



ETHANOL FROM WOOD BIOMASS

Woodland Biofuels Inc. is optimizing a world-first Catalyzed Pressure Reduction (CPR™) technology at its Sarnia, Ontario, demonstration plant to make cellulosic ethanol and other fuels and chemicals from wood biomass.

- This world-first demonstration of the CPR™ technology details a unique high-yield thermo-chemical conversion process.
- The new technology allows any kind of biomass, including wood waste from the construction and demolition industry, to be converted into cellulosic ethanol and other high-value products.
- Cellulosic ethanol is a biofuel produced from cellulose, the stringy fiber of a plant, rather than from the plant's seeds or fruit.
- Operating the demonstration plant with multiple types of forestry waste will help optimize plant performance based on the type of waste used to demonstrate the process and simulate commercial production.
- Once successfully simulated, the first commercial wood-to-ethanol facility that uses this novel process can be built.

UTILIZING CANADA'S FORESTS: RESULTS EXPECTED



INNOVATING WITH WOOD

This demonstration project will lay the groundwork for the world's first commercial plant deploying the innovative CPR™ technology:

- highly replicable technology across the industry
- potential to convert over 190,000 metric tonnes of bone-dry wood waste per year into over 75 million litres of ethanol
- potential for Canada to become a major producer of biofuel on the world stage

POTENTIAL OPPORTUNITIES

ENVIRONMENTAL: USING CELLULOSIC ETHANOL TO IMPROVE THE ENVIRONMENTAL FOOTPRINT OF TRANSPORTATION OPTIONS CURRENTLY BASED ON FOSSIL FUELS AND HELPING THE SHIFT TOWARD RENEWABLE FUEL

MARKET: MEETING THE NEED FOR DOMESTIC PRODUCTION OF ETHANOL BY DEMONSTRATING A NEW CELLULOSIC ETHANOL PRODUCTION TECHNOLOGY AND PROVIDING AN ALTERNATIVE TO FOOD-BASED ETHANOL MADE FROM CORN OR SOY

COMMUNITY: PROVIDING TRAINING FOR 12 NEW OPERATORS AT THE DEMONSTRATION PLANT AND POTENTIALLY CREATING HUNDREDS OF FULL-TIME JOBS AND THOUSANDS OF PART-TIME AND INDIRECT EMPLOYMENT JOBS WHEN OPERATIONS BECOME COMMERCIAL-SCALE

SUSTAINABILITY: CREATING WEALTH FROM FOREST WASTE THAT WOULD OTHERWISE GO TO A LANDFILL WHILE ALSO USING EXISTING FOREST INDUSTRY INFRASTRUCTURE



WOODLAND BIOFUELS INC. IS A GLOBAL LEADER IN THE MOVE TO SUSTAINABLE, RENEWABLE, CLEAN FUEL.

PROJECT LOCATION: SARNIA, ONTARIO

This demonstration project will open the doors to the commercial deployment of full-scale CPR™ plants that promise attractive economic returns and significant environmental benefits compared to fossil fuel and corn ethanol.

— Greg Nuttall, President and CEO
Woodland Biofuels Inc.

Investments in Forest Industry Transformation Program: In 2010, Natural Resources Canada's Canadian Forest Service created the Investments in Forest Industry Transformation (IFIT) Program 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*

Cat. No. Fo4-108/2017E-PDF (Online) ISBN 978-0-660-08369-8

Aussi disponible en français sous le titre : Produire de l'éthanol au moyen de la biomasse forestière.

For information regarding reproduction rights, contact Natural Resources Canada at nrcan.copyrightdroitdauteur.nrcan@canada.ca.

© Her Majesty the Queen in Right of Canada, as represented by the Minister of Natural Resources, 2017

