

**Form 920B**  
**Waste to Energy Proposals—Full Application**  
**Renewable Energy Programs—Biopower**



To be completed by Applicant

*Attach pages, as needed, to answer each question. On this form, refer to the attachment. On each attachment, please identify the section and question numbers for each answer provided.*

**Section 1—Applicant Information**

A. Project Name		B. Submission Date (m/d/yy)	
C. Provide a short project description.			
<i>Enter information for the company or organization that may enter into an agreement with the Energy Trust of Oregon, Inc. if this application were to be selected for further review and negotiations.</i>			
D. Company or Organization			
E. Applicant Contact			
F. Applicant Address		City	State
			Zip
G. Telephone		H. Fax	
<input type="checkbox"/> cell <input type="checkbox"/> office <input type="checkbox"/> home			
I. Email		J. Website	
K. Business Classification <input type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Individual/Sole Proprietor <input type="checkbox"/> Other ( <i>specify below</i> )			
L. Describe the experience and credentials of the applicant organization or organizations. Attach additional sheets, if necessary.			
M. List key personnel who will be involved in the proposed project, whether staff, consultants or contractors. Describe the experience, credentials, and role of each. If critical project development roles or functions have been identified, but have not yet been filled, please identify them and indicate that the role has not yet been assigned. Attach additional sheet(s), if needed.			

Return completed form to:

**Renewable Energy Programs—Biopower**  
 851 SW Sixth Avenue, Suite 1200, Portland, Oregon 97204-1349  
 1-866-368-7878 ♦ Fax 503-546-6862 [energytrust.org](http://energytrust.org)

***Please keep a copy of this document for your records.***

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**Section 2—Technological Approach**

<p><b>A.</b> Please indicate the waste to energy technology being used for this project.</p> <p><input type="checkbox"/> Combustion</p> <p><input type="checkbox"/> Gassification</p> <p><input type="checkbox"/> Pyrolysis</p>
<p><b>B.</b> Will the project generate electricity from direct conversion of the fuel, or will synthetic gas or other energy products be produced as intermediate stages in the process?</p> <p><input type="checkbox"/> Direct conversion for electric power production</p> <p><input type="checkbox"/> Synthetic gas</p> <p><input type="checkbox"/> Other energy product (please describe below)</p>
<p><b>C.</b> Efficiency of primary energy conversion process (%)</p> <p style="text-align: center;">%</p>
<p><b>D.</b> Efficiency of any secondary energy conversion process (%)</p> <p style="text-align: center;">%</p>
<p><b>E.</b> If multiple energy resources will be produced from the waste stream, what percentage of the total production (on an equivalent energy basis) will be used to produce electrical power?</p> <p style="text-align: center;">%</p>

**Section 3—Resource Characterization**

<p><b>A.</b> What is the physical composition of the fuel? (e.g., construction waste, food waste, etc.)</p>	<p><b>B.</b> What is the percent moisture of the fuel source(s) when delivered to the site?</p> <p style="text-align: center;">%</p>	<p><b>C.</b> What is the anticipated moisture content at the time of combustion?</p> <p style="text-align: center;">%</p>
<p><b>D.</b> If the fuel will be dried before combustion or conversion, what technology/process will be employed for drying purposes?.</p>		
<p><b>E.</b> In addition to drying, will the fuel receive any additional pre-treatment (materials separation, hogging, etc.)?</p>		

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F. Is there an opportunity to hygrade the fuel to improve the economics of the project or stabilize the cost?
G. What is the higher heating value (HHV) of the fuel(s) on a dry-weight basis?
H. Are there any contaminants or other toxicity issues associated with the use of this fuel?
I. Are any components of the fuel or the residuals after combustion considered hazardous or toxic wastes?

**Section 4—Biomass Supply**

A. Who owns the fuel resource?
B. If the fuel is purchased, at what cost, and under what contract terms?
C. How much does the price of the fuel usually vary?
D. Characterize the level of control over supply of the fuel that project operators will have during the life of the project, and the level of risk that this presents.
E. What alternative sources are available in the event of default by the planned supplier?
F. Is the supply of fuel susceptible to disruption due to natural causes, including but not limited to, fires, floods or inclement weather? If yes, describe the nature of the risk.
G. What would happen to this fuel in the absence of this project (e.g., used elsewhere for energy purposes, digested and flared, remain in forest, etc.)?
H. How much of the fuel is available per year (in tons)?

