

2015



**FISCAL YEAR 2015
ANNUAL PROGRAM PLAN
& BUDGET ALLOCATIONS**

FOR THE YEAR JULY 1, 2014 TO JUNE 30, 2015

Purpose of the Annual Program Plan & Budget

The purpose of the Annual Program Plan is to identify the initiatives and programs that the Clean Energy Development Fund (CEDF) will pursue during the fiscal year and to establish an annual budget for the expenditure of CEDF funds.

The Annual Program Plan and associated budget represent the CEDF's efforts to meet the goals and approach described in the 2012 CEDF Strategic Plan with the funds expected to be available.

Management & Governance

In accordance with 30 V.S.A. § 8015, the CEDF shall be administered by the Public Service Department (PSD). A Fund Manager hired by the PSD, together with other PSD staff, manages the day-to-day operations of the CEDF.

The Clean Energy Development Board (Board) reviews and approves the CEDF Annual Plan, budget, and program designs. As defined in 30 V.S.A § 8015, the Board consists of seven persons, three appointed by the Commissioner of PSD and two each by the Chairs of the Senate and House Committees on Natural Resources and Energy.

Clean Energy Development Fund Board

The current Board (*and appointing authority*) consists of:

- Gaye Symington, Chair (*House Energy Committee Chair*)
- Sam Swanson, Vice Chair (*Senate Energy Committee Chair*)
- Jo Bradley (*PSD Commissioner*)
- Jennifer Hollar (*PSD Commissioner*)
- Linda McGinnis (*PSD Commissioner*)
- Johanna Miller (*House Energy Committee Chair*)
- Mark Whitworth (*Senate Energy Committee Chair*)

CEDF Goals and Objectives

To guide the CEDF, a five-year Strategic Plan was developed in 2012 (published in January 2013). The Plan was written in order to advance the founding purpose of the CEDF: to promote the development and deployment of cost-effective and environmentally sustainable electric power and thermal energy resources for the long-term benefit of Vermont consumers, primarily with respect to renewable energy resources.¹

The CEDF's principal goal is to increase

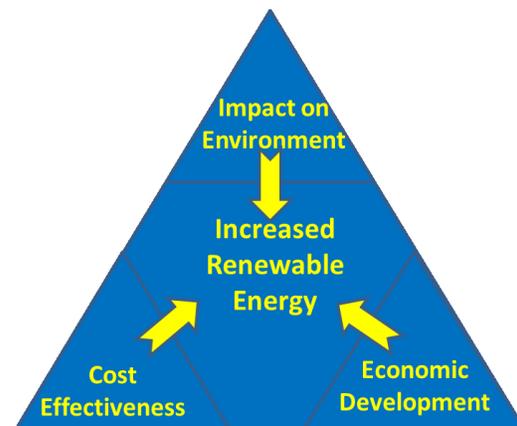


Figure 1.

¹ 30 V.S.A. § 8015 (c)

renewable energy generation while increasing cost effectiveness and economic development of renewable energy and decreasing environmental impacts of the state's energy use. While the goals, objectives, and strategies of the Plan may be pursued independently, they are intended to be considered as a system, where the activities intended to fulfill one objective should also contribute toward fulfillment of the others.

Vision

The vision for the CEDF is to serve the citizens of Vermont by increasing local, small-scale renewable energy generation while maximizing associated economic development. The CEDF coordinates with other State programs and private entities to integrate and advance renewable energy across all sectors of the state's energy economy.

Goal and Objectives

Under the vision is the primary goal of **increased renewable energy generation** in Vermont (thermal and electrical). Supporting the primary goal are three objectives (Figure 1):

1. Advance Economic Development of the renewable energy sector of the economy
2. Increase Cost Effectiveness of renewable energy
3. Decrease Environmental Impacts of Vermont's Energy Use

Strategies

In pursuit of the primary goal and the three objectives, the CEDF will focus on nine strategies:

