



## 2012 Renewable Energy Incentive Program (REIP) Biomass Sustainability Determination Information Sheet

REIP offers incentives for projects that generate electricity with Class 1 biomass resources. Depending on the type of feedstock the project intends to use, a biomass sustainability determination from the New Jersey Department of Environmental Protection (NJDEP) **may or may not** be required. Pursuant to N.J.A.C. 14:8-2.5(b), a biomass sustainability determination is **not** required for any of the following:

- Electricity generated by the combustion of methane gas captured from a landfill (landfill gas facilities should document that the methane fuel has a minimum availability of five years);
- Electricity generated by a fuel cell powered by a biomass derived fuel;
- Electricity generated by the combustion of gas from the anaerobic digestion of food waste and sewage sludge at a biomass generating facility;

Other forms of biomass included as Class 1 eligible in N.J.A.C. 14:8-2.5(e), (f) and (g) **are** required to obtain a biomass sustainability determination from the NJDEP. This must be obtained **prior** to applying for any REIP incentives. Therefore, prior to applying for a rebate, an applicant must submit a letter to the NJCEP Account Manager at the address below requesting a biomass sustainability determination. The Account Manager, after reviewing/ascertaining the completeness of the information provided, will forward your request along with all supporting project documentation to the NJDEP. Forms of biomass listed in N.J.A.C. 14:8-2.5(l) are not eligible for REIP incentives.

For biopower projects requiring sustainability determination by the NJDEP, the following criteria must be satisfied:

### **1. Sustainable Supply of Biomass Feedstock**

Each project must document and provide evidence of the continued availability of the biomass fuel feedstock to satisfy the REIP requirements. This information includes the percentage of biomass fuel feedstock that is derived from a certified, sustainable biomass source and how the applicant intends to procure enough biomass feedstock to support the project. The submitted information must include, at a minimum, the applicable requirements as outlined in Table 1.

**Table 1: Required Information Relating to Biomass Feedstock**

<b>Feedstock</b>	<b>Evaluation Criteria</b>
Non-Food, Non-Sewage Sludge Biomass Fuel (N.J.A.C.14:8-2.5 [d3])	Use of existing Best Management Practice (BMP) in accordance with NJ regulatory standards.
Dedicated Bio-Energy Crop (N.J.A.C. 14:8-2.5 [d1])	<ul style="list-style-type: none"> <li>- Sustainability (BMPs) plan for specific bio-energy crops;</li> <li>- Use of native crops;</li> <li>- Use of marginal croplands not used for food and that do not displace food crops.</li> </ul>
Forest-Derived Residues (N.J.A.C. 14:8-2.5 [d2])	Forest biomass harvested or collected in a manner not to create adverse ecological impacts
Non-Forest Wood Waste (N.J.A.C. 14:8-2.5 [d4])	Non-treated, metal-free, unadulterated wood material produced by a Class B recycling facility
All/ All Others Not Otherwise Listed in N.J.A.C. 14:8-2.5	<ul style="list-style-type: none"> <li>- Biomass quality (high content of plant or animal matter)</li> <li>- Greenhouse gas (GHG) emissions reduction/savings</li> <li>- Net energy balance</li> <li>- Soil quality and fertility to ensure no nutrient depletion and organic content loss</li> <li>- Water use efficiency and water use reduction satisfying water allocation and water quality standards</li> <li>- Wildlife habitat protection to ensure biodiversity conservation</li> <li>- Maintenance of land productivity for alternative uses</li> <li>- Reduction/elimination of point and nonpoint wastewater discharge</li> </ul>



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### 2. Fuel Manufacturing and Use Process

Documentation must include a description of the fuel manufacturing process, including all equipment used in the preparation and conversion of the feedstock, gas cleanup, and disposal of solid and liquid waste streams. Also, documentation of acceptable disposal or reuse of solid and liquid waste must be submitted. For manufacturing and operational activities resulting in the generation of ash, information regarding ash management as outlined below and required by N.J.A.C. 7:26-2B, must be submitted.