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I. Is there sufficient fuel available from this source to satisfy energy production goals listed in your proposal?
--

**Section 5—Fuel Transportation**

A. Where is the fuel located in relation to the project site?
B. If fuel must be transported to site, how will this be done, and approximately how many vehicle-miles are required per year?
C. Will transportation costs be absorbed by the seller, or will the project absorb the transportation expense?
D. What is the percent transportation cost increase that would make the project not feasible?
E. Will fuel storage be available, or provided, and if so, how much? Define in terms of quantity and consumption time (That is, “so many tons that will fuel the system for so many days”)

**Section 6— Electricity Production**

A. Expected Generating Capacity (MW) <sup>1</sup>  MW	B. Annual Availability Factor <sup>2</sup>  %	C. Capacity Factor (%) <sup>3</sup>  %
D. Will part or all of the electric output be used on-site to displace existing load(s)? <input type="checkbox"/> Yes <input type="checkbox"/> No If <b>yes</b> , how much of the electricity output will be used for on-site purposes?		
E. Identify anticipated use of thermal energy.		

<sup>1</sup> Indicate generating capacity in Megawatts (MW), using the form 0.XXX MW for smaller capacity projects.

<sup>2</sup> Availability (“A”) is defined as annual project operating hours as a percentage of total hours in a year.

$$A = \frac{\text{annual project operating hours}}{8,760 \text{ hours}}$$

<sup>3</sup> Capacity Factor (“CF”) is another measure of project performance and is calculated as the ratio of actual (or estimated) energy produced to the energy production resulting from operation at full-rated power every hour of the year.

$$CF = \frac{\text{annual energy production (MWh)}}{\text{power rating (MW)} \times 8,760 \text{ hours}}$$

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<b>F.</b> Will parasitic loads be met by energy generated by this system?	<input type="checkbox"/> Yes	<input type="checkbox"/> No																											
<b>G.</b> Parasitic Energy Uses Identify major pieces of equipment, the fuels used by each and the capacity of each item.																													
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; padding: 5px;">i. Equipment</th> <th style="width: 25%; padding: 5px;">ii. Connected Load (MW)</th> <th style="width: 25%; padding: 5px;">iii. MWh</th> </tr> </thead> <tbody> <tr><td style="height: 20px;"></td><td></td><td style="text-align: center;">MWh</td></tr> <tr><td style="height: 20px;"></td><td></td><td style="text-align: center;">MWh</td></tr> <tr><td style="height: 20px;"></td><td></td><td style="text-align: center;">MWh</td></tr> <tr><td style="height: 20px;"></td><td></td><td style="text-align: center;">MWh</td></tr> <tr><td style="height: 20px;"></td><td></td><td style="text-align: center;">MWh</td></tr> <tr><td style="height: 20px;"></td><td></td><td style="text-align: center;">MWh</td></tr> <tr><td style="height: 20px;"></td><td></td><td style="text-align: center;">MWh</td></tr> <tr><td style="height: 20px;"></td><td></td><td style="text-align: center;">MWh</td></tr> </tbody> </table>	i. Equipment	ii. Connected Load (MW)	iii. MWh			MWh			MWh			MWh			MWh			MWh			MWh			MWh			MWh		
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<b>iv.</b> Estimate the volume of any make-up water required and the annual expense.																													
<b>H.</b> Anticipated uses of thermal energy.																													
<b>I.</b> What type of environmental control systems (bag house, scrubber, water treatment, etc.) will be installed? Please describe the systems and attach schematic diagrams, if available.																													
<b>J.</b> If ash will be produced by the project, how will it be disposed?																													
<b>K.</b> What is the estimated annual expense for ash or other residual waste storage, transportation and disposal?																													

