Site Location
Address:
City:
Zip Code:
County:

OREGON DEPARTMENT OF ENERGY

Oregon Business Energy Tax Credit

Biomass Infrastructure

Appendix No. 2 to Preliminary Certification Application

This appendix is for facilities using or producing renewable energy resources and is for biomass infrastructure only. If the facility contains additional conservation measures, they should be applied for separately using the Application for Preliminary Certification of Conservation Facilities or other appropriate applications.

1. Are you eligible? To be eligible for a renewable resource tax credit you must be producing, collecting, processing or delivering 100% organic biomass feedstock.

Yes	No	
☐	☐	Is the biomass 100% organic (no petro-chemicals, contaminants, mixed waste)?
☐	☐	Is the biomass to eventually be used as an energy source to fuel a digester, hogged fuel boiler, gasifier, direct methane combustion, or as feedstock for a biodiesel oil reactor/blender, or ethanol facility? ► Attach the following additional information: evidence that the Biomass will be converted to energy, i.e. a contract for sale of energy or other qualifying evidence
☐	☐	Biomass is produced and collected in Oregon?
☐	☐	Facility (project) equipment or facility will be operated and located in Oregon?
☐	☐	Facility (project) equipment or facility is owned by the applicant?

If you answered NO to any of the above questions, you are not eligible for BETC for Biomass Infrastructure.

2. Type of Biomass Recovered (check one box)

Wood Biomass: ☐ Agricultural Wood Biomass ☐ Forest Wood Biomass ☐ Green Waste ☐ Urban Wood Biomass	Agricultural Byproducts: ☐ Grass Straw ☐ Wheat Straw ☐ Other Agricultural Cellulosic Crop: _____	Oils: ☐ Seed or Grain Oil ☐ Yellow Grease
Digester: ☐ Manure or wastewater solids ☐ Wastewater gas	☐ Landfill waste gas	☐ Other: _____

3. Equipment specifications and estimated facility cost	
Equipment and materials (processing plant, fuel distribution equipment, etc.): **<u>Processing Plant</u>** **<u>Fuel Distribution</u>**	**Estimated cost:**
Installation and labor: **<u>Processing Plant</u>** **<u>Fuel Distribution</u>**	**Estimated cost:**
Other: (Do not include Business Energy Tax Credit review costs) **<u>Processing Plant</u>** **<u>Fuel Distribution</u>**	**Estimated cost:**
Total of Estimated Costs from above:	**3a. $**
Deduct federal grants: **Note: OAR 330-090-0110(20)(l)** The sum of any rebates or cash payments under ORS 469.631 to 469.645, 469.649 to 469.659, 469.673 to 469.683, or 757.612(5)(a), or from a public purpose organization and the Business Energy Tax Credit may not exceed eligible costs.	**3b. $**
TOTAL Estimated Facility Cost Take 3a and subtract 3b to get the Total Estimated Facility Cost	**3c. $**

4. Facility Incentives			
	Amount	Secured: Yes or No	
Federal Business Energy Investment Tax Credit (ITC) Indicate how you are taking this incentive, if not checked ODOE will assume you are taking it as a grant and deduct it from your costs	$		☐ Taking as a Tax Credit (do not deduct from estimated cost) ☐ Taking as a Grant (deduct from estimated costs 3b) ☐ Not Applicable
Other Federal Grants _____	$		Deduct all federal grants from estimated costs 3b
Other Federal Tax Credits _____	$		Do not deduct from estimated costs 3b
Energy Trust of Oregon	$		Do not deduct from estimated costs 3b
Utility Incentives _____	$		Do not deduct from estimated costs 3b
Other Incentives _____	$		Do not deduct from estimated costs 3b
a. Sub-total Incentives	4a. $	The sum of any rebates or cash payments under ORS 469.631 to 469.645, 469.649 to 469.659, 469.673 to 469.683, or 757.612(5)(a), or from a public purpose organization or federal grants or credits and the business energy tax credit may not exceed eligible project costs OAR 330-090-0110(20(l).	
b. Business Energy Tax Credit (BETC) Calculated (3c x 50%)	4b. $		
c. Total Incentives (4a+4b)	4c. $		

