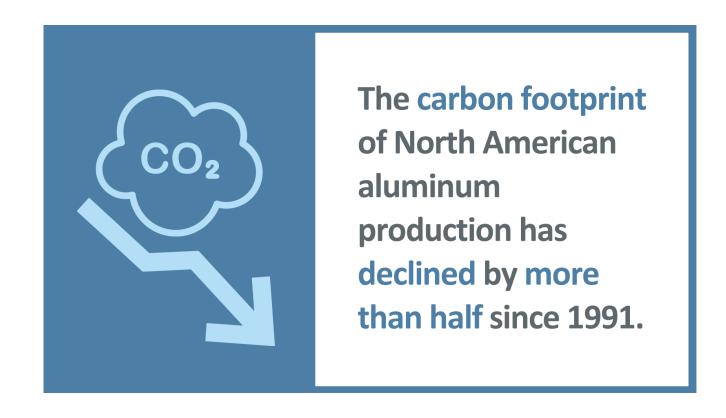
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#### **Aluminum Production**



- The LCA report shows that aluminum produced in North America, which relies heavily on renewable power, is among the cleanest in the world.
- •Since 1991, the energy needed to produce primary and recycled (secondary) aluminum has dropped by 27 and 49 percent, respectively.

## **Carbon Footprint**



• Since 1991, carbon footprint declined by 49% for primary aluminum production and 60% for recycled aluminum production.

#### **Recycled Aluminum**



- Increasing the end of life (EOL) recycling rate for one metric ton of aluminum by one percent can reduce the product's carbon footprint by roughly the equivalent to the impact of driving 198 miles in a passenger car.
- Producing recycled aluminum saves 93% energy and reduces the carbon footprint by 94%.

#### **Primary Aluminum**



- Not all primary aluminum is created equal.
- Primary aluminum sourced from hydropower and renewable energy dominant regions result in the lowest carbon footprint of products.
- Making aluminum products in regions which rely heavily on coal and natural gas-based electricity can be up to 3.2 times as carbon intensive as making them in North America.

#### Regional



• Aluminum products made in China are two to three more times as carbon intensive as similar products made in North America.

#### **Social Media: Twitter**

- A new life cycle assessment (LCA) report shows the energy and carbon impact of aluminum production in North America has dropped to its lowest point in history. #ChooseAluminum <a href="https://alu.mn/3mUSIPu">https://alu.mn/3mUSIPu</a>
- Aluminum production has never been greener! Aluminum produced in North America with renewable hydropower is among the cleanest in the world.
  https://alu.mn/3mUSIPu
- Increasing aluminum recycling rates and advocating for new investment on recycling infrastructure can reduce the amount of aluminum lost in landfills every year. https://alu.mn/3mUSIPu

Did you know that producing recycled aluminum saves 93% energy and reduces the carbon footprint by 94%? Learn more here: https://alu.mn/3mUSIPu

## Social Media: LinkedIn

- A new critical-reviewed life cycle assessment (LCA) report that documents the life cycle impact of primary, recycled and semi-fabricated aluminum products shows the energy and carbon footprint of aluminum products in North America has dropped to its lowest point in history.
  <a href="https://alu.mn/3mUSIPu">https://alu.mn/3mUSIPu</a> #ChooseAluminum #aluminum #sustainability
- More sustainable than ever a new life cycle assessment (LCA) report shows that the overall environmental impacts of North American aluminum production have declined significantly since 1991. Technological advancements, efficiency improvements, the phasing out of older smelting technologies, and the replacement of coal-fired for renewable electricity in smelting have all contributed to this trend. <a href="https://alu.mn/3mUSIPu">https://alu.mn/3mUSIPu</a> #ChooseAluminum #aluminum #sustainability
- Recycling aluminum saves more than 90% of the energy needed to produce new aluminum. Unfortunately, more than a million tons of aluminum is lost in landfills every year in North America alone. That's why we're advocating for recycling infrastructure improvements and other policy changes to incentivize the increased collection and capture of used aluminum. <a href="https://alu.mn/3mUSIPu">https://alu.mn/3mUSIPu</a> #ChooseAluminum #aluminum #sustainability

#### Join the Conversation

- @ChooseAluminum
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