

**Montana Department of Natural Resources and Conservation
Forestry Division**

REQUEST FOR QUALIFICATIONS (RFQ)

**Analysts to Conduct Preliminary Feasibility Assessments for
Wood Biomass Energy System Installations at
Public and Non-Profit Facilities**

Announcement Date: March 14, 2011

Revision Date: November 2, 2011

SECTION 1: GENERAL INFORMATION

1.0 PURPOSE

The Montana Department of Natural Resources and Conservation (DNRC) is issuing this Request for Qualifications (RFQ) for the purpose of generating a list of qualified firms and/or individuals to conduct preliminary feasibility assessments for wood biomass energy system installations at public and non-profit facilities in Montana. DNRC anticipates selecting multiple firms that may have diverse expertise in different types or scales of woody biomass energy projects including wood chip and pellet boilers and furnaces, indoor/outdoor cordwood systems, and other biomass energy technologies appropriate for smaller facility/ community-scale applications.

Firms and/or individuals qualified through this RFQ will be added to a list of pre-qualified biomass energy project analysts. This list will be provided to facility managers who have applied for, and been deemed eligible for, funding assistance from DNRC's Biomass Energy Project Feasibility Assessment (PFA) program. Eligible facilities will be required to select an analyst from this pre-qualified list in order to receive funding assistance from DNRC's PFA Program.

1.1 OBJECTIVE

The objective of a Preliminary Feasibility Assessment (PFA) is to provide the facility owner/manager with *preliminary* information regarding the technical and economic feasibility of retrofitting or installing a wood biomass energy system. The scope of the PFAs under this DNRC-sponsored program is *not* intended to be a fully comprehensive investment-grade assessment. Rather, the PFA will provide general information and direction to the facility owners, assisting them to make a decision on whether to proceed with further analysis, an investment-grade assessment and/or biomass energy system design and installation.

Analysts qualified through this RFQ will be selected and contacted individually, and as needed, by eligible facilities on a rolling, intermittent basis. Hired analysts will complete preliminary feasibility assessments for wood biomass energy projects which typically include a brief description of the facility HVAC system, energy usage analysis,

breakdown of estimated total project costs, and a life-cycle cost analysis including estimated payback period.

1.2 BACKGROUND

The State of Montana DNRC manages a Woody Biomass Utilization and Fuels for Schools and Beyond Wood Energy Program designed to promote and facilitate the utilization of woody biomass for value-added markets including energy. As an incentive for biomass energy installations, the DNRC program offers no-cost preliminary feasibility assessments to public and non-profit facilities. Since 2003, the DNRC has sponsored over 60 feasibility assessments at public facilities and provided grant funding to assist in the design and construction of 14 projects in Montana. There continues to be interest from additional facilities at varied scales in Montana who have limited resources with which to evaluate project feasibility.

DNRC anticipates awarding a minimum of \$16,000 total over the next two years to at least 5-8 public and non-profit facilities in Montana to provide funding assistance for preliminary feasibility assessments. Current DNRC funding is limited to sponsoring PFAs in the eligible project area defined in the Attachment 1, Eligible Applicant Area Map.

This amount of funding may be increased, and/or geographic area expanded, and/or time period extended, dependant on future funding availability.

1.3 PROCESS FOR USING THE LIST OF PRE-QUALIFIED ANALYSTS

Interested public and non-profit facilities submit an application for a preliminary feasibility assessment to DNRC on an open application, rolling basis. Approved facilities will be required to select an analyst from the pre-qualified list in order to receive funding assistance from DNRC's PFA Program.

- 1) Facility submits completed application to DNRC including Preliminary Feasibility Assessment Application Form (Attachment 2) that includes specific information about the facility structures, existing heating system, and annual heating fuel usage and costs.
- 2) DNRC pre-screens each PFA application to determine whether the facility appears to have potential for a wood biomass energy system installation and warrants a preliminary feasibility assessment by a professional firm. This pre-screening is based largely on information related to the existing heating system, fuels used and annual heating costs.
- 3) Applicants will be notified of DNRC's decision within 3 weeks of DNRC's receipt of complete application materials. Successful applicants are notified of approval and DNRC determines if the facility wants to move forward with a DNRC-sponsored PFA. Applicants not selected to move forward are notified of the decision and the reason for denial.
- 4) If the facility wants to move forward, DNRC requires that the facility select and hire a firm/individual from the list of pre-qualified analysts to conduct the assessment. This list of pre-qualified analysts will be provided by DNRC to the facility upon project

approval. A sample template of the pre-qualified list is attached to this RFQ as Attachment 3, List of Pre-Qualified Analysts Template.