- 1) Identify funding and deployment barriers to renewable energy development and coordinate with industry, state agencies, and private organizations to develop solutions that overcome those barriers
- 2) Strengthen and build the markets for select distributed renewable energy technologies
- 3) Build connections between the deployment of renewable energy and energy efficiency
- 4) Increase jobs and revenue in the clean energy industry sector of the Vermont economy
- 5) Educate and support clean energy developers and businesses in obtaining other incentives and financing
- 6) Support and strengthen clean energy finance and investment-related activities
- 7) Increase the leverage of CEDF funds while helping to drive the costs of projects down
- 8) Focus support on those technologies and CEDF programs that maximize the reduction of Vermont's energy-related carbon emissions
- 9) Continually evaluate programs, activities, and outcomes in order to adjust programs as necessary to meet goals

Strategic Planning Framework

While this Annual Plan focuses on the programs and spending for one year, the Plan presumes successive years of programs that evolve strategically. The CEDF's planning framework includes the assumption that the CEDF will receive annual funding that is commensurate with the State's clean energy goals² and the CEDF's role in meeting those goals. Given that the CEDF is assuming multiple years of programmatic activity, the CEDF has adopted a strategic planning

² These goals are to: 1) meet 90% of Vermont's overall energy needs from renewable sources by 2050 and 2) reduce Vermont's greenhouse gas (GHG) emissions by 50% from the 1990 baseline level by 2028 and 75% from the 1990 level by 2050.

framework of Knowledge, Practice, and Results (KPR) that offers a multi-year guide to make best use of public resources to accomplish the CEDF goals.

First, advancing the field of clean energy in the state requires Knowledge about what is taking place in the clean energy market. The CEDF will seek to obtain and maintain market knowledge in key clean energy sectors. Secondly, this knowledge will be used to inform the strategic deployment decisions that create programs, or CEDF's Practice. Understanding how CEDF funds stimulate beneficial changes in the marketplace will provide Results that will be evaluated. The evaluation results will provide additional data and knowledge that will be used for improving the CEDF's Practice. These three (KPR) components form a cycle of continuous improvement that can be applied within different clean energy sectors as well as holistically across Vermont's entire clean energy economy.

The CEDF will use the KPR template as the framework to guide program development and strategic allocation of funds. When constructed annually, the KPR template will comprise the framework for the CEDF's annual work plan. Each annual plan can then be linked over time to comprise a multi-year approach intended to evolve robust markets through which companies can offer cost effective renewable energy solutions to Vermont consumers.

Overview of Plan & Budget

Historically, the CEDF has focused on a set of core tools, including rebates offered through the Small Scale Renewable Energy Incentive Program (SSREIP), competitive grants, and targeted loans. After the strategic planning process in 2012, the CEDF transitioned away from loans and instead initiated efforts to support financial products offered by the private market for renewable energy projects. During this time, the CEDF has continued to use the SSREIP rebates as its primary program to effect change. The CEDF reduced the use of competitive grants for installations in favor of working to fill gaps in select markets where an identified barrier stymies growth. For example, the CEDF is working to help develop model solar contracts and guidance for use by municipalities and schools in order to lower the soft costs and increase the local benefits of these community projects.

In this Plan, the CEDF will continue to adopt key strategies of its 2012 Strategic Plan. An important finding of that plan is that the CEDF should try to narrow its scope of work to select renewable energy technologies in order to have the greatest impact. With the funding and staff available, the CEDF cannot effectively or efficiently promote all forms of renewable energy. Since the Strategic Plan was created, it has become even more evident that the CEDF would best serve its mission and meet its vision by focusing its efforts on a strategic sector of the clean energy economy, while monitoring and keeping a pace with all renewable energy technologies and clean energy clusters. This strategy entails deeper market assessments, comprehensive value chain support, and customized approaches that will allow the CEDF to achieve the most progress toward reaching its goals with the dollars invested.

In this plan, the CEDF has selected modern wood heating as its strategic focus. Modern wood heating denotes wood heating that: 1) utilizes highly efficient combustion technology, 2) produces low levels of emissions, 3) supports healthy forest ecosystems, and 4) consumes local

wood. For the CEDF to meet its goals it is imperative that all four of these conditions of modern wood heating are built into program designs.

What is considered “highly efficient”, a “low level of emissions”, a “heathy forest ecosystem” and/or “local wood” will evolve with technology improvements and the CEDF’s program requirements will be adaptive in order that its programs are always leading the wood energy market to improve its performance.

