



Fiscal Year 2015 Summary

The CEDF continued its transition from broad-based support of all renewable energy technologies, to a focus on a strategically chosen renewable energy. In FY15 the focus was on advanced wood heating. As FY15 commenced, the CEDF wound down its residential PV incentive/rebate program, added new finance programs to support the PV market's transition away from the rebate program, and established new advanced wood heating programs.

Highlights for FY15 Include:

1. Restructuring of the Small Scale Renewable Energy Incentive Program (SSREIP)
FY 2015 saw the end of the solar PV incentive that the SSREIP had offered since 2004. On December 31, 2014 the PV incentive ended. There was a surge of reservations at the end of the program and projects were still being installed during the fourth quarter of the fiscal year that received incentive reservations in December. Despite the elimination of the incentive the SSREIP had another year of increased installations of residential PV projects.
2. Focus on Advanced Wood Heating
The 2013 Strategic Plan found that, in order to maximize its effectiveness, the CEDF needed to focus its efforts on one sector or technology of the broader clean energy market. As part of its FY15 Plan, the CEDF selected Advanced Wood Heating as that focus. The largest investment in this sector was a \$1.6 million grant to a consortium working to promote advanced wood heating in Windham County.
3. Community Solar Projects
Six community solar PV projects received CEDF grants this fiscal year, leading to the development of 462.5 kW of new PV capacity in the state. These projects represent the Fund's continued effort to support distributed net metering facilities with municipalities and schools that have community support and ownership.
4. 2nd Vermont Clean Energy Industry Report
Like the year before, FY15 showed strong growth in the Vermont clean energy economy. The number of workers involved with clean energy activities grew by 6.2% to reach 16,231, an increase of more than 1,400 since 2013. This represents approximately 4.8% of the state's workforce. This figure corresponds to a growth rate of 9.8% since 2013. The CEDF commissioned the state's second report, which confirmed the growth of Vermont's clean energy sectors. This report showed that there are 2,519 clean energy businesses throughout the State.
5. Program Evaluation
The NMR group conducted a process and impact evaluation of near 1,000 CEDF and ARRA awards totaling \$64.1 million. The evaluation revealed the CEDF has had a very high net positive impact in the clean energy economic sector. While there were process recommendations for improvements there were no major process or administrative problems identified.

Current CED Board (affiliations), Appointing Authority, and Year Term Ends:

- Jared Duval (*Agency of Commerce and Community Development*) PSD Commissioner, 2019
- Linda McGinnis (*Energy Action Network*), PSD Commissioner, 2017
- Johanna Miller (*Vermont Natural Resources Council*), House Energy Committee Chair, 2017
- Janice St. Onge (*Vermont Sustainable Jobs Fund*), PSD Commissioner, 2019
- Sam Swanson, Vice Chair (*Pace Energy and Climate Center*), Senate Energy Committee Chair, 2019
- Gaye Symington, Chair (*High Meadows Fund*), House Energy Committee Chair, 2019
- Mark Whitworth (*Energize Vermont*), Senate Energy Committee Chair, 2017

Figure 2 – Fiscal Year SSREIP Incentives, Expenditures, and kW installed for Solar PV