- 5) It is the responsibility of the facility to contact the analyst, and negotiate full scope of work and rates. In accepting grant funding from DNRC, the facility is required to hire the analyst to perform the minimum scope of work detailed in the RFQ. If the facility wants an assessment above and beyond the scope of the basic PFA provided by the DNRC Program, the facility may be responsible for covering additional costs.
- 6) Once an analyst is selected by a facility and cost of services is determined, DNRC will create a grant agreement with the facility to reimburse costs of pre-feasibility assessment up to \$3,500. DNRC anticipates awarding between \$1,500-\$3,500 per facility per assessment, dependant on size of facility. Facility will provide name of selected firm and cost of services to DNRC.
- 7) Analyst will work with facility to complete the pre-feasibility assessment.

This Request for Qualifications does not indicate, nor imply, that any individual/company will receive work as a result of successful selection by the DNRC as a qualified analyst. The list of pre-qualified analysts will be provided to eligible facilities and selection of analysts is at the discretion of each individual facility.

Assessments must be completed within 60 days of hire by facility, unless other reasonable arrangements are made with the facility.

This list may be provided to interested parties outside of the DNRC-sponsored PFA program upon request.

1.3.1 UPDATING THE LIST OF PRE-QUALIFIED ANALYSTS

DNRC is currently soliciting qualifications from analysts to fulfill near-term requests for PFAs from interested facilities. Analysts interested in being considered for pre-qualification in this first round of solicitation, must deliver Statement of Qualifications to DNRC by April 14, 2011.

This Request for Qualifications will remain open for an additional 2 years from the original closing date up to April 14, 2013. Respondents may submit qualifications for consideration by DNRC at any time during this 2 year period. The pre-qualified analyst list will be updated twice per year in April and October.

Analysts qualified in this first round expiring April 14, 2011 will be included in the pre-qualified list provided to near-term requests from interested facilities. Pre-qualified analysts will remain on the list until removed either at the request of the analyst, or upon performance-based termination by DNRC.

1.3.2 PERFORMANCE

DNRC may terminate status as a pre-qualified analyst by written notice in any one of the following circumstances:

1. Failure of the analyst to correct unsatisfactory performance or work; or
2. Failure to complete the analysis within the established timeframes.

SECTION 2: SCOPE OF WORK

Upon selection by a facility, a pre-qualified analyst will be contacted by a facility to negotiate cost, hiring and scheduling services to conduct a preliminary feasibility assessment. Facilities eligible for DNRC-sponsored PFAs are limited to public schools and institutions and non-profit facilities located within the eligible area designated in Attachment 1. Eligible applicants may include school districts, hospitals, universities, government entities, tribally-owned facilities, and non-profit organizations. Based on previous PFA applications received, DNRC anticipates interest from facilities sized in the range of 30,000-100,000 square feet (SF). However, DNRC may see interest from a broad range of facilities including single buildings as small as 10,000 SF and campuses sized as large as 400,000 SF.

The objective of a Preliminary Feasibility Assessment (PFA) is to provide the facility owner/manager with preliminary information regarding the technical and economic viability of installing a wood biomass energy system. The PFA is intended to be an *introductory step* for facilities. This approach to assessing projects in stages, beginning with a *preliminary* feasibility assessment, provides a low cost option to better identify the projects that are most-likely to be viable. The PFA will provide general information and direction to the facility owners, assisting them to make a decision on whether to proceed with further analysis, an investment-grade assessment and/or project design and installation. The PFA will mostly focus on evaluating the cost-effectiveness and economic viability of a project, while providing a brief summary of technology and integration options, opportunities and challenges. A typical Biomass Energy PFA includes a brief description of the facility HVAC system, energy usage analysis, breakdown of estimated total project costs, and a life-cycle cost analysis including estimated payback period.

