



Cleantech Leader Aymium Announces World's Largest Advanced Biocarbon Contract for its Coal Replacement Product

More than 4 million tons of coal will be replaced with Aymium's renewable carbon negative product, removing over 10 million tons of CO2

St. Paul, Minn. (USA) May 9, 2022 – [Aymium](#), the leading producer of renewable biocarbon products, announced that it has entered a long-term supply contract for its patented, coal replacement product with [Hokuriku Electric Power Company](#) and [Nippon Steel Trading](#). The contract is the largest for advanced biocarbon globally and will support the first large-scale continuous utility use of advanced biocarbon to replace coal in power generation. Aymium produces the only demonstrated carbon-negative product for replacing coal in power generation.

"Hokuriku's pioneering use of Aymium's leading-edge products to replace coal will accelerate transition away from fossil-fuel based power generation and reduce environmental impacts," said Aymium CEO [James Mennell](#). "Aymium's products allow immediate replacement of coal with a renewable, carbon negative product. Our collaboration with Hokuriku and Nippon Steel Trading advances our shared mission of decarbonization and global environmental improvement."

Each ton of Aymium's product, when used in place of coal, results in a reduction of over 2.5 tons of CO2 as well as over 95% reduction in emission of other pollutants from coal generated power, including sulfur dioxide and mercury.

The landmark contract and associated environmental benefits were celebrated by [U.S. Ambassador to Japan Rahm Emanuel](#). "Hokuriku Electric Power's agreement to purchase Aymium's innovative renewable biocarbon products is a win for U.S. jobs, the environment, and U.S. exports. Japanese investment in Aymium's innovative technology, from both Hokuriku Electric Power and Nippon Steel Trading, shows the power of U.S. – Japan cooperation," said Ambassador Emanuel.

Aymium's renewable product is created through a non-combustion process that converts biomass to high purity biocarbon and biogas, recovers and recycles water from the biomass, and is powered by self-generated renewable energy. The product has been tested at power-plant scale by Hokuriku confirming suitability and advantages as a replacement for fossil coal.

"Hokuriku is committed to decarbonization, and strengthening our relationship with Aymium, whose patented technology shows high growth potential and contributes to Hokuriku's efforts to become carbon neutral," said Mr. Koji Matsuda, Executive President and Representative Director Hokuriku Electric Power Company.

Hokuriku also announced an equity investment in Aymium. Hokuriku's investment follows \$200 million from investments by major global energy and metals companies with a focus on decarbonization, including [Nippon Steel](#), [Rio Tinto](#) and [Steel Dynamics](#).

“As partners to this contract, and investors in Aymium, Nippon Steel Trading is showing its commitment to advance carbon reduction technologies that will have an immediate and near-term benefit,” said Mr. Yasumitsu Saeki, President and Representative Director, Nippon Steel Trading Corporation. Nippon Steel Trading is acting as Aymium’s and Hokuriku’s trading partner and managing international logistics for the supply to Hokuriku.

Aymium is a Minnesota-based cleantech company that creates renewable products that replace fossil fuels and reduce the environmental impact of large global industries including metals, energy, and crop production. Aymium’s products are protected by more than 275 issued and pending patents globally and are engineered to immediately displace fossil coal in energy production — without the need for any type of plant modifications. Aymium’s patented process converts certified sustainably sourced renewable biomass into biocarbon using integrated thermolysis.

Aymium is constructing two additional production facilities—one in Williams, California, and another in the Pacific Northwest—to produce advanced biocarbon for use by Hokuriku. Aymium anticipates investing over \$350 million to construct the facilities that are scheduled to be operational in 2023.

[About Aymium](#)

Aymium produces high-value biocarbon and biohydrogen products that can be used to immediately replace fossil fuels in the production of metals, energy, crops, and in the purification of water and air with no modifications to equipment or processes. Produced using sustainably sourced biomass – recovered and unusable wood – Aymium’s bioproducts are renewable, carbon-negative and they replace emission-heavy fossil fuels such as coal and coke. Aymium’s leading technology is backed by more than 275 issued or pending patents on a global basis. Aymium is headquartered in Minnesota.

[About Hokuriku Electric Power Company](#)

Established in 1951, Hokuriku Electric Power Company is a comprehensive energy company that aims to contribute to the development of the Hokuriku region through the stable supply of affordable and high-quality energy. The company's vision for the future is to "develop together with Hokuriku and deliver new value nationwide and overseas," and it is expanding its business beyond the existing electric power business while contributing to social issues such as addressing the global warming, sustainable development of the region, and the realization of a smart society.

[About Nippon Steel Trading Corporation](#)

Nippon Steel Trading Corporation is the core trading company of NIPPON STEEL CORPORATION Group, and was established in October 2013 through the merger of Nippon Steel Trading Co., Ltd. and Sumikin Bussan Corporation. The company continues to grow as a multiple specialty trading company operating four integrated core businesses: steel, industrial supply & infrastructure, textiles, and foodstuffs.

Forward-Looking Statements

This press release contains some predictive statements about future events, including statements related to new facilities and environmental impact. These statements, which are generally preceded or accompanied by such typical conditional words as "anticipate", "intend", "believe", "estimate", "plan", "seek", "project", or "expect", or by the words "may", "will", or "should", are intended to be made as "forward-looking," subject to many risks and uncertainties, within the safe harbor protections of the Private Securities Litigation Reform Act of 1995. These statements speak only as of this date and are

based upon currently available information and assumptions, which we consider reasonable as of this date. Such predictive statements are not a guarantee of future performance, and we undertake no duty to update or revise any such statements. There are many factors that could cause such forward-looking statements to turn out differently than anticipated.