#### A. Ash management information requirements per N.J.A.C. 7:26-2B

1. The expected daily quantity of bottom ash, fly ash (air pollution control train residues), post-combustion waste residue generated by facility operations, referenced by weight and projected volumes. [N.J.A.C. 7:26-2B.4(a)6]
2. The proposed ultimate disposal location for all facility generated waste residues and the proposed alternate disposal locations for any unauthorized waste types, which may have been unknowingly accepted. The schedule for securing contracts for the disposal of these waste types at the designated locations shall be provided. [N.J.A.C. 7:26-2B.4(a)7].
3. The composition, data for the proximate and ultimate analysis of solid waste, indicating percent by weight, generated within the service area shall be defined for ash, among others. [N.J.A.C. 7:26-2B.4(a)14iii(2) & iv(1)]
4. Description of combustion chamber design to allow ash discharge. [N.J.A.C. 7:26-2B.4(b)4]
5. Description of vessel design for ash quenching. [N.J.A.C. 7:26-2B.4(b)5]
6. Plan for compliance with pre-disposal requirement for ash analytical classification, testing, and reporting. [N.J.A.C. 7:26-2B.4(m) through (r)].

#### B. Emission Levels from Fuel Use

The project must meet applicable emission standards to satisfy New Jersey's regulatory requirements. Therefore, SOTA applicability will be evaluated by NJDEP in accordance with the processes and thresholds defined within the New Jersey Air Pollution Control Act regulations at N.J.A.C. 27:8 and 27:22. Table 2 describes the required information that must be submitted by the applicant for the NJDEP to perform the appropriate SOTA review and/or SOTA analysis. Please note that the submitted information regarding emissions from fuels manufactured from certain feedstocks may require inclusion of independent third party verification performance data and claims. However, this will be determined on a case by case basis.

**Table 2: Air Contaminants Listed at N.J.A.C. 7:27-8**

Contaminants	Emission Rate (lbs/hr)	Emission Rate (tons/year)
Total Volatile Organic Compounds (VOCs)		
Total Suspended Particulates (TSP)		
Particulate Matter (PM-10)		
Nitrogen Oxides (NO <sub>x</sub> )		
Carbon Monoxide (CO)		
Sulfur Dioxide (SO <sub>2</sub> )		
Each TXS [air contaminants as defined in N.J.A.C. 7:27-17.3]		
Each Hazardous Air Pollutant (HAP) listed in Appendix 1 Table B of N.J.A.C. 7:27-8		
Any 112 (r) [defined in section 112 of the federal Clean Air Act (CAA)] air contaminant; any stratospheric ozone depleting substance; or any greenhouse gas except carbon dioxide.		



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NJDEP's review of an administratively complete sustainability determination application will be completed within 60 days. However, projects that propose the use of certain biomass feedstocks, for which there are no verified performance data, may encounter delays in the NJDEP's SOTA review process. In such cases, the review process may exceed 60 days.

In addition to determining if the biomass is sustainable in order for NJCEP administrators to calculate the rebate, applicants are required to submit documentation to support the system rated net continuous output, per the equipment specification sheets.

The REIP includes additional incentives for biomass systems that include a heat component which recovers and reuses the waste heat. If applying for the combined heat and power (CHP) rebate, additional documentation supporting the heating system is required. If you have not already done so, it is important that you contact your municipality as soon as possible to learn more about any other approvals required to install biopower equipment. Note: NJDEP Solid Waste Management regulations require inclusion of waste collection/processing facilities in the respective New Jersey County's Solid Waste Management Plan in which these facilities will be located.

When you submit a complete biopower application packet, you will receive a rebate approval letter within 4 – 6 weeks of receipt, assuming that all eligibility requirements are met.

For assistance on the application process, please contact Ron Reisman at 732-218-3721 or rreisman@veic.org.

**Mail or hand deliver application only; faxes and e-mail are not accepted**

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