

REQUEST FOR PROPOSAL No. 101716
Environmental Health Strategy Center
Biomass Feedstock Study

1. Summary and Background

Environmental Health Strategy Center, with its project partners the University of Maine and Biobased Maine, has been awarded a federal grant from the U.S. Economic Development Administration for a project entitled, “Diversifying Maine’s Forest-Based Economy: Biobased Manufacturing from Renewable Biomass.” The intent of this project is to create good manufacturing jobs in rural Maine by converting renewable biomass into advanced and sustainable biobased products, biochemicals, bioplastics, and biofuels, for which there is rising global demand.

The 3-year project extends from September 2016 through August 2019 and be administered by Environmental Health Strategy Center. Environmental Health Strategy Center, with headquarters in Portland, Maine is a non-profit organization working for healthy products in a healthy economy.

The purpose of this RFP is to solicit competitive bids for a Biomass Feedstock study consisting of expert analysis, characterization, and costing of available wood fiber in Maine to be used as feedstock for biobased manufacturing. The biomass study will be a critical component of a Road Map to Advance Biobased Manufacturing in Maine, which is a primary deliverable of the federal grant project. The EDA-approved total budget for the Biomass Feedstock Study is \$25,000.

2. Project Scope

As described above, a Biomass Feedstock Study is needed to characterize the different types of wood fiber in Maine that are available as a feedstock for conversion to cellulosic sugars or other biobased building blocks to support the emerging global demand for biobased chemicals, bioplastics, advanced biofuels, and other advanced biobased products.

Up-to-date information on the types of biomass and their costs will be a critical component of the Road Map to Advance Biobased Manufacturing in Maine, which will also serve as an investment prospectus for potential investors. The Road Map will be a tool used to market Maine’s assets to the global biotechnology industry and share with them specific data on Maine’s available biomass, primarily forest biomass.

The Biomass Feedstock Study should consist of the following components:

- A. High-level description of the Maine forest resource, including:
 - a. Land ownership and ownership patterns
 - b. Historic growth and harvest levels

- c. Species composition
 - d. Supply chain (Landowners → Foresters → Loggers → Truckers)
 - e. Existing users of wood
 - f. Current and historic pricing
 - g. Prices and price drivers (current and historic) for hardwood, softwood, and biomass intended for biomass plants (for each, price should be broken down to reflect moisture content, transportation to the mill gate, pre-processing costs, and harvesting/collection costs).
 - h. Identify challenges regarding long-term contracting and characterize the opportunities and barriers to providing long-term supply contracts in the future.
- Please note that item (A), described above, should be a concise summary of information largely available from previous studies done in Maine. The labor associated with item (A) should represent a small percentage of the total project cost.

B. Characterize the generation of available forest residuals by:

- a. Quantity
- b. Geographic distribution (e.g., region)
- c. Suppliers (independent contractors, sawmills, wood processing plants, chip mill, landowners, etc.)
- d. Characteristics (sawdust, chips, bark, pins/fines, species composition, hardwood vs. softwood, etc.)
- e. Price (price should be broken down to reflect moisture content, transportation to the mill gate, pre-processing costs, and harvesting/collection costs)
- f. Current markets for residuals, broken by region and/or wood basket

The primary focus should be on the “idle” wood fiber available in Maine currently that lacks existing markets. This is the fiber that will be most cost-effective to use as feedstock for new biobased manufacturing, not fiber that is already being utilized in pulp and paper mills, for example. It is important to reference the cost of fiber headed to pulp and paper mills in this study as a reference point only, but the bulk of the analysis should focus on fiber that currently lacks markets.

C. Develop forward-looking projections/estimates of cost and availability of wood fiber available now and over the next 10 years that can be used as feedstock for Maine’s emerging biobased manufacturing industry.

D. Based on existing publicly available information (primarily the “Coming Spruce Budworm Outbreak” Report produced in March 2016 by the University of Maine’s Cooperative Forestry Research Unit, Maine Forest Products Council, and Maine Forest Service), comment on the effect that spruce budworm will have on the quantity, characteristics, and price of forest residuals and provide an estimate for the time frame when the spruce

will be available for use as a feedstock. The professional labor for item (D) should not exceed 4 hours.

- E. A general discussion of how Maine's wood fiber costs compare with other forested states (e.g., Georgia, Minnesota, Oregon, Washington).

