



Maine's Resources, Part 1: The Forest

Maine Mass Timber Event
October 11th, 2018

Introductions

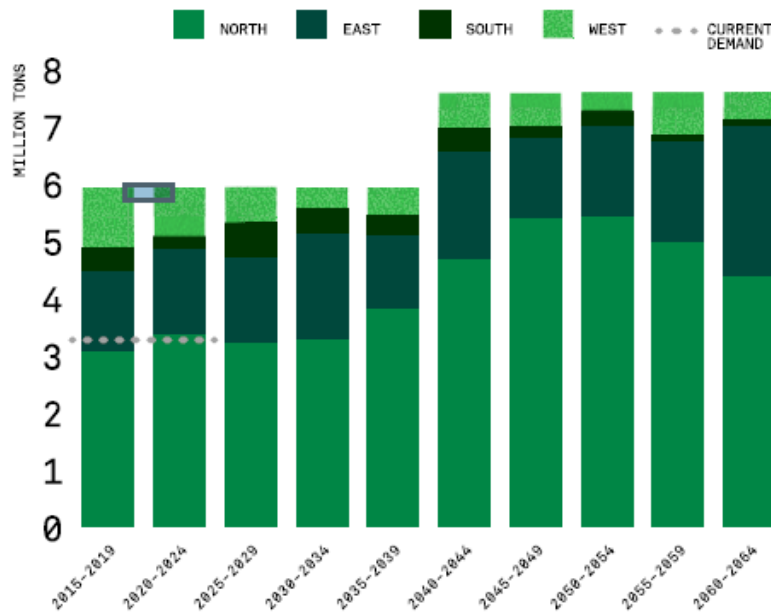
- Alden Robbins, RLCO
- Jason Brochu, PRL
- Ken Laustsen, MFS (ret.)
- Jeff Easterling, NeLMA
- Patrick Strauch, MFPC

Discussion

- What Sort of Species and Products are CLT manufacturers looking for now and in the future?
- Are Maine's Sawmills capable of producing this now and/or willing to make investments to produce it in the future?

