



This is Hydro

Hydro is a leading aluminium and energy company that builds businesses and partnerships for a more sustainable future. We develop industries that matter to people and society.

Since 1905, Norway-based Hydro has turned natural resources into valuable products for people and businesses, creating a safe and secure workplace for our 32,000 employees in more than 140 locations and 40 countries. Today Hydro is present in a broad range of market segments for aluminum, energy, metal recycling, renewables, green hydrogen and batteries.

Hydro is committed to leading the way towards a more sustainable future, creating more viable societies by developing natural resources into products and solutions in innovative and efficient ways.

Hydro in the United States

Hydro's aluminum manufacturing in the U.S. is all based on recycling, and we are the largest producer of aluminum extrusion ingot in the U.S., with a production of over 2 billion pounds or 1 million metric tonnes. We are also by far the largest aluminum extrusion company in the U.S., as well as in Europe, with sales to large customers in sectors such as automotive, buildings, general engineering and consumer durables.

Hydro has had operations in the U.S. for several decades, beginning in energy production in the 1980s, but many of our aluminum operations have been around for quite a while longer. For example, our largest U.S. plant, in Cressona, Pennsylvania, was originally constructed in the 1940s.

Currently, our U.S. operations include ten aluminum recycling facilities and more than 20 aluminum extrusion facilities. In addition, Hydro operates two R&D centers. In total, Hydro has more than 6,000 employees in the U.S., making us the largest Norwegian employer in the country.

Hydro is currently building a new state-of-the-art aluminum recycling facility in Cassopolis, Michigan and expanding our Cressona, Pennsylvania facility. In addition, we are looking for opportunities in the areas of renewable energy, green hydrogen and battery materials in the U.S.



Key facts: Hydro globally

- Legal name: Norsk Hydro ASA
- Founded: 1905
- Business areas: Hydro Bauxite & Alumina, Hydro Aluminium Metal, Hydro Extrusions, Hydro Energy
- Number of employees: 32,000
- Company presence: 40 countries worldwide
- President and CEO: Hilde Merete Aasheim

Key facts: Hydro in the U.S.

- Current operations: Hydro Aluminium Metal, Hydro Extrusions, Hydro Building Systems
- Number of employees: >6,000
- 21 manufacturing sites and two R&D facilities from coast to coast
- Annual production of aluminium billet is 2 billion pounds and we are by far the largest aluminium extrusion company in the country



Hydro's decarbonization initiatives

In Hydro, we welcome the Biden administration's climate leadership and the comprehensive policy packages which are expected to accelerate the industrial innovation we need for a successful green transition.

This aligns well with Hydro's ambitions. Our aim is to provide sustainable low-carbon aluminum products and new energy solutions to decarbonize industries while we provide good jobs and support vibrant local communities.

Since the start of 2021, Hydro has announced more than 25 sustainability related projects, totaling more than USD 1 billion in investments across its global operations. We are committed to achieving net-zero emissions by 2050 or earlier and are leading the way by utilizing renewable energy and new technologies. Today we already deliver near-zero carbon aluminum from select recycling facilities in Europe.

Our decarbonization initiatives cover:

- Increased recycling of post-consumer scrap to deliver low-carbon and recycled products to customers in the transport, automotive, buildings and consumer durables sectors
- Carbon capture and storage for existing aluminum smelters (CCS)
- Development of Hydro's proprietary HalZero technology for greenfield smelters
- Development and use of green hydrogen to decarbonize our own casthouses and recyclers
- Increasing the use of renewable energy in our value chain
- Expanding our presence in the U.S. market as a producer of renewable energy, green hydrogen and sustainable battery materials

Growth in recycling of end-of-life aluminum scrap

Hydro's motivation is to drive the green transition in the American auto & transport, B&C and consumer durables industry by expanding our production of recycled aluminum and extruded products. Aluminum recycling conserves the value of the aluminum by keeping the material in the loop and significantly reduces energy consumption as recycling scrap aluminum requires 95% less energy than producing primary aluminum.

Hydro is now implementing international sustainability standards (ASI, ISO and DNV) in all our operations in the U.S. and we can offer our customers transparency when it comes to the recycled content and climate footprint of the materials they buy. We believe this is important in driving the green transition in the market for aluminum and extruded products.

We have been driving this transition in Europe for several years and the US market is now starting to mature. Hydro has ten recycling facilities in the U.S, and with the new state-of-the-art recycling plant in Cassopolis Michigan, we introduce new recycling technology, pioneered in Europe, to the U.S. This will industrialize the production of Hydro's premium low-carbon product Hydro CIRCAL which contains at least 75% post-consumer scrap and, as a result, the lowest carbon content of any extrusion ingot produced at scale in the world today.

Carbon capture and zero-emission technology development

To speed up decarbonization of the aluminum industry and make our existing aluminum smelters fit for the future, Hydro is developing carbon capture and storage (CCS) solutions that can be retrofitted into aluminum plants that are in operation today. We have made a significant investment in Verdox, a carbon capture startup launched from the Massachusetts Institute of Technology, and we are currently testing the technology at one of our Norwegian smelters.

Hydro is also developing a breakthrough technology for zero-carbon primary aluminum production. We call it HalZero. Instead of carbon dioxide, the HalZero process emits oxygen. On March 1, we announced a new milestone and will now invest in a test facility supported by the Norwegian government. If successful, the ambition is to produce the first pilot volumes of zero-carbon aluminum by 2025 and to have an industrial-scale pilot up and running by 2030.



Increased use of renewable energy across our value chain

Hydro is investing heavily in decarbonizing our own value chain through technology development and increasing the use of renewable energy sourcing. In Brazil Hydro is implementing the world's largest electrification project, switching from fossil fuels to natural gas and in the next phase 100% renewables at our Alunorte refinery.

In August 2022, Hydro's extrusion plant in Spanish Fork, Utah, became the company's first in the United States to source 100 percent of its electricity needs from renewable energy. It is Hydro's second plant in North America to reach this milestone, joining the Pointe-Claire, Quebec site in Canada, which utilizes 100 percent hydroelectric power. Hydro's new investments in Cassopolis, Michigan, and Cressona, Pennsylvania will also source their entire electrical needs from renewable energy.

Hydrogen and battery materials

Green hydrogen is still an early phase industry that will need government support to get off the ground. Long-term, making

the fuel switch from natural gas to green hydrogen will be important to decarbonize hard-to-abate sectors, including the metals, maritime and transportation sectors.

Within sustainable battery materials, Hydro considers Europe our home market and starting point. However, with the Biden Administration's ambitious climate plan, the U.S. market has become increasingly interesting for investment in both hydrogen and battery solutions going when scaling up our business.