The scope elements outlined above include some information that has already been collected and is available to the public from previous studies. The winning proposal will show that the bidder has a comprehensive understanding of other studies done to date, and will be able to leverage this existing, publicly available information to improve the overall quality of the deliverable for this biomass study.

3. Project Timeline

All proposals in response to this RFP are due no later than 5 pm EST on January 13, 2017. Evaluation of proposals will likely be conducted until January 27, 2017. If additional information or discussions are needed with any bidders during this time, the bidder(s) will be notified using the contact information provided in the bid.

The selection decision for the winning bidder will likely be made by January 27, 2017. Upon notification, the contract negotiation with the winning bidder will begin immediately. Contract negotiations will aim to be completed by February 10, 2017.

Environmental Health Strategy Center (in consultation with the University of Maine and Biobased Maine) will initiate a kick-off meeting (or call) with the contractor once contract negotiations have ended and the contract has been signed. A specific timeline for project deliverables will be established during this meeting.

4. Proposal Guidelines

This Request for Proposal represents the requirements for an open and competitive process. Proposals will be accepted until 5pm EST January 13, 2017. Any proposals received after this date and time will not be considered. All proposals must be signed by an official agent or representative of the company submitting the proposal.

If the organization submitting a proposal must outsource or contract any work to meet the requirements contained herein, this must be clearly stated in the proposal. Additionally, all costs included in proposals must be all-inclusive to include any outsourced or contracted work. Any proposals which call for outsourcing or contracting work must include a name and description of the organizations being contracted. All costs included in proposals must be itemized to include an explanation of all fees and costs. Contract terms and conditions will be negotiated upon selection of the winning bidder for this RFP. All contractual terms and conditions will be subject

to legal review by Environmental Health Strategy Center's attorney and will include scope, schedule, budget, and other necessary items pertaining to the project.

Electronic copies of proposals are preferred (.pdf) and can be emailed directly to cmace@biobasedmaine.org. Environmental Health Strategy Center will confirm receipt of bids as they arrive with a confirmation email to the sender.

5. Project Budget

All proposals must include proposed costs to complete the tasks described in the project scope. All costs and fees must be clearly described in the proposal. Contracts will consist of time-and-materials budgets with a not-to-exceed ceiling price. The EDA-approved budget for this biomass study is \$25,000. Proposals received above this amount will not be considered. Proposals should include a break-down of hours spent on each subtask of the work (items A – E above).

6. Bidder Qualifications

Bidders should provide the following items as part of their proposal for consideration:

- Description of experience in characterizing biomass as feedstock for biobased manufacturing or bioenergy
- List of how many full-time, part-time, and contractor staff in your organization
- Examples of three previous projects successfully completed to the satisfaction of a client
- References for the three successful projects described above
- Anticipated personnel you will assign to this project (name, title, brief summary of academic background and professional experience)
- Timeframe for completion of project

7. Proposal Evaluation Criteria

Environmental Health Strategy Center (and its project partners, as appropriate) will evaluate all proposals based on the following criteria. To ensure consideration for this Request for Proposal, your proposal should be complete and include all of the following criteria:

- Overall proposal suitability: proposed analysis must meet the scope and needs included herein and be presented in a clear and organized manner
- Organizational experience: bidders will be evaluated on their experience as it pertains to the scope of this project
- Previous work: bidders will be evaluated on the examples of previous projects completed successfully and the references of past clients of these projects
- Value and cost: bidders will be evaluated on the cost of their analysis based on the work to be performed in accordance with the scope of this project
- Expertise and experience: bidders will be evaluated on the documentation of their staff's expertise and experience

- Additional consideration will be given to such matters as contractor integrity, compliance with public policy, record of past performance, and financial and technical resources or accessibility to other necessary resources to ensure successful project completion
- Non-response bids or proposals (i.e., those with material deficiencies, omissions, errors, or inconsistencies) will not be considered
- No contract shall be made with parties listed on the General Services Administration's List of Parties Excluded from Federal Procurement or Nonprocurement Programs
- All necessary affirmative steps will be taken to solicit participation of locally-owned, minority-owned, female-owned, and small businesses.

For questions about this proposal, please contact:
Charlotte Mace, 207-699-5792
cmace@biobasedmaine.org