For the purposes of programs developed under this annual plan the CEDF will require that modern wood heating systems meet a 80% efficiency standard and have best available emission control technologies that limit particulates to no more than a 0.2 lb/MMBtu output. The CEDF believes that wood heating can have a positive carbon emission impact through sustainable forest management practices that ensure long-term forest health, biodiversity, and carbon storage. To help ensure this is the case, the CEDF will emphasize the use of local wood, for example wood primarily coming from a fifty mile radius woodshed from where it is consumed. Using local wood also makes it possible for the State to sufficiently monitor and manage the forest resource used for wood heat. The CEDF is committed to working with the Vermont Department of Forest and Parks (and other stakeholders) to promote sustainable harvesting guidelines for forest management.

The CEDF will commit roughly 50 percent of its statewide available funding to the advancement of the modern wood heating sector in Vermont. Together with funds from FY’14, this will result in the CEDF investing over \$1.25 million in transforming Vermont’s heating sector statewide. In particular, the plan is to build the pellet heating market and supply chain throughout Vermont. This new focus on modern wood heat may need to be sharpened or broadened over the next two years based on the CEDF’s evaluations of the market and use of the KPR framework.

For the first time, a portion of CEDF funds must be deployed in a certain county. The agreement between the State and Entergy Vermont Yankee, which resulted in the CEDF receiving over \$5.3 million in April of 2014, requires that at least 50 percent of those funds be spent in, or for the benefit of, Windham County.

After a preliminary investigation into the renewable energy markets of Windham County, discussions with Windham County stakeholders, and receiving public comments, the CEDF made the a similar strategic decision with the \$2.6 million of Windham County funds as it did with the statewide funds - to focus a majority of the new funding in support of a vibrant, integrated and strong modern wood heating market. For Windham County the CEDF will engage with Windham County stakeholders to design a modern wood heating initiative focused on schools and municipal buildings that is aligned with Windham regional economic and development plans, and could best leverage statewide funds and other modern wood heat programs.

The CEDF will continue to support existing program areas, specifically farm-based anaerobic digesters as well as solar thermal and photovoltaic (PV) systems (the latter two mainly through the SSREIP rebates for the first half of the year, but also with support of financing tools). This

plan does make significant changes to the SSREIP, including adding wood pellet boilers as an eligible technology and phasing out PV incentives from the program.

Description of Programs

The programs, and program changes, described below provide details on the CEDF's plan and provide a narrative for the line items in the annual budget (See Appendix A). The dollar amounts allocated to each program are listed parenthetically after each program title.

Windham County Programs (\$2,660,273)

At least fifty percent of the funds the CEDF received from Entergy Vermont Yankee in April 2014 must be spent in – or for the benefit of – Windham County. This represents a significant opportunity for Windham County to address the local effects of the closure of the Vermont Yankee power plant as well as the county's energy and economic future. The CEDF held a public hearing in Windham County, at which the CEDF received oral and written comments, and the CEDF had discussions with regional stakeholders about the funds earmarked for Windham County. The hearing, discussions, and direct proposals received provided the CEDF with a plethora of ideas and insights that the CEDF considered in developing a plan for the deployment of the CEDF Windham County funds.

The CEDF goals of increased renewable energy generation and economic development appear to be in-line with the goals of Windham County as determined by the comments the CEDF has received from Windham County. The CEDF's guiding principle for the Windham funds is similar as for all CEDF resources: how can we make the most progress toward the CEDF goals while simultaneously catalyzing continued growth of the clean energy economy after the CEDF funds have been fully expended? For Windham County the CEDF is also focused on what would best serve the unique Windham regional energy economy. To this end, the CEDF will continue to work with local and regional organizations in Windham County to design and implement the Windham County programs described below.

Similar to the CEDF's overall strategic focus on modern wood heating, the CEDF thinks that the greatest lasting clean energy benefit to the County would be achieved through a strategic, high-profile focus on modern wood heating, with an emphasis on the bulk wood pellet market specifically in the school and municipal building sector and the bulk delivery infrastructure. The CEDF will deploy a majority of the funds earmarked for the County toward this focus area. This aligns well with comments the CEDF received from Windham county residents and the Southeastern Vermont Economic Development Strategy's targeting of green building products.