The scope of work as detailed below may be abbreviated or expanded depending on the specific needs and sizes of each individual facility. Scope of Work associated with the basic preliminary feasibility assessment sponsored by the DNRC program will generally consist of the following:

2.0 SCOPE OF WORK

1) Initial Facility Review to include, at a minimum, the following:

- a) Review facility information provided in DNRC application (furnished by DNRC or facility)
- b) Verify facility information as needed via correspondence with facility
- c) Investigate the current heating system to determine steps to integrate a biomass system
- d) Work with facility staff to understand their needs and existing issues related to the heating and cooling system

2) Preliminary Site Investigation to include, at a minimum, the following:

- a) Available space (within existing structures or space for newly constructed building)
- b) Street access and space available for fuel storage and deliveries
- c) Any building or site constraints (i.e. topography, permitting, historical preservation, etc.)
- d) Estimate proper size of biomass heating system to meet needs of facility
- e) Based on site information gathered, formulate options for installing a biomass energy system. This may include generating an assessment of a few project options and/or scenarios for different types of technologies, wood fuels and/or financial scenarios.

3) Preliminary Cost Estimating

Provide *preliminary* cost estimates for installing a biomass energy system on site. Total project cost estimates will include, at a minimum, cost breakdown of:

- a) design and engineering,
- b) fees and permitting,
- c) mechanical integration to existing or new HVAC system,
- d) biomass energy unit (boiler or furnace package),
- e) structure to house biomass energy unit, conveyance and fuel storage (as needed),
- f) emission controls (if required)
- g) other equipment, materials, and construction costs.

4) Economic Analysis

30 year life cycle cost analysis that incorporates, at a minimum:

- a) Baseline data on existing heating system (i.e. fossil fuel costs/unit, average annual fuel usage, average annual heating costs)
- b) Projected volume of wood fuel required to meet heat demand
- c) Estimated wood fuel cost per unit and annually
- d) Total project cost
- e) Projected savings, cash flow analysis and payback schedule

5) Final Report

Final report will include, at a minimum, the following:

- a) Executive summary of the preliminary assessment including brief discussion of:
 - the site features and opportunities and obstacles identified
 - the various technology or installation options assessed, if more than one
 - general perspectives of the assessment results, project viability, and recommended next steps
- b) Life cycle cost analyses of all assessed options in easy-to-understand spreadsheet formats

6) Submit Final Report to both facility and DNRC

The final report will be submitted to both the facility and DNRC. The analyst will provide 2 hard copies and one electronic copy as PDF to both entities.

SECTION 3: SUBMITTAL

3.0 SUBMITTAL

DNRC is currently soliciting qualifications from analysts to fulfill near-term requests for PFAs from interested facilities. Analysts interested in being considered for pre-qualification in this first round of solicitation must **deliver Statement of Qualifications to DNRC by April 14, 2011.**

It is the responsibility of the individual/firm to ensure receipt of qualifications to DNRC by the due date, or allow sufficient time for the submittal to transit through the US Postal Services and the State Mail System.

Respondents shall organize their written submittal into a single (one-volume, 8.5" x 11") document and shall respond to the evaluation criteria listed below in a manner that is clear and concise for review and evaluation by the selection panel. Include a cover letter from the prime consultant expressing interest in the project. Provide an appendix within the submittal to include resumes for all proposed team members, along with any additional relevant materials at the discretion of the respondent. There is no limit to the number of pages that may be included in the one-volume submittal; however, unnecessarily elaborate brochures, art work, excessively

high quality paper and bindings, and visual or other presentation aids beyond those sufficient to present a complete and effective proposal are not desired.

This Request for Qualifications will remain open for an additional 2 years from the original closing date up to April 14, 2013. Respondents may submit qualifications for consideration by DNRC at any time during this 2 year period. The pre-qualified analyst list will be updated twice per year in April and October.

Analysts qualified in this first round expiring April 14, 2011 will be included in the pre-qualified list provided to near-term requests from interested facilities. Pre-qualified analysts will remain on the list until removed either at the request of the analyst, or upon performance-based termination by DNRC.

