

New England Regional Council on Forest Engineering

# Economic Trends in the Northeast Forest Industry

March 2019

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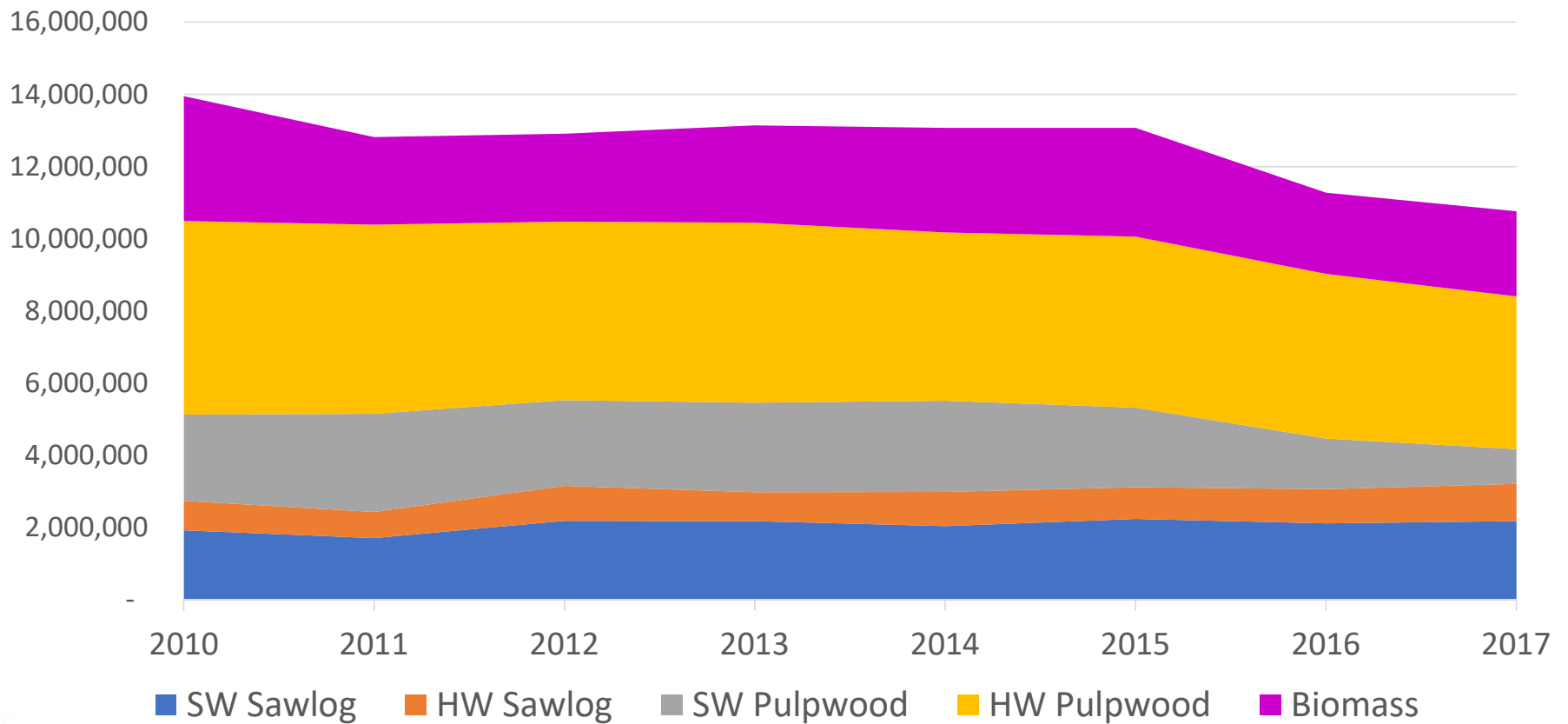


