



## Renewable Energy Credits

### What Are RECs?

Renewable energy certificates or renewable energy credits (RECs) are the tracking and legal attribute that qualifies electricity as “green” or a renewable energy source. Once generated, electricity flows into a common pool (the grid) where it cannot be physically traced to its source or end use.

The system of tracking attributes via RECs is the only legal way of characterizing the renewable nature of different sources of electricity. RECs can be separated, or “unbundled,” from the electric output and sold to anyone that needs renewable credits to comply with its state renewable portfolio standard or wants to purchase renewable energy. Whoever buys the RECs has paid an extra cost to bring renewable energy to the grid and has the only legal claim that their energy is renewable.

Electricity that has its RECs stripped away and sold is called “null electricity.” Null electricity is not renewable and is simply unspecified and undifferentiated power from the electric grid.

### Benefits of RECs

- ✓ A way to combat climate change and reduce your carbon footprint
- ✓ Promotes sustainability efforts
- ✓ Makes renewable energy more cost competitive
- ✓ Increases current and future demand for renewable energy
- ✓ Ensures more clean energy is added to national grid, thereby lessening our dependence on dirty fuels like coal and natural gas.

### How are RECs Handled in VT?

- Many Vermont renewable energy projects keep their RECs, a few examples include:
  - ✓ Middlebury College
  - ✓ Vermont Public Radio
  - ✓ State of Vermont
  - ✓ Small Dog Electronics
  - ✓ Champlain Orchards
  - ✓ Morse Farm
  - ✓ Merchants Bank
  - ✓ Starksboro Elementary School
  - ✓ Town of Hinesburg
  - ✓ Vermont Smoke & Cure
  - ✓ Private individuals – residential & small businesses (selling RECs on market isn’t an easy task and buyers don’t offer large sums for small amounts)
  - ✓ Gardener’s Supply
  - ✓ Woodchuck Hard Cider
  - ✓ Vermont Law School
  - ✓ Estimated Total: More than 20 MW Statewide\* (REV is just beginning to compile this data).
- Although selling RECs waives the rights to claim renewable energy, it does not change that clean energy is being built and produced.
- ***REC sales have helped reduce electric rates in Vermont by around 5 percent (2013) and deploy renewable generation and clean energy infrastructure around the state.***
- **With the passage of Act 56 in 2015, Vermont will be required to meet 55% of their energy sales from renewable energy in 2017 and 75% in 2032. Consequentially, more RECs will be retired in state and, with a great deal of renewable energy infrastructure already in place with the help of financing through early REC sales, these goals will be easily attainable!**
- Vermont’s Renewable Energy Standard (RES) prevents utilities from selling off RECs from distributed generation in Vermont if the RECs are sold or surrendered to the utility (Tier II).

- Vermont Standard Offer Program project RECs are given to the utilities on quarterly basis through NEPOOL-GIS.
- Currently a high demand exists from other New England states to obtain RECs in order to meet their (mandatory) Renewable Portfolio Standards that can be obtained either through building renewable infrastructure or by purchasing RECs.
  - Because of this demand, some Vermont renewable projects sell their RECs out of state, driving down initial costs for renewable energy projects and making them more competitive with traditional dirty fuels.
  - This sale of RECs is only temporary (usually on 1, 3 or 5 year contracts called “strips”).

### **Recent Draft of Board Net Metering Rule**

- Net metered renewable energy projects contribute value to Vermonters through:
  - Avoided Energy Cost (avoided generation capacity and “peak shaving” to reduce spot market exposure)
  - Avoided transmission cost
  - Distribution benefits
  - Environmental attributes (no to low pollution, cleaner air & water, climate change mitigation, etc.) even excluding REC values.
- The Public Service Board’s latest draft net metering rule (5.100) penalizes Vermonters, regardless of whether they choose to keep RECs or surrender them to the utility:
  - Customer surrenders REC to utility = + \$0.03/kWh for 10 years [Customer loses any value for REC after the 10 year period]; or
  - Customer keeps REC = - \$0.03/kWh for life of the project.

### **How are RECs Handled Elsewhere?**

- Currently 37 states have some form of renewable energy RPS or renewable energy goals.
- Many of these states meet these goals by purchasing (also known as trading) RECs from other markets.

### **Who Purchases RECs**

- Utilities and other load serving entities, enabling them to offer their customers renewable power.
- Businesses, government agencies, and non-profits to offset carbon footprint, making their products/services more sustainable.
- Building professionals in order to qualify for points under the LEED Green Power Credit.

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