

VERMONT STATUTORY FINANCIAL INCENTIVES FOR RENEWABLE ENERGY
Office of Legislative Council, Oct. 30, 2017

PROGRAM/STATUTE	DESCRIPTION	INCENTIVE
<p>Net metering 30 V.S.A. § 8010</p>	<p>With Public Utility Commission (PUC) approval, a customer or group of customers may install and operate renewable electric generation of 500 kW or less. The electricity generated offsets energy consumed by the customer from the utility and the customer receives bill credit for excess generation.</p>	<p>Calculated as follows (per PUC rule): <u>Step 1:</u> Blended residential rate,” to be the lowest of the following: <ul style="list-style-type: none"> • Company’s general residential service rate, • Blend of company’s residential block rates, or • Statewide average rate <u>Step 2:</u> Apply siting adjustor <ul style="list-style-type: none"> • < 15 kW, plus \$0.01/kWh • 15 – 150 kW, if on preferred site, plus \$0.01/kWh • 15 – 150 kW, if not on preferred site, minus \$0.01/kWh • 150 – 500 kW, minus \$0.03/kWh, only allowed on preferred sites • Hydroelectric facilities, no site adjustor <u>Step 3:</u> Apply REC adjustor <ul style="list-style-type: none"> • Transfer REC to utility, plus \$0.03/kWh • Retain REC, minus \$0.03/kWh Source: PUC Rule 5.127 </p>
<p>Standard offer 30 V.S.A. § 8005a</p>	<p>New renewable generation in Vermont, with a plant capacity of 2.2 MW or less, may enter into a long-term contract with the Standard Offer Facilitator appointed by the PUC. The rate varies by technology. The Facilitator allocates the power, capacity, RECs, and costs among the electric utilities. The PUC through the Facilitator issues requests for proposals for annual increments of capacity until the program reaches a cumulative capacity ceiling of 127.5 MW, with exceptions for some plants.</p>	<p>Recent Pricing. 2017 awards to successful bidders (prices rounded to nearest ¢): <ul style="list-style-type: none"> • solar – multiple projects, ranging from at \$0.09/kWh to \$0.12/kWh • small wind (≤ 100 kW) – \$0.25/kWh, one project • food waste – \$0.21/kWh, one project, one project Source: Vermontstandardoffer.com </p>

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<p>Renewable energy standard (RES) 30 V.S.A. §§ 8004-05</p>	<p>The RES requires that electric distribution utilities have ownership of sufficient renewable energy plants or sufficient tradeable renewable energy credits (RECs) that reflect the required amounts of renewable energy. There are three categories or tiers:</p> <p>1. <u>Total renewable energy</u>: 55 percent of each distribution utility’s retail sales in 2017, rising to 75 percent on and after 1/1/32. Must be bundled energy (power from renewable energy with environmental attributes attached) or RECs generated by a plant capable of delivering energy to New England</p> <p>2. <u>Distributed renewable energy</u>: one percent of each distribution utility’s retail sales in 2017, rising to 10 percent on and after 1/1/32; counts toward Tier 1. Must be bundled energy or RECS generated by “new” renewable energy (in service after 6/30/15) that is either: (a) 5 MW or less and directly connected to the Vermont grid or (b) an approved net metering system.</p> <p>3. <u>Energy transformation</u>: two percent of each distribution utility’s retail sales in 2017, rising to 12 percent on and after 1/1/32; does not count toward Tier 1 or 2. “Energy transformation project” is defined as an undertaking that delivers energy goods or services other than electric generation and results in a net reduction in fossil fuels consumed by the utility’s customers and greenhouse gas emissions associated with that consumption. Examples: home weatherization, air source heat pumps, grid storage.</p>	<p><u>Total renewable energy (Tier 1) REC price</u></p> <ul style="list-style-type: none"> • To be established by market • Statutory alternative compliance payment (ACP): \$.01/kWh; increases with inflation starting 1/1/18; acts as cap on Tier 1 REC price <p><u>Distributed renewable energy (Tier 2) REC price</u></p> <ul style="list-style-type: none"> • To be established by market • Statutory ACP: \$.06/kWh; increases with inflation starting 1/1/18; acts as cap on Tier 2 REC price <p><u>Energy transformation (Tier 3)</u></p> <ul style="list-style-type: none"> • Incentive will vary by project • Statutory ACP: \$.06/kWh; increases with inflation starting 1/1/18