With a collaborative effort, the CEDF estimates that an investment of \$1.6 million of CEDF funds could be leveraged so that 90 percent of Windham County school children would attend schools heated by wood chips or pellets by the end of 2016. The goal of this initiative will be to install modern wood heating systems in public buildings while maximizing financial leverage along with thermal energy efficiency measures in order to maximize the amount of energy dollars that stay and circulate within Windham County and create a local vibrant wood heating industry. The savings in energy costs resulting from switching to wood heat by the schools and

municipal buildings will not only keep energy dollars local but will reduce operating costs and energy price risks, which will help to lower local tax burdens in the County.

The CEDF will commit resources to engage and collaborate with Windham County groups, state-wide organizations with wood heat and school energy expertise, and State agencies, to first develop a strategic design for this program based on an analysis of the current Windham County wood heating and school energy market. The program design will be coordinated amongst the schools and municipal buildings county-wide, as well with the statewide modern wood heating efforts.

While wood heating will be the focus, the CEDF will also target the solar financing and anaerobic digestion sectors in Windham County. As the availability of statewide rebate funds draws to a close in 2014, the availability of financial products for homeowners that want to install solar systems will be critical to the growth of the Windham solar sector. The CEDF proposes to work with one or more local Windham county financial institutions to support solar financing that will make investing in solar an easy option and will help to build the capacity and depth of the Windham solar market. The CEDF will allocate \$300,000 for this effort.

The CEDF also sees potential in supporting Windham County's anaerobic digestion sector. Like the rest of the state, the implementation of Act 148 is requiring Windham County to support its local food systems and to divert organic waste away from landfills. There are valuable and long-lasting synergies between these efforts and the clean energy goals of the CEDF. More analysis needs to be done, but there are opportunities to leverage state and national programs to build additional farm-based digesters in the County as well as to use digesters to generate energy from food waste diverted from landfills. Windham County has one existing farm digester with capacity to take food waste, and the Solid Waste Management District has already started curbside pickup of food waste. The interest in and support of food-waste to energy through anaerobic digestion was expressed at CEDF's Windham County public hearing and in the Solid Waste Management District's written comments. The CEDF will use \$300,000 to support anaerobic digestion on farms and/or food-waste-only digesters in the County.

In addition to funds that would be used for local partners to help design and develop the Windham County programs, the CEDF proposes to reserve \$400,000 of the Windham County funds while it (along with Windham County stakeholders) develops the County programs and gains knowledge of the local markets so that the funds can be invested to provide the highest benefits to the citizens of Windham County while meeting the goals of the CEDF.

Small Scale Renewable Energy Incentive Program (SSREIP) (\$1,900,000)

The SSREIP³ has been a proven mechanism to grow the residential and small commercial markets for mature small-scale renewable energy technologies in the most widely distributed and accessible way possible. The program's advantages are that it is market based, cost effective, highly leveraged, and simple, and access to the funds is open and transparent. The program currently provides incentives for solar hot water (SHW), PV, and micro-hydro systems.

³ The Vermont Small-Scale Renewable Energy Incentive Program is currently administrated by the Renewable Energy Resource Center (www.rerc-vt.org), under contract to the PSD.

The CEDF will continue the existing program with the following changes:

1. Revise the incentive calculation for SHW to use the Solar Rating Corporation's kWh/day capacity rating instead of its BTU/day rating. This would allow for a more understandable incentive and one that can be readily compared with electric renewable energy generation. As the State looks to measure progress on its total energy goal, being able to measure all energy generation in the same units will help to simplify the effort. Details on this change will be developed and proposed separately in the first quarter of the fiscal year.
2. Working with Efficiency Vermont and others promoting SHW, the CEDF will investigate a plan to install up to 25 energy production meters on SHW systems installed through the SSREIP to collect and aggregate production and efficiency data. This effort, if carried out, is estimated to cost approximately \$10,000.
3. Include a pilot program for incentivizing the installation of up to twenty-five solar air heating systems that will track cost effectiveness of these systems. This program is estimated to cost approximately \$65,000.
4. Reduce the Special Customer Category PV incentive to \$1/watt from the current \$1.25/watt, starting on October 1, 2014. Although Special Customers cannot make use of federal and State tax credits and thus often require a higher incentive to make the investment in a solar system there are other financing options available to such customers that can make PV projects happen without CEDF funding, while still meeting CEDF's goals.
5. Allow entities in the Special Customer Category to be eligible to purchase solar capacity or output of off-site, group net metered systems (under 500 kW in size) of up to 10 kW and receive the normal Special Customer incentive.
6. Pilot a public electric vehicle charging station (level 2 or higher) adder of \$1,000 for PV systems installed by Special Customers. The program would be limited to 10 systems, and will be leveraged/coordinated with other national, regional, and statewide electric vehicle charging programs.
7. End the current \$0.25/watt incentive for residential PV systems on December 31, 2014.
8. Include pellet boiler incentives (at no more than \$2,500 each) that will piggy-back onto Efficiency Vermont's \$1,000 incentive for qualifying high-efficiency bulk-delivery pellet boilers. This incentive would be coordinated with other pellet heating promotion programs and will have energy efficiency requirements for the buildings the systems will be heating. Details of this program will be developed in the first quarter of the fiscal year.