Submit Qualifications to:

Julie Kies, Biomass Utilization Program Manager, by mail or email.

Mail to:

Attn: Julie Kies
Montana Dept. of Natural Resources and Conservation
Forestry Division Headquarters
2705 Spurgin Road.
Missoula, MT 59804

Email to: jkies@mt.gov

By submitting a response to this RFQ, respondent agrees to, if qualified by DNRC, to have company listing, contact information, and specializations provided in a listing of pre-qualified analysts to facilities conducting DNRC-sponsored pre-feasibility assessments for biomass energy. See Attachment 3, List of Pre-Qualified Analysts Template.

This list may also be provided to interested parties outside of the DNRC-sponsored PFA program upon request.

3.1 FOR MORE INFORMATION

Contact Julie Kies at the above address or by phone at (406) 542-4280 or via email at jkies@mt.gov.

3.2 ATTACHMENTS

- Attachment 1: Eligible Applicant Area Map
- Attachment 2: Preliminary Feasibility Assessment Application Form
- Attachment 3: List of Pre-Qualified Analysts Template

SECTION 4: EVALUATION CRITERIA

The selection of pre-qualified analysts will be made based on criteria designed to evaluate the applicants' ability to accurately and thoroughly perform the requirements for the PFAs as shown above in the Scope of Work. Individual scopes of work will be developed for each facility, and each of the above requirements may or may not be specified based on the needs of the individual facility.

4.0 STATEMENT OF QUALIFICATIONS

Please prepare a statement of qualifications presenting relevant information for the following areas:

- 1) Name, address, telephone number, and e-mail address of the energy analyst.
- 2) Names and qualifications of all team members, and their areas of responsibility.
- 3) Description of experience conducting preliminary feasibility assessments for integrating wood biomass energy systems at smaller-scale facilities. Include a list of specific projects.
- 4) Description of experience gathering thermal energy usage information, estimating project implementation and operation and maintenance costs, conducting life cycle cost analysis, and determining technical and economic feasibility of HVAC and biomass energy projects. Include a list of specific projects.
- 5) Documentation demonstrating technical skills and knowledge of wood biomass heating, cooling and combined heat and power systems for smaller scale facilities.
- 6) Documentation demonstrating an understanding of the purpose and procedures identified in this Request for Qualifications. Response to this section must convincingly demonstrate to DNRC that respondents will successfully perform scope of work described in the RFQ.
- 7) Description of the software and spreadsheet modeling applications used by the analyst that will be applied to feasibility assessments. Include a sample spreadsheet.
- 8) Provision of the checked list of the specializations detailed in Section. 4.2 of this RFQ.

4.1 RATES

The purpose of this RFQ, as stated earlier, is to establish a list of pre-qualified firms and/or individuals to conduct preliminary feasibility assessments for wood biomass energy system installations at public and non-profit facilities in Montana. Any resulting contracts will be between the firms and/or individuals and the public and non-profit facilities. Entities that are not part of the State of Montana or its agencies are not subject to MCA 18-8-204 or MCA 18-8-205 for the selection of architectural, engineering or surveying services.

Statements of Qualifications shall include estimated costs of performing the scope of work as detailed above in Section 2: Scope of Work. Since facility sites have not been determined, submitted information will be based on a per hour cost basis. Travel cost, based on time, distance, per diem and other elements of specific projects will be negotiated by the eligible facilities. Rates will be negotiated between the facility and analyst for each individual project.

Note that DNRC anticipates awarding a minimum of \$16,000 total over the next two years to at least 5-8 public and non-profit facilities in Montana to provide funding assistance for preliminary feasibility assessments. DNRC anticipates awarding between \$1,500-\$3,500 per facility per assessment, dependant on size of the facility. Current DNRC funding allows awards solely to public and non-profit facilities within the eligible project area defined in Attachment 1. Of further note, as detailed in the RFQ, DNRC or the facility will provide basic facility site and energy information to hired analysts to use in conducting the PFA, namely information submitted with the facility PFA application, Attachment 2.

