



LOW CARBON FUELS FROM FOREST RESIDUES

AE Côte Nord Bioenergy, a partnership between an Ensyn affiliate and Arbec, a major eastern Canada forestry company, is building the world's first commercial facility using technology designed specifically for the conversion of forest residues to liquid biocrude for energy applications.

- Ensyn's Rapid Thermal Processing, or RTP® technology, is the global leader in the thermal conversion of biomass residues to liquid biocrude
- historical production using RTP® has focused on food ingredients and speciality chemicals
- RTP® technology is a fast thermal conversion process using moderate temperatures without the need for catalysts, hydrogen or significant pressure
- the technology is expected to be highly replicable



UTILIZING CANADA'S FORESTS: RESULTS EXPECTED



INNOVATING WITH WOOD

- a world first RTP® facility that converts slash and other forest residues to higher value biocrude for energy applications
- a repeatable, scalable model with potential impact across the forest industry in Canada
- low complexity, high processing speed and high product yields leads to low capital and operating costs

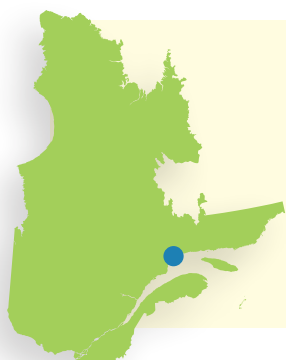
POTENTIAL OPPORTUNITIES

ENVIRONMENT: LESS NEED FOR OIL AND GAS BY USING RENEWABLE FEEDSTOCKS

MARKET: BIOCRUDE PRODUCT TO BE SOLD FOR HEATING AND AS A REFINERY FEEDSTOCK IN THE U.S. AND QUEBEC

ENVIRONMENT: REDUCTION IN LIFE-CYCLE GHG EMISSIONS OF BETWEEN 70-90% AND VIRTUALLY SULPHUR-FREE

ENSYN'S RTP® HEATING FUELS HAVE BEEN SUCCESSFULLY DEMONSTRATED ON A COMMERCIAL SCALE IN A QUEBEC MINING OPERATION AND SHOWED IT IS POSSIBLE TO REPLACE APPROXIMATELY 20% OF THE HEAVY FUEL OIL NEEDED TO OPERATE THE PLANT.



AE CÔTE-NORD CANADA BIOENERGY IS A PARTNERSHIP BETWEEN ENSYN, OWNER OF THE RTP® TECHNOLOGY AND ARBEC, A MAJOR EASTERN CANADA FORESTRY COMPANY

PROJECT LOCATION: PORT CARTIER, QUÉBEC

The RTP technology and process has the potential to significantly impact local economies in forest-dependent communities by converting low-value residues and converting them to a higher-value biocrude that replaces fossil fuels.

— Serge Mercier, President
AE Côte-Nord Canada Bioenergy Inc.

Investments in Forest Transformation Program: In 2010, Natural Resources Canada's Canadian Forest Service created the Investments in Forest Industry Transformation Program (IFIT) to support Canadian companies to develop and grow markets for new and innovative high-value products using Canada's forest resources. *For more information www.nrcan.gc.ca/forests/federal-programs/13139*

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