

Locally-Sourced Wood in Kennebec County - A Brief Overview

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Residents of Kennebec County enjoy many benefits from our region's forests. The local economy, recreational opportunities, wildlife habitat, water quality, wood products markets, and quality of life are directly connected to the County's 374,000 acres of woodlands. Most of this forestland is in small parcels of 5-500 acres, and therefore, decisions about our region's forests are made by thousands of individual small land owners.

In Kennebec County, as in many other locations in southern Maine, the processing of "roundwood" - primarily sawlogs, pulpwood, firewood, and chips - and ultimate sale of forest products is often far removed from the harvesting site. In a typical wood harvest in Kennebec County, a small landowner will engage a logger to harvest trees which are transported by a truck driver to a mill. Some of this wood will be processed and sold locally. However many of the products of this industry are shipped elsewhere, across the country and the world. This overview seeks to analyze the current state of the "local wood economy" with the intention of identifying opportunities to promote locally-sourced wood and wood products which are harvested, processed, and sold within a regional wood basket. Specifically we measure:

- **Forest Inventory** → What does the county currently have?
- **Exports/Imports** → How much of the wood harvested within the county is sent outside the county for processing, and how much of it is processed inside the county? How much processed wood is imported into the county?
- **Species/Product** → What are the species harvested in this area, processed in this area?
- **Production Volume/Prices** → What are the relative volumes of different types of products harvested in this area? For which products are prices increasing? Decreasing?

Key Findings:

- **"Locally Sourced Wood"**
 - Compared to other Maine Counties, Kennebec has relatively few wood processing facilities. Most processing facilities are involved in the production of sawlogs.
 - There are no pulp/paper mills within the county itself, though multiple such mills lie within 1 hour's drive.
 - There are no large sawmills within the county. There are multiple sawmills within the region, and multiple log buyers who purchase and export logs to other areas of the state and out of state.
 - There are multiple smaller sawmills and custom mills in the county.
 - There are many local and regional firewood dealers in the county.
 - There is at least one institutional biomass energy boiler in the county, and multiple large biomass energy plants in the region.
 - Small Landowner Harvests:
 - Spruce-fir and hardwood sawlogs typically pass through lumber concentration yards which have contracts with the larger mills in Maine and abroad. In the past, hardwood had been processed at small local mills in Maine; however most of these mills have closed, with businesses absorbed by larger mills and exports. (Burnett, 2013)
 - White pine is typically processed in (relatively) smaller and mid-sized, often family-owned mills within Maine. (Burnett, 2013)

- Local wood harvests are not limited by availability of loggers, mill or transport capacity,
- Not all harvests in Maine and Kennebec County are conducted with an eye towards future forest resources and benefits.
- Generally the largest factor limiting wood harvest is weather and consumer demand for wood products. (Burnett, 2013)
- Wood harvest among small landholders is primarily triggered by financial need. (Burnett, 2013). Other landowners sometimes have a sense they are improving “forest health” or “cleaning up the forest” by harvesting trees.
- **Energy**
 - Forest management, wood harvesting and forest products manufacturing are complex systems that involve both atmospheric carbon uptake (through forest growth and sequestration in solid wood products) and carbon release (directly, through burning of biomass fuels, and indirectly through energy inputs in harvesting, transporting, and manufacturing, as well as decomposition of harvest residues, forest litter, and landfilled wood products).
 - The primary energy utilization and contribution to Greenhouse Gas (GHG) generation from wood processing is the kiln drying process. This has been improved through technological advances, however still remains the largest energy use in the process. (Hubbard, Steven S. & Bowe, Scott A., 2008; PE International, 2012; Puettmann, Maureen E. et al., 2010)
 - Transport to the customer can be a major contribution to GHG and pollution. This consideration favors the location of processing facilities in close proximity to the customer (rather than the wood lot). (PE International, 2012)
 - The majority of energy usage at a lumber mill is electrical or biomass. In New England electrical generation is primarily based on burning natural gas. The other large wood product producing region, the Southeast, generates most of their electricity from coal. Due to the cleaner burning natural gas, lumber mills in the northeast produce fewer indirect emissions than their counterparts in the southeast. (“U.S. Energy Information Administration - EIA - Independent Statistics and Analysis,” 2013)

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