# Innovative Natural Resource Solutions LLC



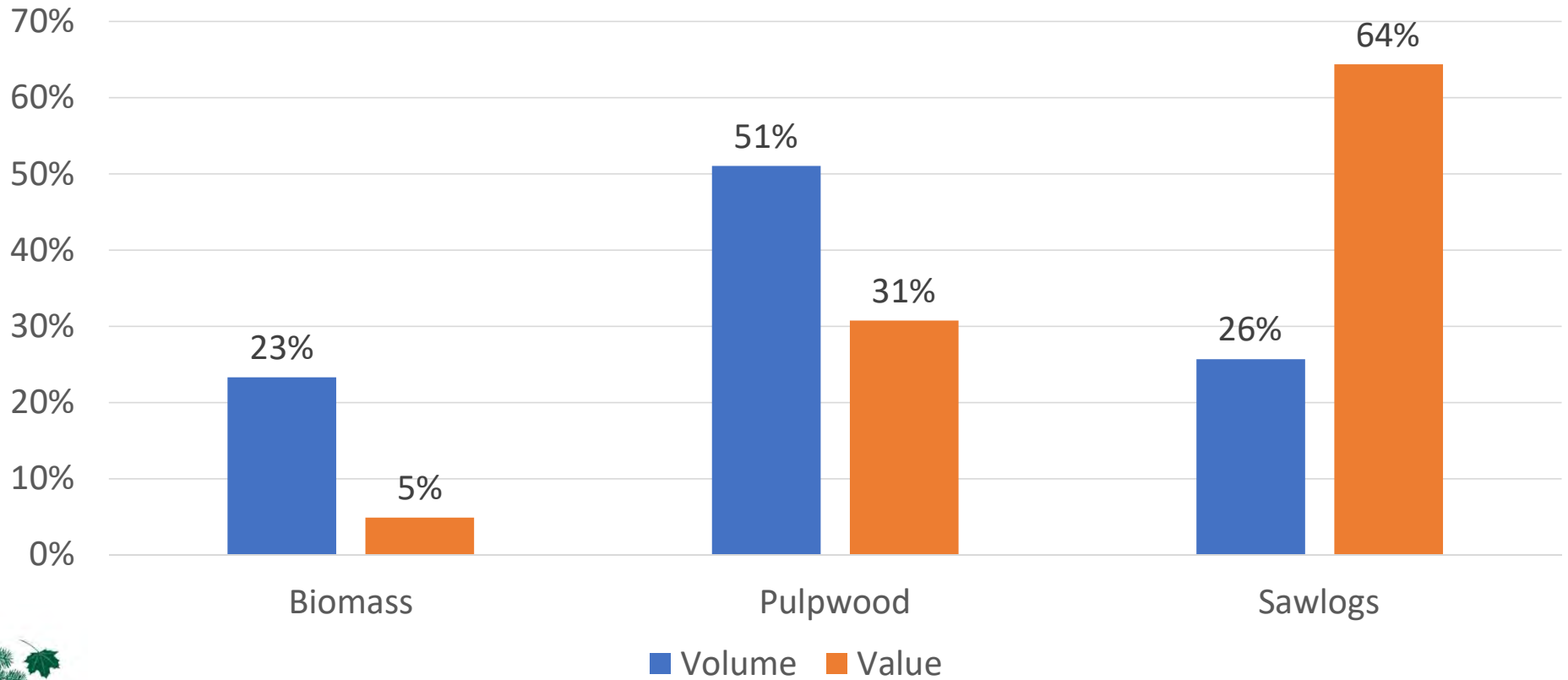
- Founded in 1994
- Offices in New Hampshire and Maine
- Focus at the intersection of forest industry, energy and economic development
- Services include:
  - consulting in renewable energy
  - forest industry consulting
  - advocacy
  - forest certification and sustainability
- Clients from the private, non-profit and government sectors
- Conducted work in all regions of North America
- [www.inrsllc.com](http://www.inrsllc.com)

# Maine Timber Harvest by Product (2010 – 2017)



# Volume and Value to Landowner of Products from a Timber Harvest

## Maine, Statewide, 2014

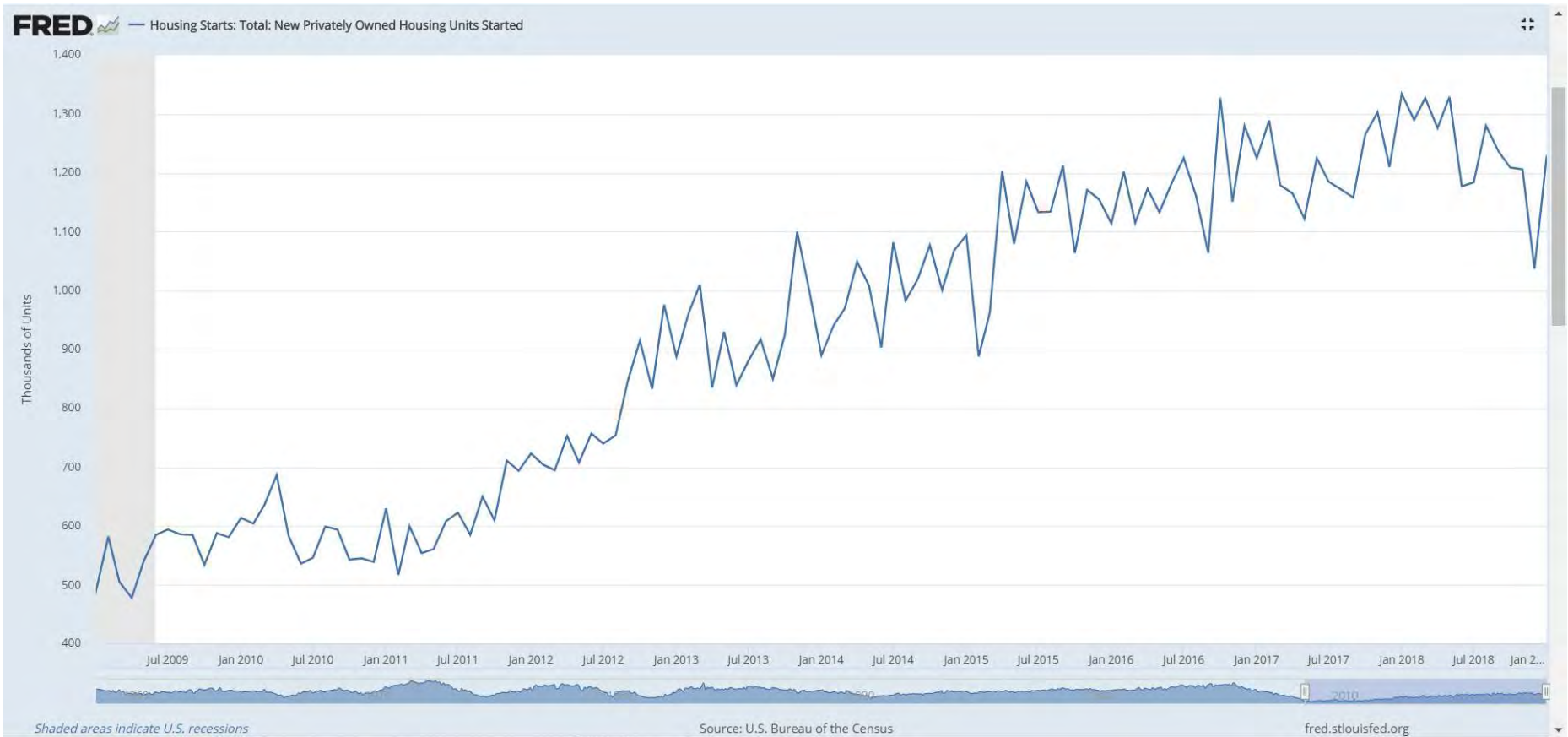




# Housing Starts (past 20 years)



# Housing Starts (past 10 years)





# Lumber Markets – The Bubble Has Passed

## LUMBER PRICE CHART

INTRADAY 1W 3M 1Y 3Y 5Y MAX

LUMBER PRICE CHART OPTIONS ☰



<http://markets.businessinsider.com/commodities/lumber-price>



# A growing issue for (softwood) mills...

- As markets build and production climbs...
- More residue (chips, sawdust, bark) is produced
- Markets for this residue have shrunk, and this is a danger sign for a healthy industry
  - Old Town to relieve some concern re chips
  - **What to do with a half million tons of bark each year?**