The decision to end the PV incentive for residential customers is significant and is not a decision that the CEDF makes lightly. The CEDF is aware of recent tariffs on Chinese PV modules and other market forces that may cause module prices to increase, after many years of falling. The CEDF is also aware of the impact that the current PV rebate of up to \$2,500 for residential systems has on making the economics of installing PV (in conjunction with falling prices, other state and federal incentives, and new finance products) pencil out for many Vermonters for the first time.

However, the decision faced by the CEDF is not one of having PV incentives vs. not having PV incentives, but rather one of PV incentives vs. having incentives and support for other renewable energy technologies that have not received support (or adequate support) from the CEDF to date and that also serve CEDF goals. There remain non-CEDF incentives and financing programs that will continue to support PV deployment in Vermont. The CEDF Plan for FY 2015 makes the difficult decision to end the residential PV incentives in order to commit the limited CEDF resources to actions that promise to make the greatest contribution to CEDF and State clean energy goals. The expanded commitment to developing Vermont's wood energy resource is made possible by this change.

From its inception through fiscal year 2013, the CEDF has invested \$14.9 million in building the PV sector in Vermont. This represents 42 percent of all CEDF expenditures and allocations made, the most of any one technology. While there is still work to be done to strengthen the in-state PV market, the CEDF and the state as a whole have been successful in maturing the PV industry and solar power in Vermont. Solar power still represents a tiny percentage of the state's energy portfolio, but installations and new proposals are growing at a rate that is outpacing the CEDF's ability to significantly impact the total capacity installed.

However, the PV industry is a valuable pillar of Vermont's clean energy economy, and the CEDF doesn't want to cause a major market disturbance. For this reason, the CEDF will continue to fully fund PV incentives through the first half of FY '15, as long as the incentive reservation is made by December 31, 2014. This should give the market time to prepare for the end of these incentives. The CEDF estimates that this will result in \$1 million of the \$1.9 million allocated to the SSREIP going to support PV installations in FY 2015.

In addition, the CEDF will continue to bolster the PV industry by supporting the credit markets for residential and commercial PV installations (see the *Credit Enhancement Program*, below) with the goal of encouraging Vermont financial institutions to offer a solar loan products that will make going solar simple for the average Vermonter (including those that don't have property on which they can install a solar system).

The SSREIP will continue to reserve for SHW systems the amount remaining (roughly \$180,000) of the \$250,000 set aside for solar hot water systems last year.

The addition of automatic, high-efficiency pellet boilers to the SSREIP will represent the first time, since the addition of micro hydro, that the CEDF has added a new renewable energy technology to the program. This will help to build demand for bulk delivery of pellets, and as such will be part of the CEDF strategic focus on modern wood heating.

Modern Wood Heat – Building The Bulk Pellet Market (\$600,000)

The investment of CEDF funds in the modern wood heat sector represents a significant step toward meeting the CEDF's goals including:

- Increased renewable energy production
- Increased economic development through:
 - Local fuel procurement

- Increased retention of energy dollars within the state
- Installation and service of systems
- Local manufacturing of boilers, equipment, and pellets
- Support of forest products industry
- Support of the working landscape
- Increased energy cost savings for Vermonters
 - Including leveraging increased thermal energy efficiency measures
- Decreased environmental impact of heating
- Decreasing the cost of wood heat to the end customer

This program will incorporate the funds from the FY '14 plan/budget for the Clean Heat Community Challenge that have not been encumbered or spent. The program details will be developed in conjunction with the wood heating program for Windham County and will be done with the assistance of a modern wood heating advisory committee. The advisory committee will be assembled in conjunction with the Department of Forest, Parks and Recreation. The effort will start with the development of a strategic roadmap for the expansion of wood-pellet heating in Vermont.