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**Section 7—Design Information**

<b>A.</b> Company or Organization Designing the System			
<b>B.</b> Design Project Manager			
<b>C.</b> Address	City	State	Zip
<b>D.</b> Telephone <input type="checkbox"/> cell <input type="checkbox"/> office	<b>E.</b> Fax		
<b>F.</b> Email	<b>G.</b> Website		
<b>H.</b> List two or three similar projects successfully completed by the designer. Provide the name and phone number of a contact person for each project. The Energy Trust of Oregon, Inc., reserves the right to contact these individuals.			
<b>Project</b>		<b>Contact Person</b>	<b>Telephone</b>

<b>I.</b> Design Subconsultant			
<b>J.</b> Address	City	State	Zip
<b>K.</b> Telephone <input type="checkbox"/> cell <input type="checkbox"/> office	<b>L.</b> Fax		
<b>M.</b> Email			

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**Section 8—Installation Information**

<b>A.</b> Company or Organization Installing the System			
<b>B.</b> Installation Project Manager			
<b>C.</b> Address		City	State
<b>D.</b> Telephone <input type="checkbox"/> cell <input type="checkbox"/> office		<b>E.</b> Fax	
<b>F.</b> Email		<b>G.</b> Website	
<b>H.</b> List two or three similar projects successfully completed by the installation contractor. Provide the name and phone number of a contact person for each project. The Energy Trust of Oregon, Inc., reserves the right to contact these individuals.			
<b>Project</b>		<b>Contact Person</b>	<b>Telephone</b>
<b>I.</b> Installation Subcontractor			
<b>J.</b> Address		City	State
<b>K.</b> Telephone <input type="checkbox"/> cell <input type="checkbox"/> office		<b>L.</b> Fax	
<b>M.</b> Email			

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**Section 9— Site Utilities**

*If this project is an expansion of an existing renewable energy facility, please provide data only on the incremental generation.*

Total annual energy consumed at this site (specify units.)

A. Electricity	(units)	B. Propane	(units)	C. Natural Gas	(units)
D. Oil	(units)	E. Other (specify)	(units)		

F. Identify the utility tariff(s) under which the site is served. Summarize the retail electricity rate paid at the proposed site. Where appropriate, include peak and off-peak rates, transmission and distribution charges, and demand charges.

G. Identify the interconnection point, the size of the interconnection, and any associated requirements. Attach any relevant documentation.

H. Describe your interconnection plan and attach relevant documentation.

I. Has a detailed interconnection study and cost estimate been prepared by the interconnecting utility? If so, please describe.

J. Can the serving utility provide inconnection to meet the projected energization date of your project?

K. Describe your progress in the interconnection process.

**Section 10—Permits**

A. I have contacted permitting agencies regarding this project and have identified the necessary permits.

City  
 County  
 State

B. On an additional sheet, list and describe all city, county, and state permits required for this project, the duration of the permits, and the status of each, including planned steps, critical milestones and an acquisition timeline.

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**Section 11—Project Revenue**

<b>A.</b>	If you plan to sell power from this project to an electric utility, identify the initial sale price, the schedule for changes in the sale price over time, and the relevant tariff.
<b>B.</b>	What annual revenue do you expect from power sales, or what reduction in site operating expense do you project from offset electrical purchase.
<b>C.</b>	If applicable, specify the use of the project’s thermal output, and the value of this energy in terms of conventional energy sources displaced. Identify the capital costs, if any, for providing the thermal energy from a conventional source if the renewable option were not built.
<b>D.</b>	If applicable, identify any revenue-producing non-energy outputs, whether they will be used on-site or sold, and their sales value or value in terms of conventional products displaced.
<b>E.</b>	If applicable, identify any other opportunities or offsets that defray project costs (e.g., waste disposal fees avoided through using wood waste as fuel).

**Section 12—Project Financing**

**A.** List all grants and other funding you expect the project to receive that are not project debt, lease obligations, or owner’s equity.

	Amount
	\$
	\$
	\$
	\$
	\$

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**B.** Describe the tax credits that should be available to the project, estimating the dollar values of the credits, and the years they will be received.

Credit Description	Dollar Value	Years Received
	\$	
	\$	
	\$	
	\$	
	\$	

**C.** List any operating leases by which the project owner/developer will obtain equipment.

Equipment	Source	Terms

**D.** If the project construction will be funded with a construction loan, identify the following.

Lender	Principal	Term	Loan Fees	Interest Rate	Payment Interval (monthly, quarterly)
	\$	years	\$	%	
	\$	years	\$	%	

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E. Identify the expected source of any project term financing and details of the loan.