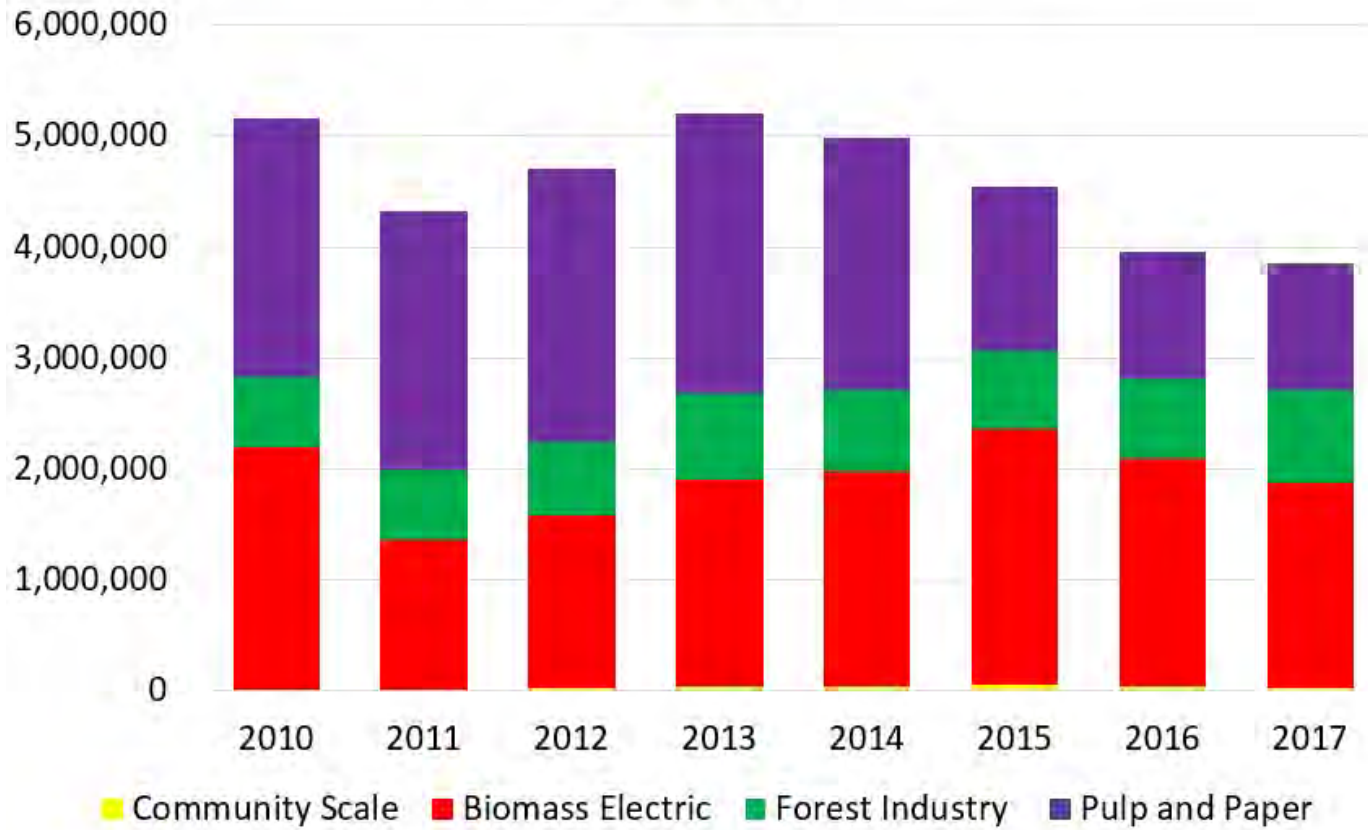
# Cross Laminated Timber





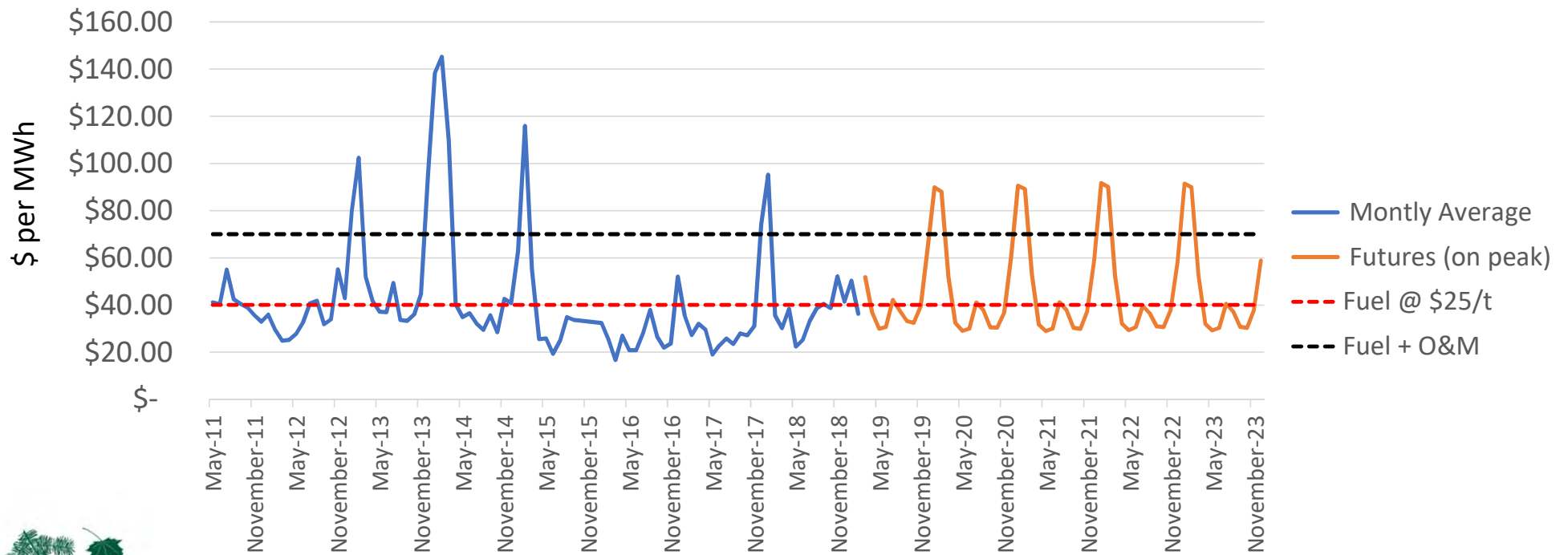


Maine Biomass Fuel Use, 2010 - 2017  
(green tons)



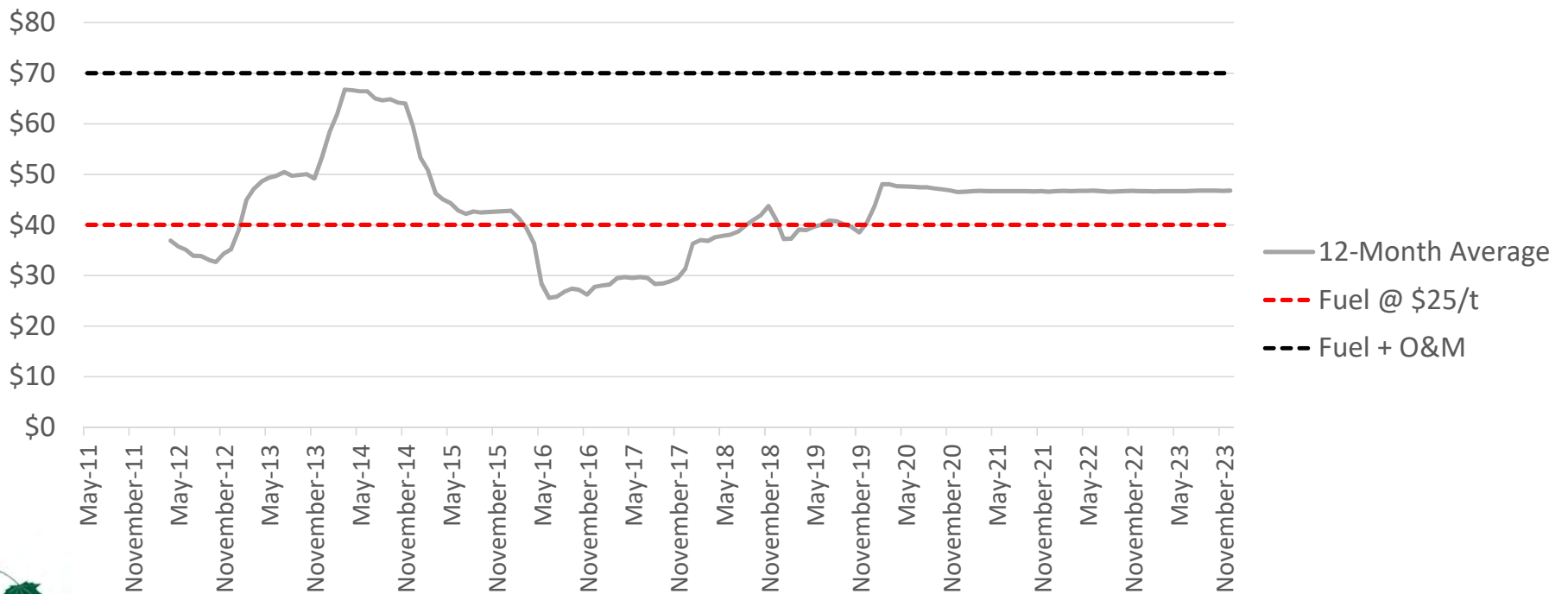
# Maine Wholesale Electricity Prices (and Futures)

Cost of Fuel, Cost of Fuel plus O&M Shown (estimates)



# Maine Wholesale Electricity Prices (Trailing 12 Months)

Cost of Fuel, Cost of Fuel plus O&M Shown (estimates)





