

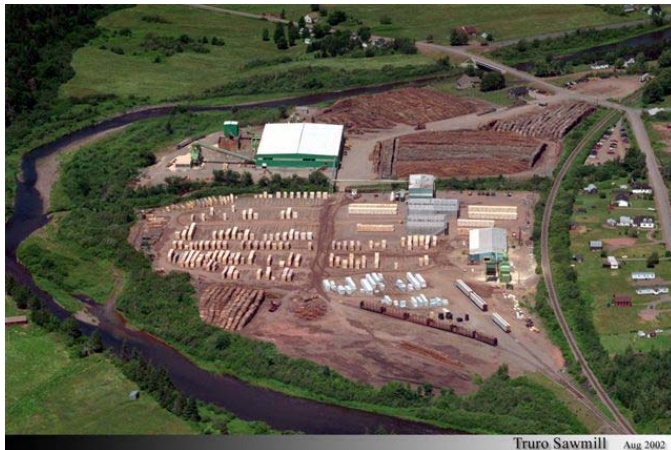
## **Sproule Lumber JDI Limited**

Truro, Nova Scotia, Canada

## **2005 Case Study**

This modern, high capacity lumber mill employing 170, is a major producer of lumber in the province. The sawmill and planer mill normally operates 20 hours per day (2 shifts), five days per week and the boiler plant operates 24 hours per day 7 days per week. The company decided to proceed with an Opportunity Assessment under the Eco-Efficiency Program for Manufacturers in the spring of 2004, and based on the results, undertook an Implementation Plan/Feasibility Assessment. The assessments were conducted by HMJ Consulting Limited in association with Lewis Engineering Inc.

The company strives to be environmentally responsible and has an extensive, progressive environmental policy statement which states: "We will strive to prevent pollution." and "We will meet or exceed relevant environmental legislation and regulations." The policy also indicates that the company is committed to sustainable forest management and will act in the best interests of the people and communities in which it works. Prior to the assessments, the company was selling or using all of its wood waste and recycling waste oil for fuel to meet excess steam requirements.



Truro Sawmill Aug 2002

### **The Process**

Round logs arrive by truck, and are stored on site. They are then debarked, milled into dimensional lumber. Sawn lumber is sorted by species, stacked and kiln dried. Finally the lumber is planned to finished size and wrapped in preparation for shipment by truck or rail.

### **The Assessment**

The assessment focused primarily on energy issues including cogeneration, fuel substitution, boiler efficiency and usage of electrical energy. All wood waste is being utilized on site or sold externally and water is not consumed in the process, but is used to generate steam (and make up water) and for domestic purposes.

Although cogeneration offers the potential for significant reductions in GHG emissions, it did not appear feasible under current circumstances. The assessment concluded that the following projects are technically and economically viable:

- install an economizer on the wood fired boiler,
- install a soot blower on the oil fired unit and
- upgrade boiler controls to improve the utilization of the wood fired unit

## Assessment Results

The following improvements are attributable to the three recommended projects:

Potential energy savings	9833 GJ/yr
Reduce GHG emitted	860 Tonnes/yr

Payback periods for the three recommended projects ranged from 1.5 to just over 4 years.

The Eco-Efficiency Program for Manufacturers is working for Sproule Lumber JDI Limited. The program is demonstrating that there are significant opportunities for improving environmental performance and improving the bottom line.

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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