

# Biomass Renewable Energy Standard

## SECTION 1: Introduction

Act No. 56 of the Acts of 2015 established a Renewable Energy Standard and Energy Transformation Program for electric utilities in the State of Vermont which specifically includes biomass to produce electricity. Act 56 amended Chapter 87 of Title 10 of the Vermont Statutes Annotated to add a new section 2751, which requires the Commissioner of the Department of Forests, Parks and Recreation to adopt rules that establish renewability standards for forest products used to generate energy by distributed renewable generation and energy transformation projects within the Renewable Energy Standard. 10 V.S.A. §2751. These standards may include minimum efficiency requirements for wood boilers and requirements for harvesting and procurement. In developing these rules, the Commissioner shall consider differentiating the standards by type of forest product and scale of forest product.

## SECTION 2: Policy and Purpose

The policy and purpose of the Biomass Renewable Energy Standard is to promote the sustainable use of forest resources and to ensure long-term forest health and sustainability through harvesting and procurement of biomass.

## SECTION 3: Authority

This rule is adopted pursuant to 10 V.S.A. §2751, 3 V.S.A. §801(11) and 3 V.S.A. §2853(5).

## SECTION 4: Applicability

The Biomass Renewability Energy Standard applies to all utilities that: offer incentives on wood-fired appliances as part of their Tier III programming; or all generation from biomass electric generation facilities; or combined heat and power (CHP) facilities that utilities claim towards their Tier II requirements.

## SECTION 5: Definitions

**5.1 “AMPs”** shall mean the rule entitled “Acceptable Management Practices for Logging Jobs in Vermont” adopted by the Department of Forests, Parks and Recreation.

**5.1 “Combined heat and power (CHP) facility”** shall have the same meaning as in 30 V.S.A. §8015(b)(2).

**5.2 “Distributed renewable generation”** shall have the same meaning as in 30 V.S.A. §8005(a)(2).

5.3 ***“Distribution Utilities or DUs”*** refers to the 17 electric distribution utilities in Vermont, as authorized by the Public Utility Commission.

5.4 ***“Energy transformation project”*** shall have the same meaning as in 30 V.S.A. §8002.

5.5 ***“Micro CHP Facility”*** means a system with 5kw or less of electric generating capacity.

5.5 ***“Renewability”*** means capable of being replaced by natural ecological processes or sound management practices.

5.6 ***“RES”*** means the Renewability Energy Standard established in 30 V.S.A. §8004 and §8005.

5.7 ***“Tier II”*** means the distributed renewable generation RES category as defined in 30 V.S.A. §8005.

5.8 ***“Tier III”*** means the energy transformation RES category as defined in 30 V.S.A. §8005.

5.10 ***“UVA”*** shall mean the Use Value Appraisal Program established by 32 V.S.A. §§375- - 3777.

## SECTION 6: Biomass Renewable Energy Standard

### 6.1 Tier II Distributed Renewable Energy Projects

To qualify as a Tier II Energy Transformation Project for the purposes of this Rule and Chapter 89 of Title 30 of the Vermont Statutes Annotated, biomass electric generation facilities and combined heat and power (CHP) facilities shall comply with the following:

1. Forestland located within the State of Vermont:
  - a. Wood fuels shall be sourced from forests that are currently enrolled and in good standing in UVA; or
  - b. For wood fuels sourced from forestland in Vermont but not enrolled in UVA, a licensed forester shall certify that the harvest area that is producing the wood fuel complies with the Vermont UVA Management Plan standards applicable to the harvest, the AMPs and all applicable Vermont forestry related laws.
2. Forestland located outside of the State of Vermont:
  - a. Wood fuels that are sourced from forestland outside of Vermont may qualify as fuel for a Tier II Energy Transformation Project provided a licensed or SAF certified forester in the state in which the forestland is located certifies that the harvest area that is producing the wood fuel complies with the Vermont UVA Management Plan standards applicable to the harvest, and all applicable state and local forestry and water quality related laws within that jurisdiction.

### **3. Requirements for all forestland within or outside of the State of Vermont:**

- a. **Land Conversion:** Wood sourced from forestry operations on land being converted from forest to non-forest does not qualify as renewable.
- b. **Certification:** The certification required in 1.b. and 2 of this section shall be a document which: identifies the requirements applicable to the harvest producing the wood fuel; certifies that the harvest producing the wood fuels complies with the requirements of this Rule; and is signed by the forester making the certification. The biomass electric generating facility shall maintain a copy of the forester certification and shall make the certification available upon request by the Commissioner of the Department of Forests, Parks and Recreation or the Commissioner of the Department of Public Service. These records shall be kept for a minimum period of four years.

## 6.2 Tier III Energy Transformation Projects

To meet the renewability standard for the purposes of Chapter 89 of Title 30 of the Vermont Statutes Annotated, wood-fired appliances shall either receive a permit to construct from the Vermont Air Quality & Climate Division, or meet the minimum performance requirements set forth in Table 1. The Table 1 performance requirements apply to all wood fuel types, including cord wood, wood pellets, green wood chips, dry wood chips.

Table 1

Appliance	Performance Requirement
Pellet Stove	Must be EPA Certified on date of installation
Wood Stove	Must be EPA Certified on date of installation
Automated Pellet Boiler or Furnace	≥85% efficiency**
Wood Chip Boiler	≥78% efficiency***
Cordwood Boiler – Up to 350,000 Btu’s	Must be EPA Certified on date of installation
Cordwood Boiler – Over 350,000 Btu’s	Not Eligible
Micro CHP Facility	≥85% efficiency**
District Energy System	DES that capture waste heat from an existing installation are fully eligible

\*\*Meaning a higher heating value or gross calorific value of 85 percent or more on a peak efficiency basis and as measured by an accredited lab or organization.

\*\*\* Meaning a higher heating value or gross calorific value of 78 percent or more on a peak efficiency basis and as measured by an accredited lab or organization.