The CEDF intends for this program to support infrastructure investments to improve and prepare for rapid growth of bulk delivered wood pellets, preferably those manufactured and sold by Vermont companies. This could include support for bulk delivery trucks, delivery depots, pellet mills, bulk filling stations at existing mills, and/or other elements of a cost effective local supply chain. Funding in this program could also go to supporting clustered demand of bulk delivery customers.

Support for the bulk pellet market will follow the four components of CEDF's definition of modern wood heating: 1) uses highly efficient combustion technology, 2) emits low levels of particulates and pollution, 3) supports healthy forest ecosystems, and 4) consumes local wood.

What is considered "highly efficient", a "low level of emissions", a "healthy forest ecosystem" and/or "local wood" will evolve with technology improvements and the CEDF's program requirements will be adaptive in order that its programs are always leading the wood energy market to improve its performance.

While the definitions of these four components will evolve with the market the CEDF will require that modern wood heating systems meet a 80% efficiency standard and have best available emission control technologies that limit particulates to no more than a 0.2 lb/MMBtu output. The CEDF believes that wood heating can have a positive carbon emission impact through sustainable forest management practices that ensure long-term forest health, biodiversity, and carbon storage. To help ensure this is the case, the CEDF will emphasize the use of local wood, for example wood primarily sourced from a fifty mile radius woodshed. Using local wood makes it possible for the State to sufficiently monitor and manage the forest resource used for wood heat.

Farm Energy Program (\$125,000)

The Farm Energy Program will leverage existing efforts by collaborating with others, especially the Agency of Agriculture, Food and Markets, as well as the Agency of Natural Resources and Green Mountain Power's Cow Power program.

In FY 2015, the CEDF will continue to strengthen the current fleet of agricultural digesters with an emphasis on driving down operating and maintenance costs, bringing down the cost of systems for smaller farms, and increasing the use of high-energy, off-farm substrates.

The focus on off-farm substrates will be food waste and will build off the food-waste digester pilot projects started as part of the FY '14 farm energy program. The CEDF believes such systems could have great potential to divert food waste from landfills (as required by Act 148) into renewable energy co-generation plants while also helping the profitability of farms.

This program is also connected to the Windham County proposal and therefore will be coordinated with those efforts, in order to bring the highest benefits to both Windham County and the state as a whole.

Credit Enhancements (\$150,000)

The PSD currently has a federal Department of Energy grant of \$100,000 to help stimulate group net metered projects through credit enhancements. The CEDF has already committed \$27,000 from fiscal year 2014 funds as match towards this effort. The CEDF has decided that to have a successful program another \$100,000 should be added to provide a total of \$227,000 for the program. The credit enhancement would support unsecured loans for up to 10kW of PV capacity (or the equivalent kWh output) that is part of group net metered system not located on the customer's property.

The goal would be able to support the creation of a loan product where the loan payment is cash neutral, or better, compared to the electrical bill savings. The CEDF will also work to incorporate available ARRA funds into this program to include non-group net metered systems (*see ARRA Revolving Loan section below*).

In addition, the CEDF will use \$50,000 to create a pilot loan loss reserve program for a community financial institution to support the addition of renewable heating systems to existing community development business loans that otherwise would not include a heating system upgrade.

Clean Energy Market Knowledge Building (\$125,000)

The CEDF will reserve these funds to build the CEDF's market knowledge during the year as part of its KPR framework. The CEDF already collects market knowledge through its grantees and projects it is involved in. However to best deploy funds the CEDF often needs specific market data or research. This market knowledge will be shared publicly and will be developed in cooperation with renewable energy sector stakeholders in order fill knowledge gaps that are

hindering market development. The CEDF will also seek to leverage these funds by finding partners to fund identified research and/or analysis.

One such analysis could be investigating the three main clean energy heating options available to residential Vermonters: wood, air-to-air heat pumps, and ground source heat pumps and developing information on which technologies are best in which situations, what are the prime system design considerations for each technology, and how do they best integrate with energy efficiency measures and other renewable energy sources.

