

Paris, May 23rd, 2025

Inauguration of Carbonity, Canada's largest industrial-scale biochar plant: a concrete solution for soil regeneration and carbon sequestration

Airex Energy, an innovative leader in the development of world-class decarbonisation solutions, Groupe Rémabec, a pillar of the Quebec forestry industry committed to responsible transformation and decarbonisation, and SUEZ, a global leader in circular solutions for water and waste, inaugurated yesterday Carbonity, Canada's first industrial-scale biochar plant, in Port-Cartier. Resulting from a partnership between the three companies, the plant will start with a production capacity of 10,000 tonnes of biochar per year, which is expected to triple by the end of 2026 to become the largest in North America — and one of the largest in the world.

Thanks to its ability to sequester carbon over-time, biochar has been identified by the IPCC¹ as an effective technology to address climate change. Also, its multiple benefits support agricultural resilience, sustainable innovation in the construction and urban planning sectors, and decarbonization of heavy industries.

Biochar, a decarbonization tool for multiple industries

Produced by high-temperature pyrolysis of biomass, without oxygen, biochar stabilises carbon in residual biomass sustainably and creates practical applications in agriculture, construction and the energy sector.

Used as a soil amendment, it sequesters carbon while improving nutrient and water retention, aeration, drainage and microbial life. It helps soil regeneration, makes fertiliser use more efficient, increases agricultural yields and contributes to water conservation — major benefits for the agricultural sector.

When added to concrete, cement or asphalt, it improves the performance of materials while significantly reducing their carbon footprint, a crucial issue for the construction industry and cities of tomorrow. Its production also generates surplus energy in the form of steam or pyrolysis oil, which can be used on site or sold to nearby industries.

An innovative plant backed by three companies pioneering the ecological transition

Located on the North Shore, Carbonity is a joint venture owned equally by three partners. It will create 75 direct and indirect jobs in the region. It produces carbon-rich biochar from approximately 58,000 tonnes per year of forest residues from the activities of Groupe Rémabec.

Carbonity relies on Airex Energy know-how, which developed the technological solutions DryFX and CarbonFX™ used to produce biochar and on SUEZ's expertises in organic waste recovery, the production of soil improvers and biofertilisers, and the development of circular solutions to reduce its customers' carbon footprint.

This project marks the first step in the ambitious roadmap of Airex Energy and SUEZ, which aim to build a global annual biochar production capacity of 350,000 tonnes by 2035 to meet the challenge of industrial activities' decarbonisation.

¹ Intergovernmental Panel on Climate Change

"The inauguration of Carbonity is a true industrial milestone for Québec. Airex Energy's technology, including our patented CarbonFX and DryFX solutions, is central to this success, and it makes us very proud. Our primary mission is to contribute to the decarbonization of our economy. This investment represents Airex Energy's first step toward scaling global biochar production, a product that will help many businesses here and abroad achieve net zero.", **Michel Gagnon, CEO of Airex Energy and Chair of Carbonity's Board.**

"Today, we continue an extraordinary journey that is shaping the future of forestry and asserting Quebec's leadership in bioproduct development. Alongside Airex Energy and SUEZ, we are building a new economy—future-focused and environmentally committed. At Port-Cartier, we're betting on innovation and boldness to convert our forest residues into sustainable economic value. This project breathes new life into a long-neglected industrial site, giving it a promising future. Thanks to strong partnerships, cutting-edge technology, and a clear vision, we are positioning ourselves as a global player while diversifying our products and markets for a better future.", **Réjean Paré, President and Chief Operating Officer of Groupe Rémabec.**

"We are very pleased to contribute to this pioneering biochar production project in Canada. This negative-emission solution identified by the IPCC is effective in combating climate change and relevant to waste recovery activities. We are convinced that biochar will play a decisive role in the ecological transition of industrial companies. That is why we aim to produce 350,000 tonnes of biochar per year by 2035, in partnership with Airex Énergie, to offer our customers committed to carbon neutrality innovative solutions for reducing their residual emissions.", **Yves Rannou, Co-CEO of SUEZ and Chief Operating Officer Recycling & Recovery.**

"The inauguration of Carbonity marks an important milestone towards a new, more sustainable form of forestry, rooted in today's economic and environmental realities and serving the ecological and industrial transition of tomorrow. We are immensely proud to be part of this industrial first in Canada.", **Patrick Girard, CEO of Carbonity.**

This project was made possible thanks to the vision and financial support of the governments of Quebec and Canada.