Wood Supply

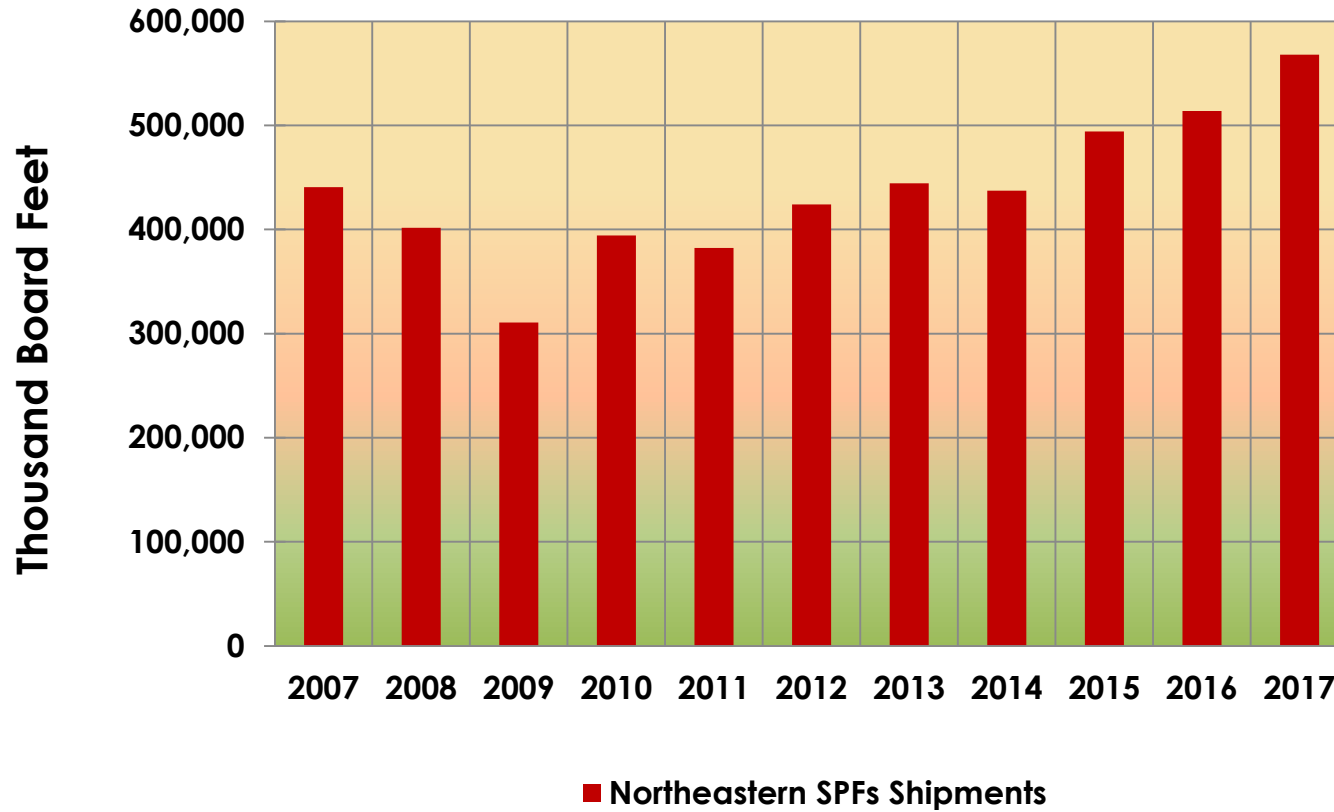
MAINE'S SPRUCE/FIR FUTURE SUSTAINABLE HARVEST AND CURRENT DEMAND



Source: James W. Sewall Company, 2018, Maine Wood Supply and Projections Study

- Highly diverse and sustainably managed
- Moderate to strong resource potential
- Spruce-fir

