

Louisiana Pacific Corporation East River Mill

2005 Case Study

This mill employing 350, is a major producer of residential and commercial hardboard siding. The plant normally operates 24 hours per day, seven days per week. The company decided to proceed with an Opportunity Assessment in the spring of 2004 and based on the results, undertook an Implementation Plan/Feasibility Assessment. The Opportunity Assessment was conducted by HMJ Consulting Limited and the Feasibility Assessment was completed by Neill & Gunter (Nova Scotia) Ltd.



The company strives to be environmentally responsible and has an extensive environmental policy statement which states: “We believe that sound business practices and efforts to enhance the environment are compatible.” It goes on to assert that the company strives to “manage natural resources in a responsible and sustainable manner” and “meet or surpass the requirements of environmental laws and regulations and to improve the environment.” Prior to the assessments, the company had successfully implemented a composting operation which converts plant wastes to a saleable compost product and wood waste was being used as a fuel to produce steam. The company has a full time environmental manager, further demonstrating its commitment to the environment.

The Process

Round hardwood logs arrive by truck, and are stored on site. They enter the process and are converted to a pulp which is then formed into hardboard with various textured finishes and cured. Finally the product is painted and dried prior to wrapping and shipment by truck.

The Assessment

The opportunity assessment focused primarily on the various waste streams from the plant including wood and product waste, wastewater and sludge. It also identified potential savings opportunities relating to building energy, electric motor efficiency and waste heat. The Feasibility Assessment evaluated several scenarios for utilizing the various wood waste streams that were being sent to landfill.

The assessment concluded that all of the options studied are technically and economically feasible, but the preferred option is converting one of the three boilers from oil to dual fuel, permitting the utilization of



all wood waste as a fuel. This change will displace heavy fuel oil consumption and eliminate disposing waste wood in the landfill.

Study Results

The following reductions and savings are expected from utilizing current wood waste streams as a fuel:

Potential heavy fuel oil savings	53611 GJ/yr	\$308000/yr
Reduce GHG emitted	3893 Tonnes/yr	
Reduced waste to landfill	3090 Tonnes	\$84000/yr

Payback periods for the three projects recommended were calculated at 2.8 years.

The Eco-Efficiency Program for Manufacturers is working for Louisiana Pacific. It is demonstrating that there are significant opportunities for improving environmental performance and at the same time improving the bottom line for the company.

The Eco-Efficiency Program for Manufacturers is aimed at small and medium sized manufacturers (SMEs) in Nova Scotia and is designed to increase awareness for pollution prevention and eco-efficiency and to stimulate implementation of cost-efficient opportunities. The cost of hiring a qualified consultant to identify eco-efficiency and pollution prevention opportunities is offset by the program. There is a cost shared arrangement with the program contributing 75% and the participating company contributing the 25% balance. The program is also intended to help build capacity in the consulting community throughout the province.

Cooperating agencies and program sponsors for the program have been Environment Canada (Atlantic Region), Atlantic Canada Opportunities Agency, Natural Resources Canada, Nova Scotia Department of Environment, Nova Scotia Economic Development, Nova Scotia Department of Energy and Nova Scotia Power Inc. The program is delivered by Dalhousie University's Eco-Efficiency Centre - a university - based extension service established to enhance the efficiency of individual businesses while encouraging the cooperative and collective efforts of groups of companies.

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