## ReEnergy Partners with Biobased Maine with New Co-Location RFP

By [Charlotte Mace](#) | October 18, 2017 | 0



ReEnergy facility in Fort Fairfield, ME

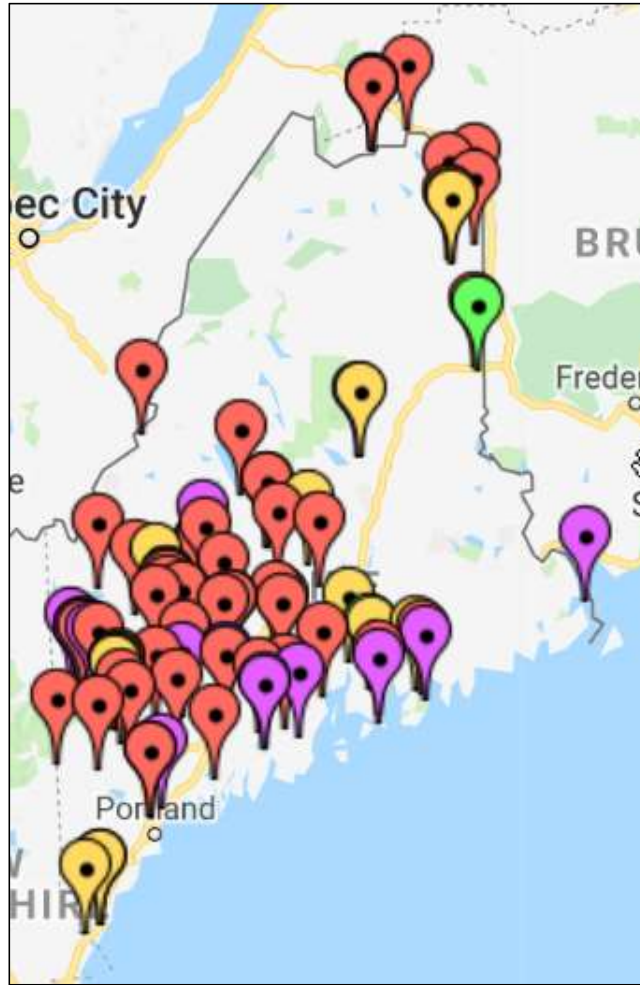
Today, at the National Biomass Energy Day event in Fort Fairfield, Maine, [ReEnergy](#) and Biobased Maine announce a partnership to seek technology for co-location at one or all of ReEnergy's biomass-to-energy facilities in Livermore Falls, Ashland, Stratton, and Fort Fairfield Maine. Biobased Maine will be administering the RFP, which can be accessed here: [ReEnergy RFP](#)






Biobased Maine's role in this partnership is to assist in finding the most viable and commercially relevant technologies to co-locate at ReEnergy's

four Maine facilities and use wood, electricity, and other site-specific assets available there to manufacture new products. Examples of industries which could co-locate with ReEnergy's facilities include biofuels, biobased chemicals, advanced biobased materials, as well as industries such as agriculture, aquaculture, algae, or other technologies that use biomass energy co-products (heat, steam, emissions).



# Modern Wood Heat A Growing Market

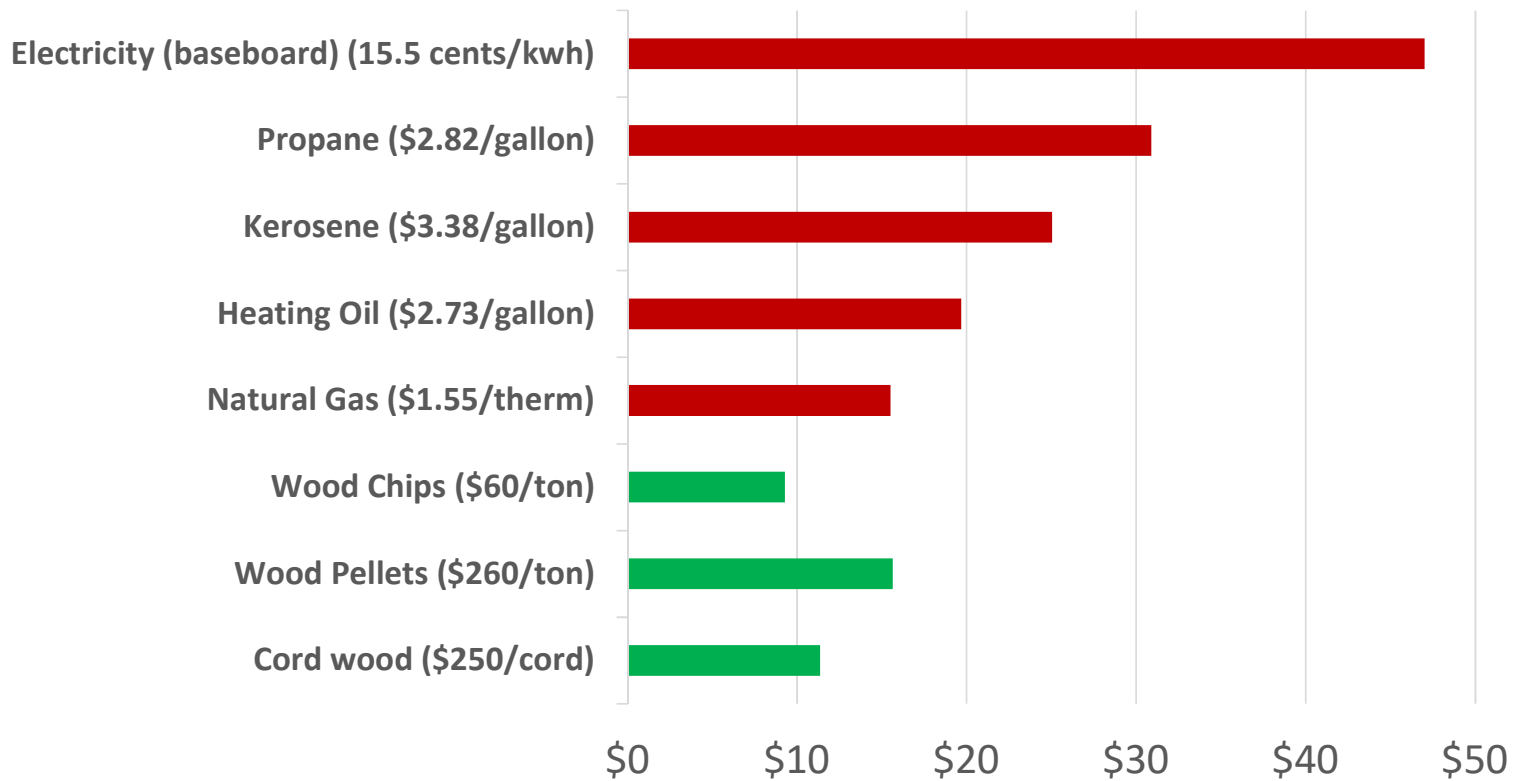


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# Comparing Heating Costs of Different Fuel Types

