

RFQ: Council of Western State Foresters Wood Energy Market Analysis

BACKGROUND

The Forest Utilization Network is a collaboration of state forestry professionals from across the western US and Pacific Islands. The Council of Western State Foresters (CWSF) established the Network to address a wide scope of forest utilization issues of regional significance. The Network supports sustainable forest management and other forest-based benefits by working with CWSF leadership to maintain and enhance markets for traditional and non-traditional forest products. The Network is responsible for sourcing information to create recommendations for CWSF's consideration and action.

PROJECT OVERVIEW and STATEMENT OF PURPOSE

The Network has been tasked with producing an international wood energy market analysis. The market analysis' primary end user is CWSF (<http://www.westernforesters.org/>). With a clearly defined, positive relationship between forest utilization, forest health, rural communities, wildfire mitigation, and forest-based economies, the analysis will provide CWSF with a picture of current opportunities presented by international wood energy markets; and provide a technical review of technology and infrastructure domestically available to support engagement in these markets.

SCOPE OF WORK

The project's scope of work has two focus areas, **international wood energy markets** and **available technology and domestic production**.

To successfully complete the **international wood energy market component** of the report, the following topics will need to be addressed:

1. Analyze the market demand for wood chips, industrial white wood pellets, and torrefied wood materials for export to Asian markets. Study would:
 - a. Summarize policy trends of different Asian countries relative to biomass and energy production (price on carbon, climate policy implementation).
 - i. Summarize biomass market dynamics of the different countries, specifically spot markets relative to longer-term contractual markets.
 - ii. Clarify market participation requirements (e.g. minimum production, product specifications, certifications, etc.)
 - b. Quantify expected volumes imported and demand into Asian countries (So. Korea and Japan) from 2020 to 2025; information to be provided by country and product (chips, pellets, torrefied products).
 - c. Estimate 'delivered price' over time (i.e. the price for which sellers agree to deliver merchandise to purchasers at designated places and which would usually include the freight on board price at the shipping point plus lawful transportation charges actually incurred in delivery)
 - d. Identify competing products, producers/countries and states, prices, and market threats to export opportunities.
 - e. Describe business-models observed in other U.S. regions that are participating in the international wood energy markets. Using these examples as case studies to identify if the businesses are vertically integrated, cooperatives, manufacture multiple products,

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or fill unique niches. What are the key supply chain components and how are they assembled? What can other U.S. regions learn about successful participation in these markets?

- f. Clarify broad challenges of exporting relative to participation in domestic markets. Describe and compare the main challenges and opportunities of domestic versus international wood energy markets for the western states.

To successfully complete the **available technology and domestic production component** of the report the following topics will need to be addressed:

1. Torrefaction technical review: Describe state of technology maturity, or lack there-of, for wood-based torrefaction in the United States.
 - a. Clarify commercially available technology relative to unproven technology and relative risk as well as cost and production parameters of proven production equipment.
 - i. Include a list of current existing domestic torrefaction plants,
 1. Output, duration of operations, location, and customers, if available.
 - b. Identify equipment and installation costs relative to production capacity and associated input requirements.
 - c. Identify capacity of existing technology to achieve production thresholds reliably and within specification requirements necessary for market participation.
 - d. Identify how inputs affect production, costs, and specification parameters.

Include in the executive summary of the report a reconciliation of the ability for CWSF's geographic region (i.e. the western United States) to engage in this market at scale, based on the market dynamics detailed in component one of the report with the status of available technology and domestic production detailed in component two.

DELIVERABLES

The end-product will be a report fully detailing dynamics impacting importation of woody biomass into Asian wood energy markets, including detail on expected volume demand by product and price through 2025. The report will detail the current state of domestically available technology to manufacture products for these markets, identify existing producers, and quantify current domestic production.

Information may be expressed in text, tables, and graphics to convey material for maximum impact and ease of interpretation. Methodology must be described and all non-proprietary data sources must be provided in footnotes.

Present a summary of the findings at a publicly available webinar to be hosted by the CWFS Forest Utilization Network.

PROJECT TIMELINE

The final product will be submitted as a report no later than March 1, 2021. All work products and deliverables will become the sole property of CWSF.

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BUDGET

A maximum award of \$27,000 is available for completing the project. Furnished equipment including computer and workspace will not be provided by CWSF and is expected to be provided by the selected bidder.

PROPOSAL FORMAT AND TIMELINE

Bids for the contract award of this project will be evaluated by responsiveness to the RFP, inclusivity of CWSF member states and entities (Appendix A), proposed outcomes, and total cost. All bid submissions must include a certification statement that the bidder is not presently suspended or debarred from conducting business with the Federal government.

Bids should be submitted no later than 4:00 p.m. Mountain Time on July 15, 2020 in writing to Kelsey Cruickshank by email or hard copy. Contact details are provided below:

Email: kcruckshank@westernforesters.org

Hard copy (by mail): 2255 Sheridan Blvd., Suite C-327, Edgewater, CO 80214.

The winning bidder will be notified by August 15, 2020. Selected bidder will be required to provide proof of insurance and eligibility to work.

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POINTS OF CONTACT

For questions regarding project scope and deliverables contact:

Marcus Kauffman
Biomass Resource Specialist
Oregon Dept. of Forestry
marcus.kauffman@oregon.gov
541-580-7480 cell

For questions regarding bid process, award and contracting contact:

Kelsey Cruickshank
Associate Communications and Operations Director
Council of Western State Foresters
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720-795-7173

And:

Tom Perry
Montana DNRC
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406-542-4210

Appendix A: CWSF Region, Member States and Entities