4.2 SPECIALIZATIONS

Please provide a checked list of the following specializations of your company. Please check all that apply. Information submitted here will be provided in the list of qualified analysts. See Attachment 3, the sample template of the pre-qualified list.

Services Provided

- Pre-Feasibility Assessments for biomass energy
- Investment-Grade biomass energy assessments
- Biomass fuel supply assessment
- Biomass energy system manufacturer/distributor
- Energy Analysis
- Mechanical Engineering
- Engineering/Design
- Installation
- Commissioning
- Financing

Technologies Experienced With

- HVAC
- Hydronic
- Steam
- Forced Air
- Automated wood-chip type system
- Wood pellet furnace/boiler
- Indoor cordwood
- Outdoor cordwood
- Combined heat and power systems

Sectors Served

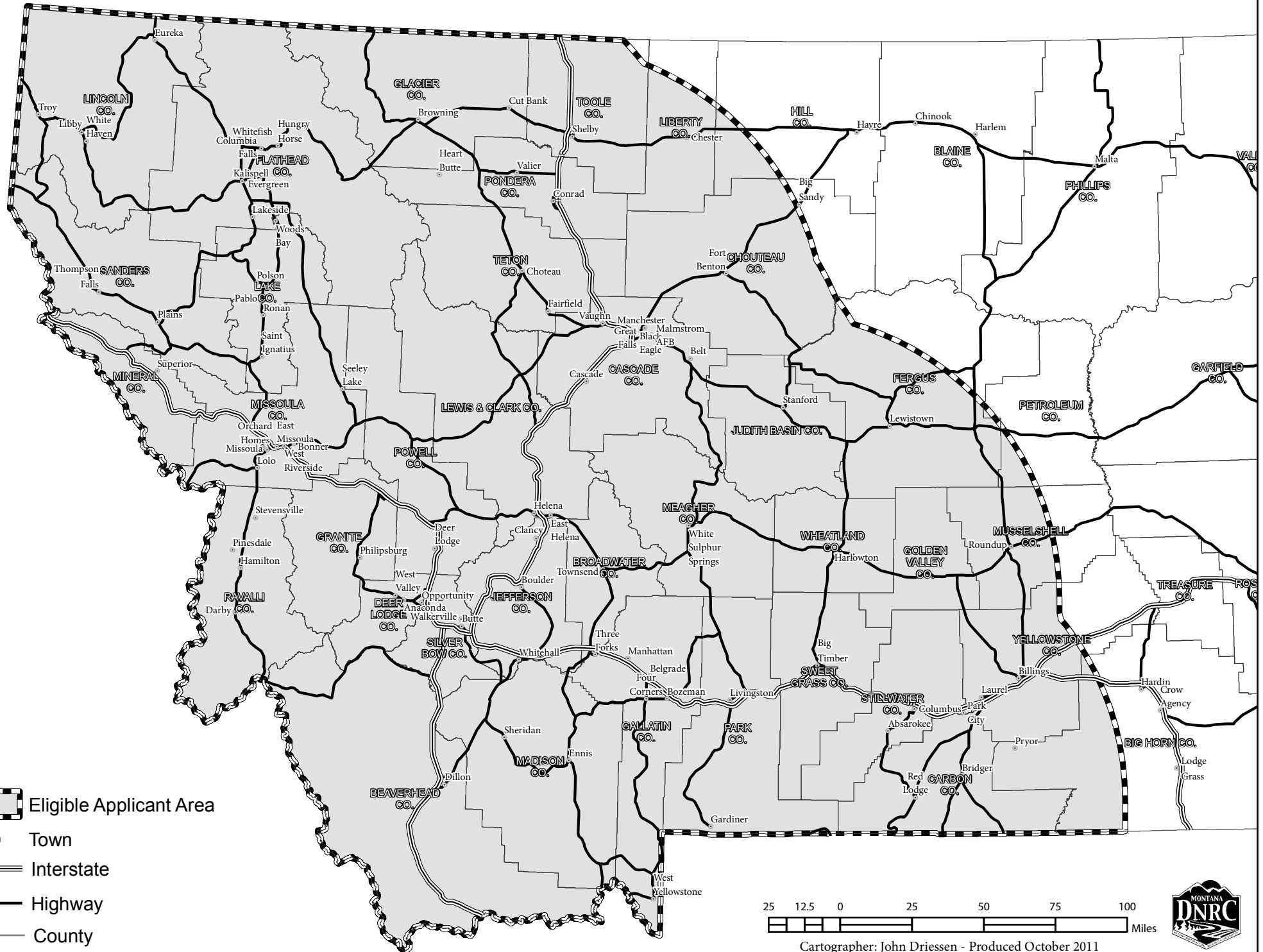
- Schools
- Healthcare
- Government
- Non-profits
- Residential
- Commercial