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## Fuel price (dollars per million Btu)

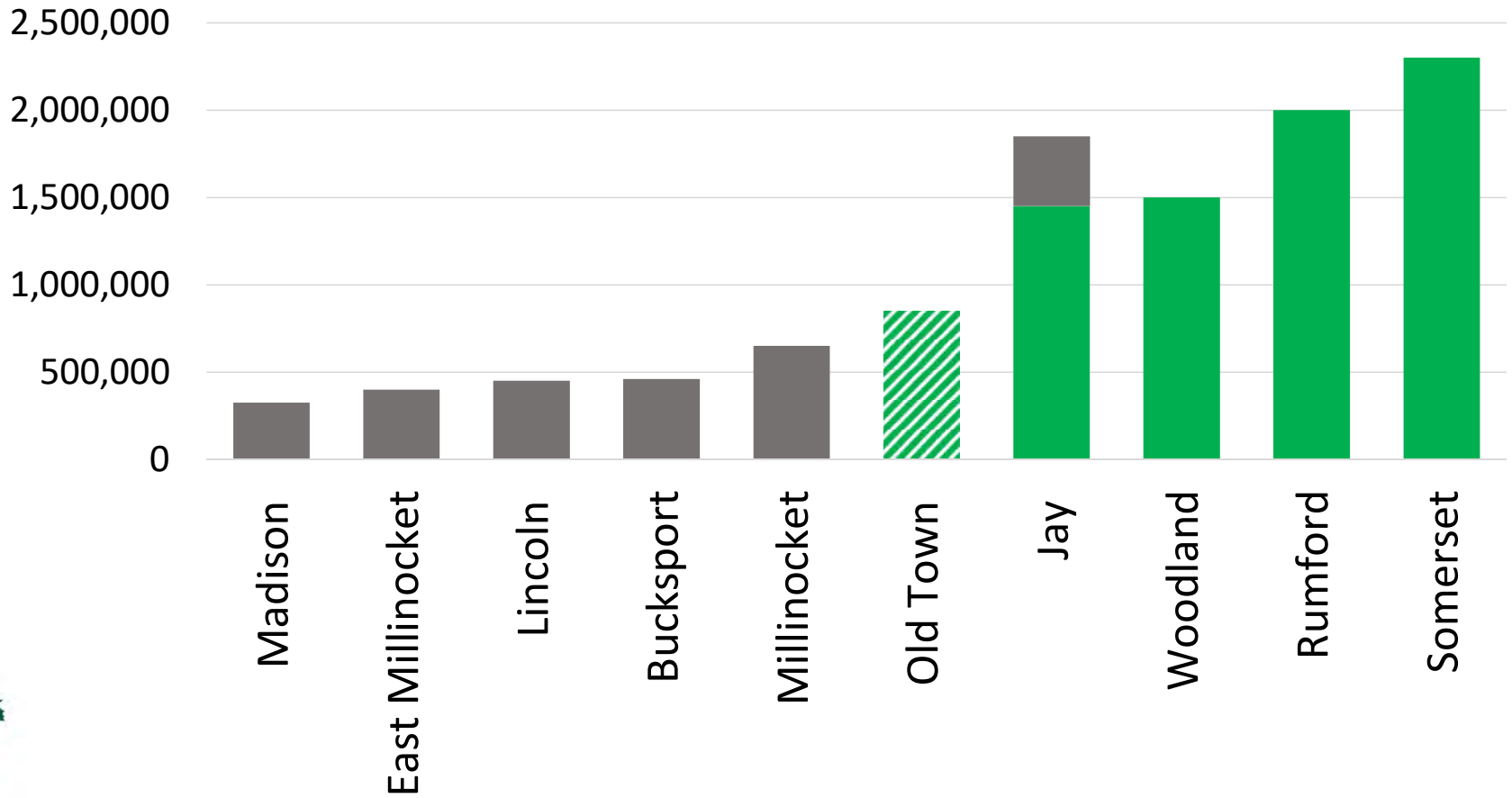


Source: Maine Energy Office



# Maine Pulpwood Consumption by Mill

Green Tons (estimated)



Emails you never expected...

If you like Pulp & Paper  
In print...

you'll love PPI online!





# New Investment at Woodland Pulp



- 2 new tissue machines
- ~\$150 million in new investment
- Used New Markets Tax Credits
- 70 new employees



**FIRST SALEABLE JUMBO ROLL  
MARCH 16**

# SAPPI Announced Investment

- \$165 million rebuild of PM1 at Somerset Mill
- \$25 million in new wood yard (completed)
- Clearly investing in the future of the mill, New England's largest market for low-grade wood

sappi





# ND Paper to Re-Start Old Town Mill



- Major (much needed) softwood market
- Announced 100+ jobs in the mill
- Lots more jobs in the woods and in trucking
- Use of regional chip mills for supply



