Production record for the Port-Cartier pyrolytic oil plant

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Large silos contain millions of liters of pyrolytic oil produced at the AE Bioenergy plant in Port-Cartier. PHOTO: RADIO-CANADA / RENAUD CHICOINE-MCKENZIE

After a difficult start, the Port-Cartier Bio-Énergie AE pyrolytic oil plant has found its way. This year, the company plans to reach a new record by producing 25 million liters, while up to 2022, it produced approximately three million liters. In 2017, the company, which is owned by Rémabec, was placed under the Companies' Creditors Arrangement Act.

However, the tide has turned, according to the deputy director of the AE Bioenergy plant, Jérémy Fortin, who estimates that the plant will reach its full potential of 40 million liters annually in 2025.

It may seem like a lot of renewable fuel product, but for a fuel oil consumer, including several large companies situated on the North Shore, it represents a small amount of their total demand, explains Jérémy Fortin.



The deputy director of the AE Bioenergy plant, Jérémy Fortin, believes that 25 million liters of pyrolytic oil will be produced this year in Port-Cartier. PHOTO: RADIO-CANADA / RENAUD CHICOINE-MCKENZIE

Mr. Fortin also believes that the BioÉnergie AE pyrolytic oil plant should not have too much difficulty selling its production. The ArcelorMittal pellet plant already buys 16 million liters annually, according to the forest engineer.

During the time ArcelorMittal was continually increasing its demand for biofuel, the bioenergy plant was not operating at maximum capacity, and was therefore able to keep pace wth the growing demand . In addition to the anchor customer, there are many other interested customers knocking on our door , says Mr. Fortin.

A step towards the energy transition

For Évelyne Thiffault, professor in the department of wood and forest sciences at Laval University, pyrolytic oil is one of the solutions for the energy transition.



To produce pyrolytic oil with a low environmental footprint, forest biomass must come from sustainable forest management, according to Évelyne Thiffault. PHOTO: RADIO-CANADA / FÉLIX DUCHESNE

"Is pyrolytic oil completely zero environmental footprint? Probably not, but it's certainly much better than fossil fuel oil or the coal supply chain."

A quote fromÉvelyne Thiffault, professor in the department of wood and forest sciences at Laval University

Pyrolytic oil is used to replace energy products of fossil fuel origin, so biomass products, such as pyrolytic oil, represents an effective solution. On the other hand, it is important that the forest biomass feed material should come from sustainable forest management, and which is the case at the Bio-Énergie AE plant, affirms Ms. Thiffault



Outside the AE Bioenergy plant, mountains of wood waste are piled up. They will be ground and dried before being transformed into pyrolytic oil. PHOTO: RADIO-CANADA / RENAUD CHICOINE-MCKENZIE

The green biomass fuel for the pyrolytic oil plant is wood residue from its neighbor, the Arbec sawmill, which also belongs to Rémabec.

Pyrolytic oil is a fuel that can be made from wood residue of all kinds. Its production allows the industry to adapt to new market realities.

Several years ago, our owners recognized that the pulp and paper industry was in decline rather than a growth industry. We see that the future lies in renewable energy and new technologies rather than in sawn timber alone , explains Jérémy Fortin.



Inside Bioenergy AE's pyrolytic oil plant, wood residue is heated to an extremely high temperature to make a fuel. PHOTO: RADIO-CANADA / RENAUD CHICOINE-MCKENZIE

Évelyne Thiffault maintains that the pyrolytic oil from the Bio-Énergie AE plant is even greener because the full manufacturing and logistical circuit is relatively compact.

There is forest development taking place in the region, there is the factory itself, and there are industrial users practically in their backyard, so there is not a lot of transportation involved in the creation and delivery of the pyrolytic oil, she concludes.

(translated to English from the original article in French)

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