4.3 EVALUATION CRITERIA

DNRC will review each Statement of Qualifications and may contact respondents to clarify submittals. Statement of Qualifications will be evaluated by an internal committee. The Evaluation Criteria are listed below. The committee will award a rating of between 0 and 5 for each of the 5 evaluation criteria below, 0 being the lowest and 5 being the highest score. To be selected under this RFQ, respondent must achieve a minimum score of 3 on each of the evaluation criteria. All firms or individuals achieving the minimum scoring will be included on the list in alphabetical order. There will not be any ranking order associated with the list.

- | | |
|--------------------|--|
| 0 1 2 3 4 5 | 1. Experience conducting feasibility assessments for integrating wood biomass energy systems for smaller-scale commercial and public building applications. |
| 0 1 2 3 4 5 | 2. Experience in gathering thermal energy usage information, estimating project implementation costs, conducting life cycle cost analysis, and determining technical and economic feasibility of HVAC and biomass energy projects. |
| 0 1 2 3 4 5 | 3. Demonstrated understanding of the purpose and procedures identified in this Request for Qualifications and ability to successfully perform scope of work described. |
| 0 1 2 3 4 5 | 4. Demonstrated application of software and spreadsheet modeling used by the analyst that will be applied to feasibility assessments. |
| 0 1 2 3 4 5 | 5. Demonstrated knowledge of wood biomass energy systems for smaller-scale applications. |

ATTACHMENT 1: ELIGIBLE APPLICANT AREA FOR REGIONAL WOODY BIOMASS UTILIZATION GRANTS





Montana Department of Natural Resources and Conservation
Community Wood Energy Program

PRELIMINARY FEASIBILITY ASSESSMENT
APPLICATION FORM

COMPLETE THE FOLLOWING INFORMATION:

Date filled out:
By (name):
Facility Name:
City:
Applicant's DUNS #:
Applicant's CAGE Code:
Principal Contact Person:
Mailing Address:
Phone:
FAX:
Email:

I. FACILITY INFORMATION

Check one:

- Existing Facility
New Construction (If new, fill in all available information for the proposed heating system and estimated energy usage.)

Check one:

- School
University
Healthcare
Government
Non-profit
Other

Size of facility: sq. ft. heated space
No. of occupants or students
Year of construction
Years of major renovations
No. of floors
No. of buildings

Describe:

II. HEATING SYSTEM

Configuration (check one or more):

- Heating plant in one location
Heating plant with exterior wall location?
Different heating plants in different locations; How many?:
Individual, room-by-room heating systems
Boiler room accessible to semi tractor/trailer vehicles

How is space heat generated? (check all applicable):

- Hot water boiler
Warm air furnace (in mechanical room)
Gas duct heaters or roof-top systems
Steam boiler

How is heat delivered to rooms? (check all applicable):

- Hot water
Steam
Ducted air
Electric heat

- Electric Boiler
Electric baseboard
Electric duct coils
Electric furnace
Heat pumps

Is current heating system due for replacement soon? YES/NO?

III. FUEL SOURCES

What fuels are used? (check all applicable):

- Natural gas
- LP gas (propane)
- No 2 fuel oil/ Diesel
- Electric
- Other; Type: _____

Describe fuel storage (number, capacity location of tanks):

Is this fuel also for: other uses; just space heat?