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<p>Clean Energy Development Fund (CEDF) 30 V.S.A. § 8015</p>	<p>The CEDF promotes “the development and deployment of cost-effective and environmentally sustainable electric power and thermal energy or geothermal resources for the long-term benefit of Vermont consumers, primarily with respect to renewable energy resources, and the use of combined heat and power technologies.” The Fund is managed by the Department of Public Service. Plans, budgets, and program designs are developed by a seven-member Clean Energy Advisory Board. The Fund has issued grants and loans for a variety of activities within its mission. No moneys have been appropriated into the Fund since FY 14, according to the Fund report of Jan. 2017. As of that report, the fund balance was approximately \$5.4 million.</p>	<p>The incentives offered by the Fund change over time. Among the initiatives currently supported by the Fund is the Small-scale Renewable Energy Incentive Program, whose current offerings include:</p> <p><u>Solar Hot Water</u> Residential: \$0.40/kWh/yr, up to \$3,000. Commercial: \$0.40/kWh/yr, up to \$16,500. Special Category (e.g., low-income housing, public schools): \$0.80/kWh/yr, up to \$45,000.</p> <p><u>Advanced Wood Pellet Heating (high efficiency)</u> Flat-Rate Incentive (Residential, Commercial/Industrial): \$3,000 Custom Incentive (Residential, Commercial/Industrial): \$1.25/sq-ft heated space connected to the system, up to \$60,000. Custom Incentive (Public-Serving Institutions): \$1.25/sq-ft heated space connected to the system, up to the lesser of \$80,000 or 50% of installed cost.</p> <p>Source: DSIRE</p>
<p>Green Mountain Power (GMP) Cow Power Program 30 V.S.A. § 8003</p>	<p>This program offers GMP customers the opportunity to purchase renewable energy for a price above the retail cost of electricity. Through the program, GMP offers a production incentive by purchasing RECs from farmers who own systems utilizing anaerobic digestion of agricultural products, byproducts, or wastes to generate electricity.</p>	<p>\$0.04/kWh</p> <p>Source: DSIRE</p>

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Education property tax, wind 32 V.S.A. § 5402c	Education property tax is assessed on electric energy output rather than property value	Tax rate of \$0.003/kWh
Property tax, solar: exemption and uniform capacity 32 V.S.A. §§ 3802(17), 8701	<ul style="list-style-type: none"> • A solar renewable electric generation system up to 50 kW is exempt from the education and municipal property taxes • A solar renewable electric generation system of 50 kW or greater pays the education property tax at a uniform rate based on capacity 	Uniform capacity tax: \$4.00/kW
Local option: property tax exemption 32 V.S.A. § 3845	Vermont municipalities are enabled to exempt renewable energy sources from real and personal property taxation	Adoption will vary by municipality
Investment tax credit 32 V.S.A. § 5822(d)	Installations of renewable energy equipment on business properties may receive a State tax credit equal to 24% of the “Vermont-property portion” of the federal business energy tax credit (which is 30 percent of expenditures for solar and 10 percent for geothermal).	<ul style="list-style-type: none"> • For solar, small wind, and fuel cells, the result is a 7.2% State-level credit for systems placed in service on or before 12/31/2019. This credit will step down to 6.24% for systems placed in service by 12/31/2020 and 5.28% for systems placed in service by 12/31/2021. After this date, solar technologies will be eligible for a 2.4% credit. • The geothermal tax credit is 2.4% indefinitely. <p>Source: DSIRE</p>
Sales tax exemption 32 V.S.A. § 9741(46)	Exempts from the sales tax tangible personal property to be incorporated into net metering systems, off-grid renewable systems similar to net metering systems, or solar water heating systems	Sales tax of six percent is not charged

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Property-assessed Clean Energy (PACE) 24 V.S.A. chapter 87, subchapter 2	With voter approval, a municipality may create a PACE district that provides an opportunity for residential property owners to borrow to finance energy improvements including renewable energy. The property owner agrees to a special assessment and lien by the municipality on the property.	Low-cost financing. As of 10/29/17, the website of Efficiency Vermont (EVT) indicates no new applications are being taken. EVT provides municipalities with the assistance to implement this program.
Vermont Sustainable Energy Loan Fund 10 V.S.A. chapter 12, subchapter 13	This chapter authorizes the Vermont Economic Development Authority (VEDA) to make loans for “sustainable energy,” the definition of which includes renewable energy.	Among the loans offered are (Source: VEDA): <ul style="list-style-type: none"> • Commercial Energy Loan Program: Loans up to \$2 million to finance qualifying renewable energy generation and energy efficiency projects. • Agricultural Energy Loan Program: Loans to Vermont agricultural and forest product-based businesses to finance qualifying renewable energy generation and energy efficiency improvement projects, and to adopt technologies that enhance or support the development and implementation of renewable energy or energy efficiency, or both.
Vermont Village Green Renewable Pilot Program 30 V.S.A. chapter 93	This program consists of two district heating projects using renewable fuels to serve end users in designated downtowns or growth centers in Montpelier and Randolph. Other municipalities may participate if either or both of those towns decline. Projects may include district power. If wood is the fuel, the project must meet fuel efficiency requirements.	End users connecting to the project are eligible to receive funds from the CEDF to be applied to the cost of connecting to the project, and the CEDF is required to provide at least \$100,000 in incentives for this purpose. Also, if district power is included, special electric rates can be set by the PUC.
Incentives Available to Energy but Not Energy-Specific 10 V.S.A. § 9-11, 32 V.S.A. §§ 3330, 3335	<ul style="list-style-type: none"> • Vermont Community Loan Fund • Local Investment Credit Facility • VEGI – Enhanced Incentives for Environmental Technology Businesses 	Will vary by program