Lender	Principal	Term	Loan Fees	Interest Rate	Payment Interval (monthly, quarterly)
	\$	years	\$	%	
	\$	years	\$	%	

F. Provide the dollar amount of owner equity that will be invested in the project.

Owner or Principal	Amount
	\$
	\$
	\$
	\$
	\$

**Section 13—Other Issues**

A. Briefly identify any outstanding unresolved issues in your project plan.

B. List any attached, supplemental documents.

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**Section 14—Disclosure of Existing or Potential Conflicts of Interest**

A direct or indirect actual or potential conflict of interest is defined as any situation in which Applicant has or may be reasonably construed to have a direct or indirect personal or financial interest in any business affairs of Energy Trust of Oregon, Inc., whether

- because of a proposed contract or transaction to which Energy Trust may be a party, in which Energy Trust may be interested, or which is under consideration by Energy Trust
- because such conflict is purely conceptual, because of similarity of business interests or affairs

Applicant agrees to promptly inform the Energy Trust in writing of any Conflict of Interest or potential Conflict of Interest which becomes apparent during review of this application.

Applicant is aware of existing or potential Conflicts of Interest.

Yes

No

If **yes**, please discuss below.

**Section 15—Terms and Conditions**

**No Commitment**

This application does not constitute an offer to enter into a contract with the Energy Trust, nor does it commit Energy Trust to enter into a contract or similar undertaking with the Applicant or any organization associated with the Applicant. Energy Trust reserves the right to suspend or modify the application process or to issue a new application that would supersede and replace this one.

Any commencement of negotiations in connection with this application does not signify a commitment by Energy Trust to execute a contract or to continue discussions with respect to the Applicant's organization. Any party involved in these negotiations can terminate contact at any time and for any reason. Energy Trust is under no obligation to pursue this application, or to disclose to the Applicant any information concerning its disposition of, or action on, the Application. Any recommendations or conclusions from this application process concerning the Applicant shall not constitute a right (property or otherwise). No binding obligation shall be created unless Energy Trust or its representative and the concerned parties execute a binding agreement. Any awards made by the Energy Trust as a result of this application will be subject to the terms of a definitive written agreement between the parties.

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**Confidentiality**

Applications may be reviewed by any Energy Trust employee, Board member, or contractor. If Energy Trust uses an outside party to help review the application, it will require that party to sign a confidentiality agreement. Subject to litigation or other legal disclosure requirements, Energy Trust will not otherwise disclose information submitted in this application.

**Waiver of Claims**

Applicant waives any right it may have to bring any claim, whether in damages or equity, against Energy Trust, Energy Trust’s Board of Directors, Energy Trust’s Renewable Advisory Council, Energy Trust’s agents, employees, or contractors with respect to any matter arising out of any process associated with this application.

**Section 16—Applicant Certification and Signature**

I hereby certify that:

1. Applicant is duly authorized to submit this proposal and the undersigned is authorized by the Applicant to submit this application to Energy Trust on Applicant’s behalf;
2. The information provided by Applicant in this application, and any other related documents delivered to Energy Trust, is true, accurate and complete to the best of Applicant’s knowledge;
3. Applicant has read, understands and agrees to all of the terms and conditions as set forth in this application;
4. Applicant understands and accepts that the approval or rejection of this application is within the sole discretion of Energy Trust;
5. Applicant understands and accepts that all costs associated with completing this application are the sole responsibility of Applicant and that the application and all materials submitted with it shall become the property of Energy Trust and shall not be returned to the Applicant;
6. Applicant authorizes Energy Trust to contact references and to investigate the business and personal financial credit history of the Applicant, its affiliates, and all associated partners, principals and management and authorizes the release of all said information to Energy Trust;
7. Applicant has included in this application all information necessary to ensure that the statements herein do not in whole or in part mislead Energy Trust as to any material fact; and
8. Applicant will report immediately in writing to Energy Trust any changes to the information contained herein at any time while this application is under consideration.

Applicant Name <span style="float: right;"><i>(printed)</i></span>			
Authorized Representative <span style="float: right;"><i>(printed)</i></span>	Title	Signature	Date