IV. DOMESTIC HOT WATER (DHW)

Uses of domestic hot water (check all applicable):

- Lavatories
- Kitchen
- Gym showers: Heavily used? Yes No
- Other large uses: _____

What fuels are used? (check all applicable):

- Natural gas
- LP gas (propane)
- Electric
- No. 2 fuel oil
- Diesel
- Other: Type: _____

Type of system (check all applicable):

- Single tank-type heater
 - Multiple tank-type heaters
 - Off heating boiler, with separate storage tank
 - Hot water generator with separate storage tank
 - Other
- Type: _____

Describe location of heater(s), including areas/ uses served:

Describe fuel storage (number, capacity, location of tanks):

V. FUEL USAGE AND COSTS (THIS MUST BE COMPLETED IN ORDER FOR APPLICATION TO BE PROCESSED)

How much did you spend on the following fuels last year?

- Natural Gas \$ _____/year _____ dekatherms (dka)/year
- LP Gas (Propane) \$ _____/year _____ gallons/year
- No 2 Fuel Oil \$ _____/year _____ gallons/year
- Diesel \$ _____/year _____ gallons/year
- Electric \$ _____/year _____ kilowatt hours (kWh)/year

Attach a copy of a recent bill for each utility account.

VI. CONTROLS

Type of system (check all applicable):

- Thermostats on individual devices, not central control system
- Pneumatic controls system Manufacturer: _____ Approximate Age: _____
- Direct digital control system Manufacturer: _____ Approximate Age: _____

VII. OTHER INFORMATION

Below provide any other information that will help us understand your space heating and DHW systems:

VIII. BUILDING ENVELOPE

- Single pane Double pane glass
- Wall type _____ Insulation value _____
- Roof type _____ Insulation value _____
-

IX. WOOD FUEL COSTS (IF KNOWN)

- Wood pellet cost delivered to school/facility \$ _____/ton
 - Wood chip cost delivered to school/facility \$ _____/ton
 - Distance to nearest wood pellet and wood chip suppliers? _____
 - Can logs or wood fuel be stockpiled on site or at a nearby facility? _____
-

X. DESCRIPTION OF INTEREST

Submit a cover letter with application form that describes your interest in a wood biomass energy installation including potential benefits to the facility and community.

Submit Application to:

Julie Kies
Montana DNRC
2705 Spurgin Road
Missoula, MT 59804
Phone (406) 542-4280
Fax (406) 542-4217
jkies@mt.gov

ATTACHMENT 3
LIST OF PRE-QUALIFIED ANALYSTS
DNRC BIOMASS ENERGY PRELIMINARY FEASIBILITY ASSESSMENTS

FIRM NAME (IN ALPHABETICAL ORDER)	SERVICES PROVIDED										TECHNOLOGIES EXPERIENCED WITH										SECTORS SERVED						
	PRE-FEASIBILITY ASSESSMENTS FOR BIOMASS ENERGY	INVESTMENT-GRADE ASSESSMENT FOR BIOMASS ENERGY	BIOMASS FUEL SUPPLY ASSESSMENT	BIOMASS ENERGY SYSTEM MANUFACTURER/DISTRIBUTOR	ENERGY ANALYSIS	MECHANICAL ENGINEERING	ENGINEERING/DESIGN	INSTALLATION	COMMISSIONING	FINANCING	HVAC	HYDRONIC	STEAM	FORCED AIR	AUTOMATED WOOD CHIP-TYPE SYSTEM	WOOD PELLET FURNACE/BOILER	INDOOR CORDWOOD	OUTDOOR CORDWOOD	COMBINED HEAT AND POWER SYSTEMS	SCHOOLS	HEALTH CARE	GOVERNMENT	NON-PROFITS	RESIDENTIAL	COMMERCIAL		
A's Engineering	X				X						X	X			X	X						X	X	X	X		
B's Energy, Inc.	X	X	X	X		X		X			X	X					X					X				X	X
Z Company	X																										

TEMPLATE

A's Engineering
 Contact: Jane Doe
 xxx Street,
 City, State, Zip
 (xxx) xxx-xxxx
 Email address

Z Company
 Contact: Jane Doe
 xxx Street,
 City, State, Zip
 (xxx) xxx-xxxx
 Email address

B's Energy, Inc.
 Contact: John Doe
 xxx Street,
 City, State, Zip
 (xxx) xxx-xxxx
 Email address