



GREEN ENERGY FROM WASTE

Alberta Pacific Forest Industries created an opportunity to be the first pulp mill in the world to produce commercial grade purified bio-methanol from its waste stream for use in operations and external sale.

- the Canadian-developed process for extracting and purifying bio-methanol will be performed using the novel distillation technology
- the process requires no additional wood fibre and runs simultaneously to the pulping process



UTILIZING CANADA'S FORESTS: RESULTS EXPECTED



BIO-METHANOL



ON-SITE PRODUCTION FOR PULP WHITENING OPERATIONS

EXTERNAL USES IN SOLVENTS, ANTIFREEZE, OR FUEL

INNOVATING WITH WOOD

- the waste stream goes to a condenser to remove some non-condensable gases and next to a decanter which removes some organic compounds
- it then passes through two distillation columns: the first column removes low boiling chemicals and the second removes high boiling chemicals

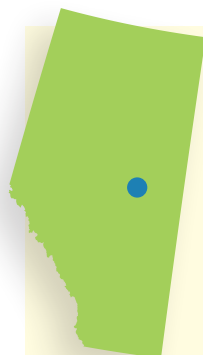
POTENTIAL OPPORTUNITIES

ECONOMIC: STABILITY AND PROFITABILITY OF THE MILL IMPROVED WITH ADDITION OF SECONDARY PRODUCT

ENVIRONMENT: REPLACES FOSSIL-FUEL DERIVED METHANOL

COMMUNITY: LONG-TERM SUSTAINABILITY AND MAINTENANCE OF DIRECT AND INDIRECT EMPLOYMENT

ENVIRONMENT: ELIMINATES ENERGY CONSUMPTION ASSOCIATED WITH TRANSPORTATION OF METHANOL TO SITE



ALBERTA PACIFIC FOREST INDUSTRIES PRODUCES BOTH HARDWOOD AND SOFTWOOD PULP IN NORTH AMERICA'S LARGEST SINGLE-LINE BLEACHED KRAFT MILL

PROJECT LOCATION: BOYLE, ALBERTA

The bio-methanol extraction and purification technology can be repeated in many Canadian kraft mills and the bio-methanol could serve as a chemical additive for the production of numerous new "green" products from the Canadian forest products industry.

— Glenn Mason, Assistant Deputy Minister
Canadian Forest Service

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.nrncan.gc.ca/forests/federal-programs/13139*

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