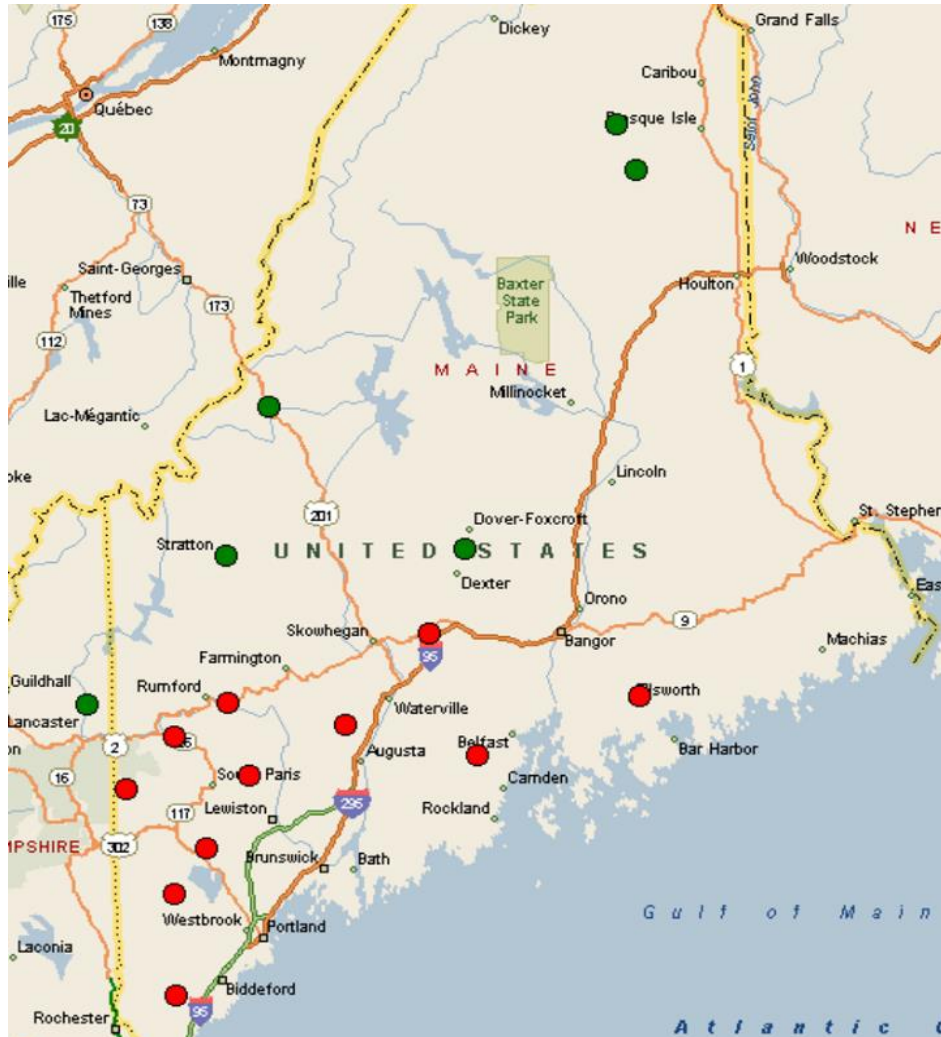
NELMA Mill Shipments of SPFs by Year



Discussion

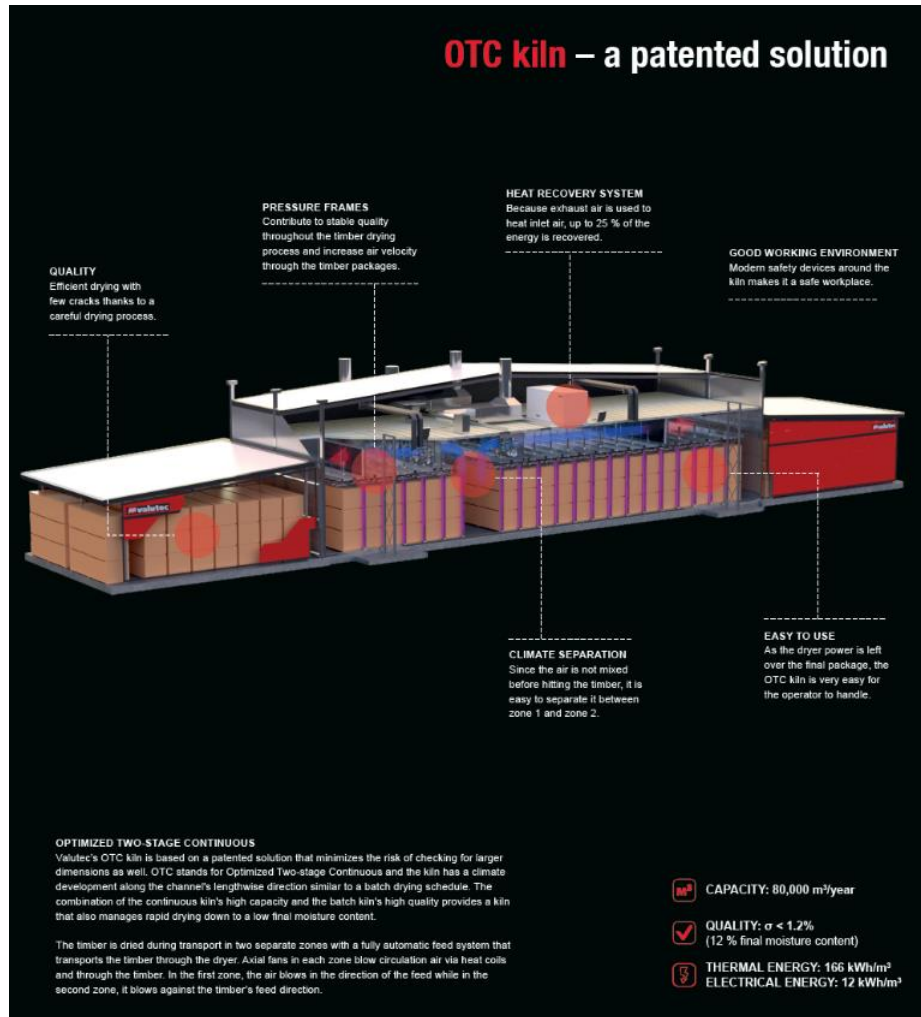
- Where should CLT plants be located, does it make sense to co-locate with a sawmill?

Sawmill Locations in Maine



Valutec Kilns – Pleasant River

OTC kiln – a patented solution



QUALITY
Efficient drying with few cracks thanks to a careful drying process.

PRESSURE FRAMES
Contribute to stable quality throughout the timber drying process and increase air velocity through the timber packages.

HEAT RECOVERY SYSTEM
Because exhaust air is used to heat inlet air, up to 25 % of the energy is recovered.

GOOD WORKING ENVIRONMENT
Modern safety devices around the kiln makes it a safe workplace.

CLIMATE SEPARATION
Since the air is not mixed before hitting the timber, it is easy to separate it between zone 1 and zone 2.

EASY TO USE
As the dryer power is left over the final package, the OTC kiln is very easy for the operator to handle.

OPTIMIZED TWO-STAGE CONTINUOUS
Valutec's OTC kiln is based on a patented solution that minimizes the risk of checking for larger dimensions as well. OTC stands for Optimized Two-stage Continuous and the kiln has a climate development along the chamber's lengthwise direction similar to a batch drying schedule. The combination of the continuous kiln's high capacity and the batch kiln's high quality provides a kiln that also manages rapid drying down to a low final moisture content.

The timber is dried during transport in two separate zones with a fully automatic feed system that transports the timber through the dryer. Axial fans in each zone blow circulation air via heat coils and through the timber. In the first zone, the air blows in the direction of the feed while in the second zone, it blows against the timber's feed direction.

CAPACITY: 80,000 m³/year

QUALITY: $\sigma < 1.2\%$
(12 % final moisture content)

THERMAL ENERGY: 166 kWh/m³
ELECTRICAL ENERGY: 12 kWh/m³

Discussion

- What happens if the spruce budworm comes calling again?

Discussion: Competitiveness

- How can we work together to compete with established players (Europe, Canada)
- What are our Strengths, weaknesses, Opportunities, and Threats?

Closing Discussion