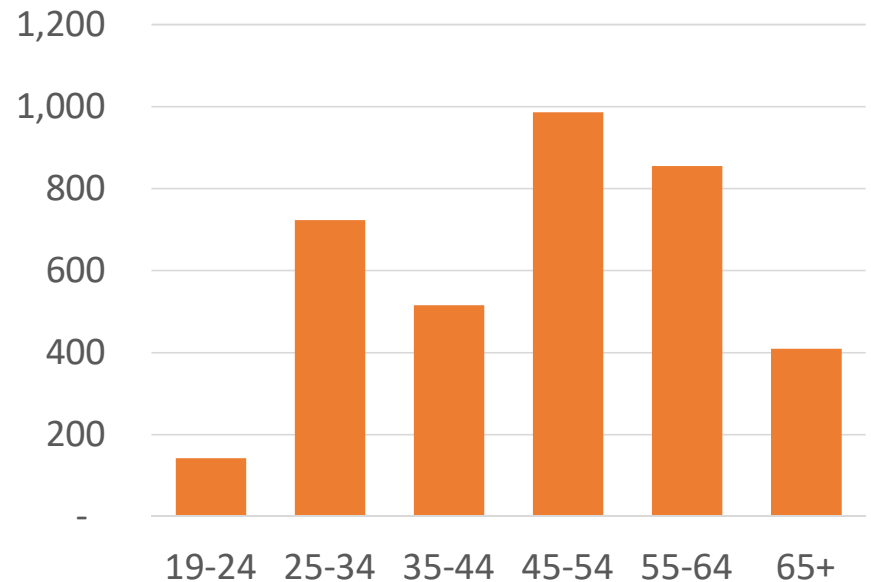
# Emerging Industries

- Maine Technology Institute recently initiated funding for emerging forest industries looking to expand or locate in Maine
  - \$1.5 million in funding (up to)
  - A number of interesting proposals – currently under review
- Companies have been looking at Maine for biofuels, biochemicals, cross-laminated timber, nano-cellulose, wood-based insulation...
- FOR/Maine has been active in identifying – and now recruiting
  - Other (allied) efforts as well

# What Concerns Me...

- Age of Maine's Logging Workforce
- Markets for Biomass / Residues
- Federal Rules for RFS Qualification
- Forest Products Trucking Capacity
  - Quit making trucks wait in line
- Speed (or lack thereof) of innovation / technology adoption in the Industry

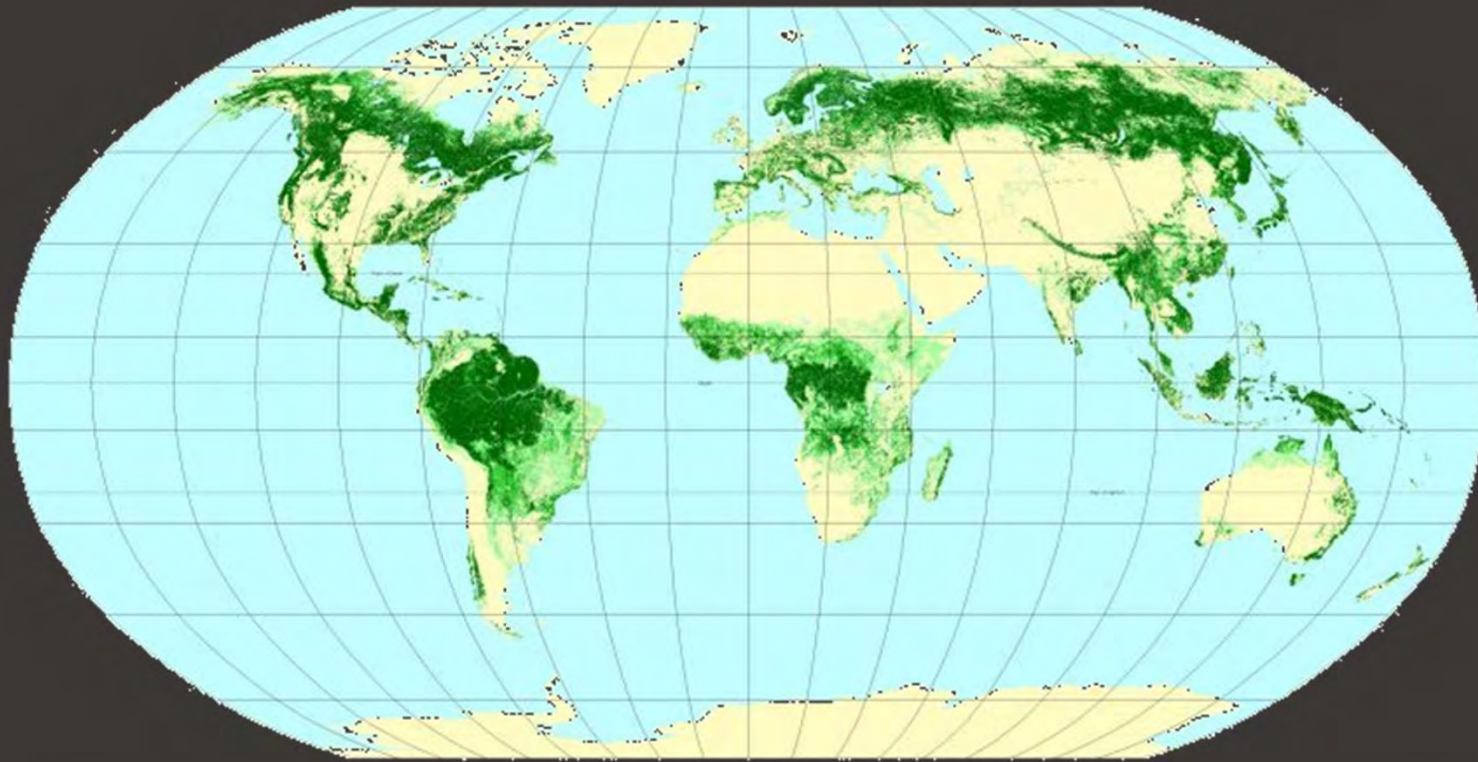
Age Distribution of Maine Loggers



Data Source: Maine Logger and Log Trucker Employment Availability and Wage Analysis Report, 2019