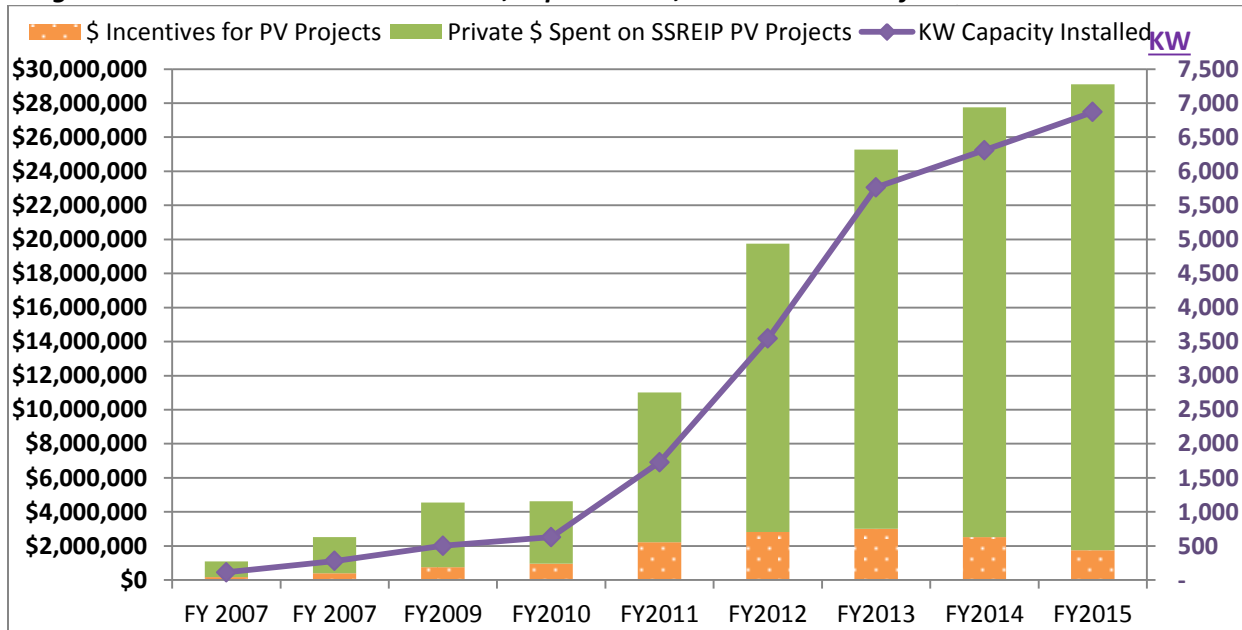
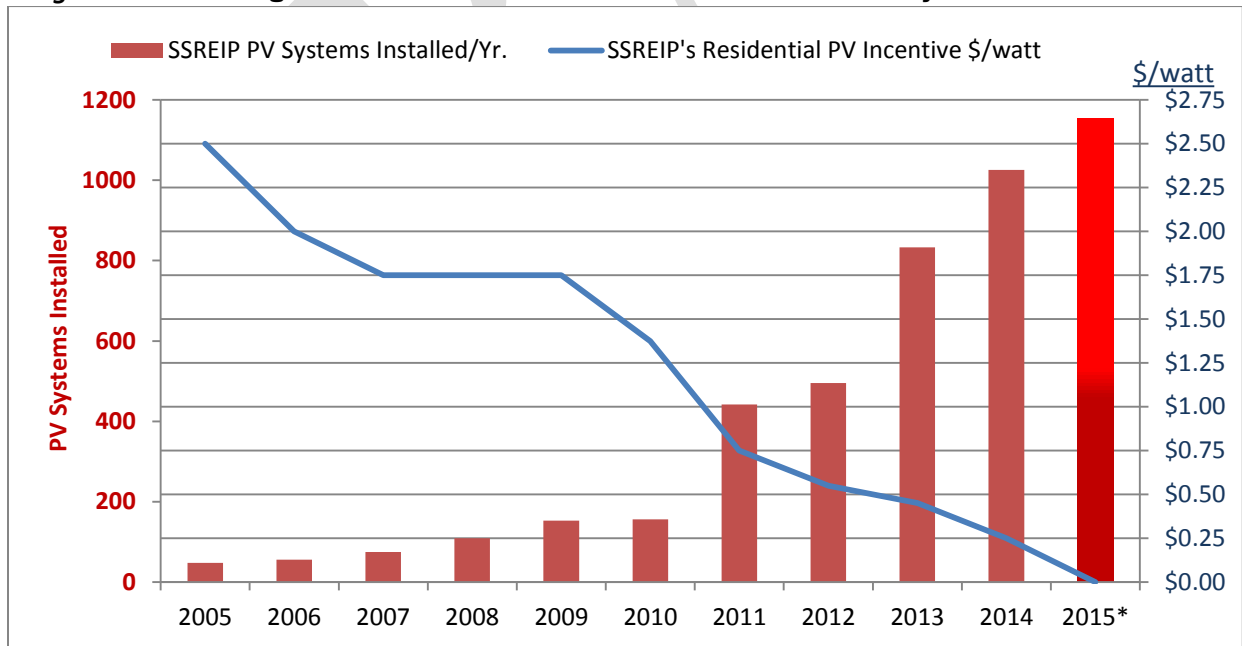


Figure 3 – SSREI Program Incentive Levels and Number of Solar Photovoltaic systems installed¹



¹ SSREIP and DPS data. 2015 data includes net metered CPG applications for solar PV systems (of 15kW or less) that would have been eligible for an SSREIP incentive had such incentives been available in 2015.

FY15 Funding Activities

Table 2 provides a summary of the funding activities conducted by CEDF in FY15. Clean energy grants totaled \$3.38 million during the fiscal year for projects totaling \$6.38million. The SSREIP issued \$1.91 million of incentives for total project costs of \$30.50 million while the Fund contracted for \$163,256 of services. Total activity amounted to \$5.45 million in outlays that yielded total investments of \$37.04 million.

Fiscal Year 2016

During the first half of FY16, addition elements of CEDF's Strategic Plan were put into action. This section provides a brief synopsis of CEDF activities from July to December 2015.