5. Oregon Business Energy Tax Credit Requested	
a. Do your Total Incentives (4c) exceed your Estimated Facility Cost (3a)?	☐ Yes, go to 5b ☐ No, go to 5d
If YES, you need to reduce your Business Energy Tax Credit, calculate:	
b. Amount Exceeded: Total Incentives – Estimated Facility Cost (4c – 3a)	5b $
c. Reduce your BETC by the Amount Exceeded (4b – 5b)	5c $
d. Maximum Eligible Business Energy Tax Credit (4b or if reduced 5c)	5d $
e. **Oregon Business Energy Tax Credit Requested** 5d or a lower amount chosen by applicant. An applicant may request less than their maximum eligible tax credit. If reduced, the lowered tax credit amount will be used when calculating other program priority scores and the applicant will receive points based on the lowered tax credit amount. The applicant shall not receive more than their requested amount. Please note that OAR 330-090-0350(3)(e) allows applicants to apply for less than the maximum eligible tax credit for their project, but this does not change the tier within which the application is reviewed.	5e $

6. Facility Leveraging
Leveraged = the facility owner will be responsible for the initial or later payment of these funds
Non-Leveraged = the facility owner will not be responsible for paying these funds back

	Amount	Secured: Yes or No	Type of Funds
Owner's funds	$		Leveraged
Loans (including SELP Loan)	$		Leveraged
Other funds (Leveraged) _____	$		Leveraged
Sub-Total Incentives (4a) Includes grants, tax credits, incentives	$		Non-Leveraged
Business Energy Tax Credit (5e)	$		Non-Leveraged
Other funds (Non-Leveraged) _____	$		Non-Leveraged
Total project cost	$	**The total should equal 4a**	

7. Net Annual Biomass Value

Is the biomass contract:	Under negotiation?	☐ Yes ☐ No
	Completed?	☐ Yes ☐ No
Name of utility or energy service supplier who will buy the biomass?		

List expected sales revenue for biomass sold to the utility or energy service provider.

Biomass Type	Annual Units of Biomass	x	Sale value per unit	=	Annual gross value
		x	$	=	$
		x	$	=	$
		x	$	=	$
			7a. Total Revenue		$

Subtract the cost to produce, prepare and deliver biomass:

kWh of equipment		x	$	=	$
Oil (#2 Diesel) or Tonmile		x	$	=	$
Other -		x	$	=	$
			7b. Total Deductions		$
7c. Total Net Annual Value of Biomass Produced (7a – 7b) =					$

8. Payback period—Calculate the facility simple payback period (how long the facility will take to pay for itself through its energy savings). To qualify, the payback must be between 1 year and the expected life of the equipment installed. Facilities with simple payback over 15 years will have eligible costs prorated accordingly.

a. Total eligible cost (3a)	8a. $
b. Total net annual value of biomass produced (7c)	8b. $
Simple payback in years (8a divided by 8b)	years

9. Estimated annual energy value of biomass produced by the facility – Determine the estimated annual energy value for the renewable resource feedstock produced by this facility.

Biomass Type	a. Units (ton, BDT, bushels, Gals.) of biomass produced or collected annually	b. Energy content per unit in Millions British Thermal Units (MMBtu)	c. Annual energy produced in MMBTU
TOTAL			

Typically accepted energy content per unit of various energy feedstocks:

Softwood	15,000,000	Btu/cord	(typically 1 ton per cord)
Hardwood	24,000,000	Btu/cord	(typically 1.2 tons per cord)
Green Sawdust	10,000,000	Btu/ton	
Kiln Dried Sawdust	18,000,000	Btu/ton	
Wood chips - 45% moisture	7,600,000	Btu/ton	
Hogged Wood Fuel	20,000,000	Btu/ton	
Bark	10,500,000	Btu/ton	
Wood Pellets - 10% moisture	16,000,000	Btu/ton	
Natural Gas	100,000	Btu/therm	
Propane	91,600	Btu/gal	
Methane	1,000	Btu/cu ft	
Ethanol	76,000	Btu/gal	
Kerosene	135,000	Btu/gal	
#2 Fuel Oil	138,500	Btu/gal	
Waste Oil	125,000	Btu/gal	
Waste Vegetable Oil	120,000	Btu/gal	
Gasoline	125,000	Btu/gal	
Electricity	3,413	Btu/kWh	

d. Estimate of conventional fuel (non-renewable) being displaced:

☐ Gasoline _____ gallons per year

☐ Diesel _____ gallons per year

☐ Natural Gas _____ therms per year

☐ Petroleum Heating Oil (diesel in stationary uses) _____ gallons per year

☐ Other (specify fuel, units and amount) _____ per year