



FOREST2MARKET

Understanding the long-term availability and cost of feedstock is critical to the success of biomass-based projects. Based on its unique and proprietary market data, **Forest2Market** is recognized by project developers and the finance community as the premier provider of project support feedstock analytics. **Forest2Market** has conducted nearly 300 studies to support projects undertaken by wood products, pulp and paper products, wood pellet, biopower, biofuels and biochemical companies.

1
Site Criteria Assessments
An examination of geographic regions to identify favorable sites for project development

2
Market Analysis
An examination of current pricing and/or availability of biomass supply

3
Feedstock Advisement
The development and negotiation of feedstock procurement strategies and contracts

4
Feedstock Supply Validation
Supplier diligence and validation of availability, reliability and market competitiveness of feedstock supply and feedstock agreements

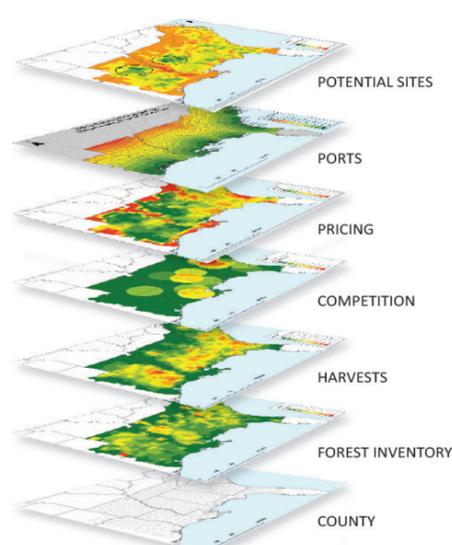
5
Policy-Oriented Studies
Data-driven assessments of forest resources and the market drivers that shape them

6
Feedstock Resource Studies & Forecasts
Characterization of forest resources and assessments of past, present and future availability, sustainability and price of feedstock

7
Supply Chain Optimization
Evaluation of feedstock procurement compared to the market to assure the optimized security and cost of supply

1 Site Criteria Assessments

Using client project criteria combined with our proprietary data and geographical information system (GIS) technology allows for the rapid identification of favorable project areas, thereby saving significant project development time and cost.



2 Market Analysis

- Current and historical feedstock cost by product and species
- Current and historical volume of feedstock by product and species
- Cost curves showing the range of delivered feedstock costs for all volume traded in the basin broken down into stumpage, handling, freight, and commission components
- Identification of current and potential future competitors
- Research to support negotiation or modification of feedstock-related cost provisions in long-term agreements between suppliers and consumers bioenergy producers and utilities, and wood pellet producers and their off-takers
- Development of customized price benchmarks to reflect unique characteristics of certain consumers and/or supply basins

3 Feedstock Advisement

During project finance, Forest2Market provides documentation of factors affecting the availability, sustainability of supply and cost of feedstocks and assists in developing a feedstock portfolio. These reports:

- Explain market drivers and regulatory regimes
- Analyze market supply and demand, current and future production capacity, and balance of available capacity
- Assess trade flows and pricing, regionally and globally
- Identify and evaluate potential suppliers
- Support or engage in the development and negotiation of commercial term sheets and contractual agreements

4 Feedstock Supply Validation

During project finance, validation of the reliability and market competitiveness of feedstock supply agreements is essential to securing project funding. To reassure investors, Forest2Market:

- Performs diligence and provides assessments of the ability of selected suppliers to reliably produce and provide fuel
- Reviews feedstock supply agreements to ensure they are comprehensive and identifies ways to improve and de-risk them and to close all loopholes
- Explains contractual terms and operational provisions of feedstock supply agreements
- Identifies contractual terms aligned to market conditions
- Demonstrates the market advantages afforded by the contract
- Validates remedies available to the purchaser, if supplier defaults
- Develops mitigation strategies for the purchaser to contract for alternative feedstocks, if supplier defaults
- Educates, and responds to questions from, potential investors and lenders

Forest2Market served as the Biomass Fuel Advisor to MGT Teeside Ltd and their syndicate of equity and debt providers during project finance (900ME total funding). Our work involved:

- Analysis of global wood pellet markets and market drivers
- Assessments of current and future global demand, supply, trade flows and cost of wood pellets
- Assessment of Enviva's ability to reliably supply 1 million metric tons of wood pellets per year to the project through 2034
- Validation of market competitiveness of supply agreement contractual terms and balance of risk between counterparties
- Justification of contractual remedies in the event of supplier default and development of mitigation strategies

5 Policy-Oriented Studies

Wood Supply Market Trends in the US South 1995 - 2015 an assessment of wood supply and pricing trends in wood markets in the US South and the role of the emerging export wood pellet sector within those markets for the U.S. Endowment for Forestry and Communities, the National Alliance of Forest Owners (NAFO) and the U.S. Industrial Pellet Association (USIPA). By examining market drivers in play prior to and independent of pellet production, we determined which market trends would have occurred with or without pellets and, for those influenced by pellets, to what extent.



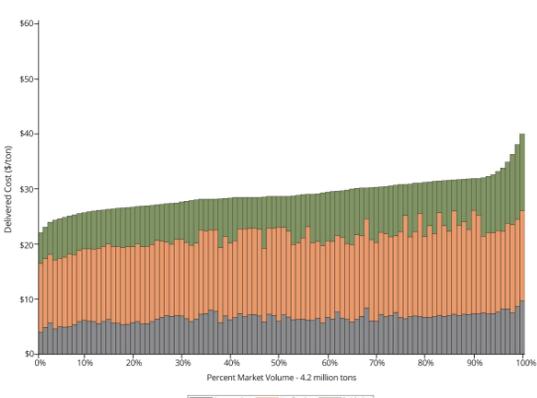
United States Forest Inventory and Harvest Trends on Privately-Owned Timberlands

A study of recent trends in inventories and removals on privately-owned timberlands in forested areas of the contiguous United States to determine whether more wood is growing on U.S. timberlands than is harvested. This first-of-its-kind national report details annual inventory and removal data by product, species and region and summarizes this data at a national level.

6 Feedstock Resource Studies & Forecasts

A deep investigation of discrete supply areas is critical for the project finance stage of acquiring or developing a biomass-consuming asset. Forest2Market's resource studies characterize land ownership, stand types, species and age class distribution of forest resources in particular supply areas. They provide historical, current state and future assessments of wood availability and pricing.

Because Forest2Market knows actual wood fiber sales, how they vary, and all of the components of delivered pricing (stumpage, harvest and transportation), we develop cost curves for all volume traded in a supply area, and these become the basis for our econometric price forecasts. By pairing cost curves with advanced growth and inventory forecast models and projections of changes in demand, we provide 20-year forecasts of sustainability of supply and feedstock price. Our approach is to assess impacts by modeling multiple scenarios, which allows us to determine the most cost effective and sustainable mix of feedstocks. It also allows evaluation of varying levels of demand from the project and from competitors who consume the same feedstocks.



6 These forecasts are used to demonstrate project viability for developers, lenders, investors and other stakeholders. The addition of sensitivity analyses to address changes in variables such as diesel and the consumer price index further demonstrates project viability under stress conditions and allow parties to develop hedging strategies.

7 Supply Chain Optimization

Forest2Market provides feedstock supply chain optimization studies to help operating companies lower their wood costs. These studies have been conducted for pulp and paper companies and pellet producers. In all cases, the studies identified areas of procurement or supply chain management where cost could be reduced and/or security of supply of feedstock increased.