- **Vermont Clean Energy Industry Report 2016** – The CEDF has commenced the third of the three clean energy industry surveys to yield insight into trends in the clean energy industry. The third report is slated for completion in the spring of 2016. The final in the series will explore the biomass subsector as a part of the Fund's current focus. At the end of 2015, the CEDF learned that the methodology employed in Vermont is now being used as part of a national survey on energy jobs.
- **Windham County Renewable Energy Program**
In December, CEDF issued a solicitation to invite businesses, government entities and organizations to submit a Letter of Intent to apply for a CEDF grant to create and administer a \$400,000 renewable energy grant program for Windham County. This program is intended to help accelerate deployment of solar PV, advanced wood heating and other renewable energy technologies in the southeastern portion of the state.
- **Wood Pellet Bulk Delivery Program**
Part of the task for building a viable wood pellet industry entails transitioning pellet consumers from individual bag storage to bulk storage through which fuel companies can readily supply larger volumes of pellets to their customers. Doing so requires investment in infrastructure such as bulk pellet deliver trucks, delivery depots, and bulk filling stations at pellet mills. In the fall of 2015, CEDF issued a Letter of Intent seeking companies interested in applying for grants to support development of this infrastructure. Support for the bulk pellet delivery market is required to follow the four components of CEDF's definition of advanced wood heating: 1) uses highly efficient combustion technology, 2) emits low levels of particulates and pollution, 3) supports healthy forest ecosystems, and 4) produced using local wood. The total available through this LOI is \$600,000 with a maximum award of \$250,000 and a 65% cost share.
- **Clean Heat Community Challenge Grants**
In the fall of 2015, CEDF offered preliminary grant awards to six entities to install advanced wood heating (pellet or chip) systems in their facilities.

Table 2. CEDF Awards for FY15

Funding Type	Award Recipient, (# of Awards)	Technology, Capacity or Type of Activity	Funds Awarded	Total Project Cost Estimated Upon Award	Estimated Annual Energy Production
CONTRACTS & MOUS	-BW Research, Inc.	• Vt. Clean Energy Industry Report	Yr-2: \$48,266 (For a 3-yr \$149,957 contract)	\$48,266	NA
	-NMR, Inc.	• CEDF Evaluation	\$99,990	\$99,990	NA
	-Dept. of Forests Parks and Recreation (MOU)	• State Wood Energy Team	\$15,000	\$15,000	NA
SUBTOTAL: Contracts	2		\$163,256	\$ 163,256	
GRANTS <i>SOLAR PV</i> <i>BIOMASS ENERGY</i> <i>FINANCE PROGRAMS</i>	-Franklin NE Supervisory Union (Richford High School)	• 54 kW Solar PV System	\$45,500	\$130,000	52,623 kWh/yr
	-Shrewsbury Mountain School	• 22.5 kW Solar PV System	\$31,250	\$98,350	29,486 kWh/yr
	-Strafford Energy LLC	• 55 kW Solar PV System	\$32,250	\$238,500	76,000 kWh/yr
	-Thetford School Board	• 120 kW Solar PV System	\$125,000	\$470,000	170,000 kWh/yr
	-Town of Waitsfield				
	-Town of Warren	• 85 kW Solar PV System	\$80,000	\$306,609	102,106 kWh/yr
	-Sustainable Energy Outreach Network	• 126 kW Solar PV System	\$80,000	\$462,829	165,304 kWh/yr
	-Casella Waste Management	• Modern Wood Heating Initiative	\$1,600,000	\$3,200,000	
	-Grow Compost	• Food Waste Pilot	\$139,000	\$179,500	
	-VSECU	• Food Waste Pilot	\$131,549	\$172,349	
		• Windham Co. Solar Finance Program	\$300,000	\$300,000	
		• Community Solar Finance Program	\$125,000	\$125,000	
	-NeighborWorks of Western Vermont	• Interest Rate Buy-Down Fund	\$255,167	\$255,167	
	-Vermont Energy Investment Corp.	• PACE Interest Rate Buy-Down Fund	\$200,000	\$200,000	
	-Thermal Energy Finance Pilot Program	• Interest Rate Buy-Down Fund	\$240,000	\$240,000	
SUBTOTAL: Grants		462.5 kW Solar PV	\$3,384,716	\$6,378,084	595.5 MWh/yr
INCENTIVES	SSREIP Installations 1014	Solar PV 6,526 kW (AC)	\$1,755,123	\$29,099,945	7,971 MWh/yr
	61	Solar Thermal 4,155 kBtu/day	\$97,365	\$796,913	270.2 MWh/yr
	21	Wood Pellet 683 kW	\$57,850	\$604,416	1,360.6 MWh/yr
SUBTOTAL: Incentives	1,096		\$1,910,338	\$30,501,274	9,601.8 MWh/yr
TOTAL		Electric 6.99 MW (AC) Thermal 4,155 kBtu/day 683 kWh/day	\$5,458,310	\$37,042,834	Electric 8,566.5 MWh/yr Thermal 1,630.8MWh/yr Combined 10,197.3 MWh/yr