These funds would not be used to fund feasibility studies of particular projects.

Program Evaluation (\$50,000)

The CEDF Strategic Plan includes a sustained commitment to program evaluation. The CEDF is currently in the process of hiring an evaluation contractor using FY 2014 funds to conduct a process and metric evaluation of the CEDF's administration and grant awards. This evaluation will be completed in the first half of FY 2015. Once the CEDF has the results of that evaluation and continues with FY 2015 programs it will determine the scope of additional evaluation of CEDF programs.

The successful conduct of regular monitoring (as called for in the KPR framework) and evaluation should produce benefits in program productivity that far exceed the costs. These monitoring and evaluation efforts will assess the:

- Contribution the CEDF programs are making to deploying renewable energy in Vermont
- Progress being made toward CEDF objectives
- Cost-effectiveness of the CEDF program investments
- Effectiveness of the CEDF program implementation processes
- On-going performance of funded projects

American Recovery and Reinvestment Act (ARRA) Revolving Loan Funds (\$200,000)

The CEDF created a \$3.8 million revolving loan fund with ARRA funds in 2010. Over \$1 million of the funds loaned out have been repaid and the CEDF estimates another \$200,000 will be repaid in interest and principle in FY 2015. The CEDF closed the loan program to new loans in 2012 while working on the strategic plan and the re-evaluation of all CEDF programs.

The CEDF determined that the best use of these ARRA funds would be to leverage other financial products offered elsewhere, rather than to offer more direct loans. There is no shortage of available debt to finance clean energy projects and a separate CEDF loan program will not spur needed innovation in the financial markets.

Instead of providing direct loans, the CEDF will use the returned ARRA loan funds for credit enhancements, which will best leverage other funds available to support the development of the clean energy finance market in Vermont.

The CEDF will combine this \$200,000 with \$100,000 of the Credit Enhancement program described above for group net metered solar credit enhancements to broaden that program to include all residential solar and not just group net metered PV projects.

Continuing Activities as Part of the Public Service Department

Coordinating Role on State Clean Energy

The CEDF will continue its collaborative work with other state agencies as well as non-profit entities and organizations working on clean energy in Vermont. The CEDF will build upon its current role as a virtual clearinghouse in state government where many turn for information about current policies and funding options. By doing so, the CEDF can also strengthen relationships to help generate broader economic development outcomes such as job growth, increased revenue and clean energy cluster advancement to benefit Vermont.

Vermont Renewable Energy Industry Baseline Analysis:

Modeled on similar reports issued in other states (most notably MA), the CEDF prepared Vermont's first Clean Energy Industry Report. In 2015 we will work with the same contractor (BW Research) to issue the second report of what will be a three-year effort to research, analyze, and document the size, scope, and character of the clean energy industry in Vermont. The CEDF is working collaboratively with the Agency of Commerce and Community Development and the Department of Labor on these reports. These reports will provide a survey framework and baseline data that can be used in the future to gauge the effectiveness of CEDF programs and state clean energy policies on growing this sector of the economy.

APPENDIX A**Fiscal Year 2015 Budget**

CEDF Revenue	FY '15 \$
Entergy Vermont Yankee Escrow Payment	5,320,546
Forecasted Loan Repayments (P&I)	125,296
Other Forecasted Revenue	22,000
Estimated FY '14 Carry Forward	414,234
TOTAL REVENUE	5,882,076
CEDF Expenses	
Programs	\$ Allocations
Windham County Programs	2,660,273
Small-Scale Incentive Program	1,900,000
Biomass Heat - Bulk Pellet Market	600,000
Farm Energy Initiative	125,000
Clean Energy Market Knowledge Building	125,000
Credit Enhancements	150,000
Solar Permitting Training	14,000
Program Evaluation	50,000
Solar Tax Credit Obligation	107,803
Administration	150,000
TOTAL EXPENSES	5,882,076
ARRA Fund Revenue	
Estimated Unencumbered ARRA Loan Funds Available in FY '15	202,129
TOTAL ARRA \$ AVAILABLE	202,129
ARRA FUND ALLOCATIONS	
Community Solar Residential Credit Enhancement	200,000
TOTAL	200,000