

Missed opportunities

Larry Hughes

MacEachen Institute, Dalhousie University

5 February 2020

One of the undiscussed outcomes of the Northern Pulp mill closure will be an estimated decline of approximately 67 kilotonnes of greenhouse gas emissions. This is about 0.4% of Nova Scotia's total 2017 emissions. Since the mill generated most of its electricity onsite, the impact on Nova Scotia Power's emissions is likely to be minor.

The province is now left with several thousand forestry workers out of work and between 600,000 and 1 million tonnes of wood "waste" to be dealt with. A variety of proposals have been put forward, many of which involve shipping the wood to New Brunswick to add value to it.

Another possibility is to convert the wood into chips or pellets for energy production, including district heating in Europe. Given Nova Scotia's predilection for exporting its energy resources, there's no reason to think this wouldn't happen.

What if, rather than being exported to help Europe meet its renewable energy and emissions targets, the chips or pellets were used in Nova Scotia to meet some of our energy needs?

Based on conservative estimates, the energy content of the 600,000 to 1 million tonnes of wood after drying is about 4.5 to 7.5 petajoules (PJ). To put things in perspective, the province used 23.8 PJ of heating oil and natural gas in 2017 for space and water heating in the built environment (residential, commercial, and institutional buildings).

In other words, there is enough energy in the wood to meet between 19% and 31% of the province's space and water heating demand presently met by oil and natural gas. (These values would vary, depending on the efficiency of the oil and natural gas furnaces being replaced and the efficiency of the wood heating technology adopted.)

Could this happen?

In June 2009, I made a similar proposal to the Nova Scotia Utility and Review Board (UARB), arguing for the use of biomass for space heating rather than electricity production in Port Hawkesbury. The proposal was ignored. Had it not been, Nova Scotia could have a number of chip and pellet producers operating to meet some of the built environment's space and water heating demand.

The decision to stop the effluent being pumped into Boat Harbour was the right one; however, the province was ill-prepared for dealing with the aftermath. The province is now in the situation where it has a product that Nova Scotians could benefit from but are unable to do so.

Developing a new provincial energy policy that includes sustainable silviculture for some of our space and water heating needs should be considered for at least three reasons. First, it would mean that some, if not all, of the forestry workers would have employment opportunities, second, Nova Scotians would be less reliant on imports of oil and natural gas, thereby

improving the province's energy security, and third, the province's greenhouse gas emissions could decline by up to 3.3%.

Published as "Wood 'waste' from home heating is a win-win", Halifax Chronicle-Herald, 5 February 2020.