"The federal government is proud to have contributed to this flagship project supporting the establishment of a new subsidiary in Canada. Biochar is a key solution for carbon sequestration, with additional benefits for agriculture, the development of resilient cities, and the support of a diversified forestry industry.", **Mélanie Joly, Minister of Industry and Minister of Canada Economic Development for Quebec Regions.**

"I am delighted to see the Carbonity project come to fruition. The new automated plant will generate significant financial and social benefits for the North Shore, including the creation of highly skilled jobs. It also strengthens the region's forestry sector, which plays a key role in the vitality of our economy.", **Kateri Champagne Jourdain, Minister of Employment, Minister responsible for the North Shore region and Member of the National Assembly for Duplessis.**

"The Carbonity plant will promote the decarbonisation of strategic sectors in Quebec. Our government is proud to have contributed more than \$16 million to this project, which leverages innovative technology and helps build a prosperous and sustainable economy.", **Christine Fréchette, Minister of Economy, Innovation and Energy and Minister responsible for Regional Economic Development.**



"With Carbonity, Port-Cartier is becoming a leader in sustainable innovation. By transforming our forest residues into biochar, we are smartly leveraging our local resources while creating sustainable jobs. This is a promising project that demonstrates that the environment and economic development can go hand in hand. We are very proud to see our community take its place as a model of responsible development.", **Alain Thibault, Mayor of Port-Cartier.**

At full capacity, the plant will sequester 75,000 tonnes of CO2 eq. per year. This production generates guaranteed and certified carbon credits, which are sold on the voluntary market by First Climate. In 2024, Microsoft selected Carbonity to purchase 36,000 carbon credits over the first three years of operation.

"The official launch of the Carbonity project is an important milestone for international climate protection through technical carbon removal solutions, as it proves that biochar technology can be scaled up. We are delighted that our customers are showing such interest in Carbonity, thereby supporting the continued development of carbon removal technology.", **Olaf Bachert, CEO of First Climate.**

About SUEZ:

Faced with growing environmental challenges, SUEZ has been delivering essential services that protect and improve our quality of life for more than 160 years. SUEZ provides its customers with innovative and resilient solutions for water and waste services. With 40 000 employees across 40 countries, the Group works with customers to create value over the full lifecycle of their assets and services, and to drive their low carbon transition. In 2024, SUEZ provided drinking water for 68 million people worldwide and sanitation services for 44 million people. The Group generated 8 TWh of energy from waste and wastewater. In 2024, SUEZ has generated revenues of 9.2 billion euros.

For more information: www.suez.com / Twitter @suez

About Airex Energy:

An innovative leader, Airex Energy develops and delivers world-class decarbonisation solutions with the ability to significantly reduce GHG emissions. Using its proprietary CarbonFX™ technology, Airex Energy transforms biomass into high-value green products such as biochar, biocharcoal and biocarbon. Since 2016, the company has been operating Canada's first and only industrial-scale biochar production facility. Today, the company exports its solutions around the world, to Europe and Asia. www.airex-energy.com

About Groupe Rémabec:

Founded in 1988, Groupe Rémabec, a pillar of the Quebec forestry industry, is an integrated company engaged in the operations, processing and sale of wood products, as well as the production of green energy. As the largest private forestry contractor and one of the largest sawmill operators in Quebec, Groupe Rémabec is proud to provide direct, high-quality employment to nearly 2,000 people. With a strong presence in three forest regions of Quebec, Groupe Rémabec operates seven mills through its Arbec Lumber division, which specialises in sawing, planing and finger-jointing softwood lumber. With three other hardwood processing plants and a plant in the green energy sector, Groupe Rémabec has a total of eleven plants. It is owned by two groups of shareholders: the founders and the current management team, and Arbec Forest Products Inc., one of the leading players in Quebec's forestry industry specialising in OSB panels.

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