# The Wood



**GLOBAL FOREST RESOURCES ESTIMATION OF 2005**

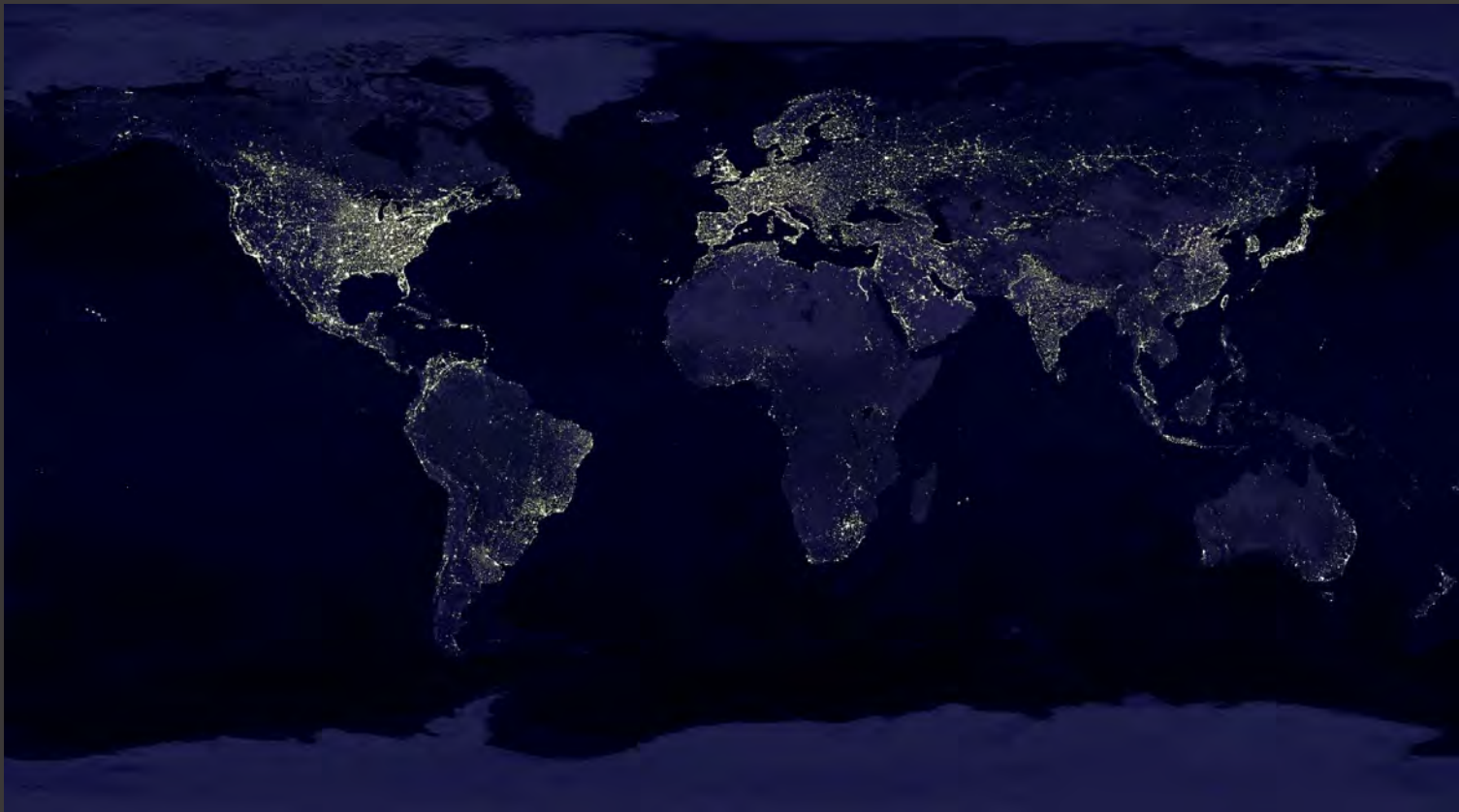
USGS, in partnership with the International Geosphere-Biosphere Programme (IGBP), has produced this global forest resources map. The map shows the distribution of forest resources across the world. The data is based on satellite imagery and ground-based data. The map is available in both print and digital formats. For more information, visit the USGS website at [www.usgs.gov](http://www.usgs.gov).



This map was produced using the Global Forest Resources Estimation (GFRE) system. The GFRE system is a computer-based system that uses satellite imagery and ground-based data to estimate forest resources. The system is available for use by other researchers and organizations. For more information, visit the USGS website at [www.usgs.gov](http://www.usgs.gov).

**Disclaimer:** USGS makes no warranty, expressed or implied, for the use of the information contained in this map. The data were derived from the Global Forest Resources Estimation (GFRE) system. The system is available for use by other researchers and organizations. For more information, visit the USGS website at [www.usgs.gov](http://www.usgs.gov).

# The Markets



# We're Going to Be Fine...

- We have **markets**, and are incredibly well positioned compared to other parts of the country
- We have the **forest resource and supply infrastructure** (landowners, **loggers**, entire forest industry ecosystem) that would make other regions jealous
- We live in close proximity to (and are part of) the **greatest collection of consumers** in the history of the world
- There may **never be a better time** to be develop a project or technology that uses low-grade, particularly softwood



# I would like to add you to my email lists



Send an email to [kingsley@inrslc.com](mailto:kingsley@inrslc.com) to be placed on our monthly email list, which provides information on markets and developments of interest to the region's forestry community. I will also add you to my FRA email list, and you will receive invitations to monthly dinner forums and other regional information.



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