

ANNUAL REPORT TO THE LEGISLATURE FISCAL YEAR 2021

[July 1, 2020 – June 30, 2021] Published: January 2022

Submitted to the following Committees of the Vermont General Assembly: Senate Committee on Natural Resources and Energy, Senate Committee on Finance, House Committee on Energy and Technology, and House Committee on Commerce and Economic Development

Summary of Fiscal Year 2021

The FY21 fiscal year (July 1, 2020, to June 30, 2021) was a year of changes for the Clean Energy Development Fund (CEDF or Fund). In the summer of 2020, the Fund focused on the impacts of the pandemic and adjustments that needed be made to our programs and grants. The pandemic slowed down the work of grantees causing some projects and grants to be extended. Installation of CEDF incentivized pellet heating systems decreased 34% compared to FY20, but on the other hand the program did start to install bulk pellet bins for residential customers for the first time. The program installed nineteen bulk pellet bins during the year. In addition, the program starting a coal change-out program that removed four coal stoves and seven coal boilers.

The Fund and the Public Service Department (PSD) worked to implement a plan to wind-down CEDF's programs as funding was expended over the following two years. The CEDF Fund Manager was working part time and other staff at the PSD that had spent a significant amount of time on CEDF programs were transitioning to other work for the PSD. This reduced workforce was in-line with the plan to power-down and preserve the CEDF until there was new funding available.

Actions of the Vermont General Assembly in 2021 caused the CEDF to abruptly change course in the last three months of the fiscal year. The year that started with the CEDF ramping down operations ended with the CEDF preparing to ramp up its activities to design and implement \$15 million in new programs. The legislature added to the State's FY22 budget a \$10 million Affordable Community Renewable Energy Program for low-income Vermonters for the PSD to develop "consistent with the parameters of the CEDF". An additional \$5 million was appropriated to the PSD but with the provision that the allocations of the funds be directed by the Clean Energy Development Board. The funding for these projects was from the federal American Rescue Plan Act funds awarded to Vermont.

The Funds continues to see how its work on building the local advanced wood heating markets yields substantive economic benefits to Vermont and to program participants. The increase in fossil fuel heating prices during the year (a barrel of oil increased from ~\$40 at the beginning of the FY to ~\$75) bring substantial heating cost savings and price stability to those that have switch to AWH in the past and is starting to drive more consumer interest in AWH. However, workforce and other constraints are not allowing the AHW market to take full advantage of its price advantage over heating oil. If the pandemic's constraints lessen then we are expecting a much greater growth of the market in 2022 than we have seen in any other year so far.

The CEDF completed its eighth annual clean energy employment survey, which revealed a pandemic employment in the sector of 17,502 workers. The report showed that clean energy jobs in Vermont declined by 7.4 percent—a loss of roughly 1,400 jobs in 12 months—wiping out four years of job growth. While these are historic job losses for Vermont's clean energy sector, clean energy businesses shed fewer jobs compared to overall statewide job losses. By comparison, the statewide economy contracted by 8.6 percent, displacing an estimated 26,700 workers statewide.

During FY21 the CEDF expended over \$1.3 million with \$129,839 (under 10%) of that for administration expenses, including PSD staff wages for CEDF work.

■ Table of Contents

•	Summary of Fiscal Year 2021	. 1
•	Purpose and Scope of This Report	.3
•	Strategic Planning for the Clean Energy Economy	.3
•	Authority, Funding & Resources	.4
•	Administration & Program Delivery	.6
•	New FY21 Awards & Activities	.7
•	Continuing Awards & Programs from Prior Fiscal Years	.9
•	Fiscal Year 2022 – First Half Preview	13
•	Conclusion	14
•	Appendix I – Statutory Authority & Clean Energy Development Board	15
•	Appendix II – CEDF Financial Reports for CEDF & ARRA Funds	16
•	Appendix III – Carbon Reduction Metrics	18

Purpose and Scope of This Report

The purpose of this annual report is to provide information to the Vermont Legislature, clean energy stakeholders, and the citizens of Vermont detailing the Clean Energy Development Fund (CEDF) activities, revenues, expenditures, and progress made toward its goals and mission during fiscal year 2021 (FY21).

Strategic Planning for the Clean Energy Economy

The mission of the CEDF is to serve the citizens of Vermont by increasing the local supply and utilization of distributed, small-scale, community-supported electrical and thermal renewable energy, while targeting related economic development advantages.¹

During FY21 the CEDF and the Clean Energy Development Board (CEDB) worked on priority strategies from the CEDF's Strategic Plan. In 2018 the CEDF created a multi-year strategic plan that recognizes that there would not likely be a sustainable funding source for the CEDF, but that it should sustain its program framework until new funding is secured or the CEDF is closed.

In support of CEDF's mission of increasing distributed, small-scale, community-supported thermal and electrical renewable energy generation, the CEDF has been guided by four goals:

- 1. Create economic development via the clean energy economy
- 2. Increase the cost effectiveness of clean energy
- 3. Support vulnerable Vermonters
- 4. Reduce negative impacts of Vermont's energy use and generation on the environment.

Figure 1 visually shows the interaction between CEDF's Vision and its four supporting goals.

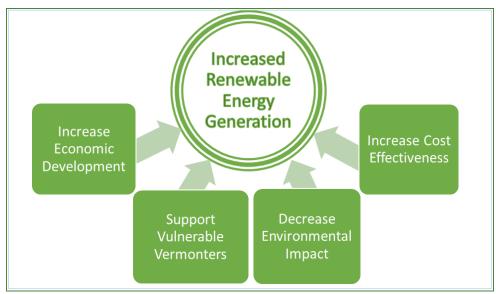


Figure 1. CEDF Goal and Objectives

1

¹ CEDF 2018 Multi-year Strategic Plan

Strategies

In pursuit of the primary goal and four objectives the CEDF has implemented the following seven strategies:

- 1) Concentrate on unregulated energy markets
- 2) Focus on transforming a select emerging market/technology
- 3) Coordinate and collaborate across State government and local businesses
- 4) Leverage other projects, programs, and private capital
- 5) Focus on projects that have community support
- 6) Provide access to renewable energy and its direct benefits to low-income Vermonters
- 7) Learn and adapt from past activities

CEDF's 2018 strategic plan and the subsequent annual plans call for a strategic focusing on developing Vermont's advanced wood heating sector. The CEDF has worked to build consumer demand for advanced wood heating together with strengthening businesses in the local supply chain capable of delivering affordable, dependable wood fuel and installing cost-effective advanced wood heating systems.

The CEDF defines "advanced wood heating" as 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. What is considered "highly efficient," and a "low level of emissions," will evolve with technology improvements and "local wood" could fluctuate with changes in the local wood markets. Accordingly, the CEDF's program requirements will be adaptive to ensure its programs are always leading the wood energy market to be supportive of CEDF and State goals.

Authority, Funding & Resources

The Vermont General Assembly established the CEDF in 2005 through Act 74 (30 V.S.A. § 8015). The CEDF is administered by the Department of Public Service (PSD), which employs a CEDF Manager and dedicates additional PSD staff to CEDF tasks as needed (See Appendix I for more details on CEDF governance.)

Figure 2 below shows the revenue, expenses, and end-of-year balance of the Fund for the last six fiscal years. Figure 2 does not include any of the \$22 million in American Recovery and Reconstruction Act (ARRA) funds that were managed by the CEDF. Almost all the funding the CEDF has received has come from agreements the State of Vermont had with Entergy Vermont Yankee that required Entergy to send payments of \$4-7 million per year directly to the CEDF. The last payment received directly from Entergy VT Yankee was for \$5.2 million in FY14.

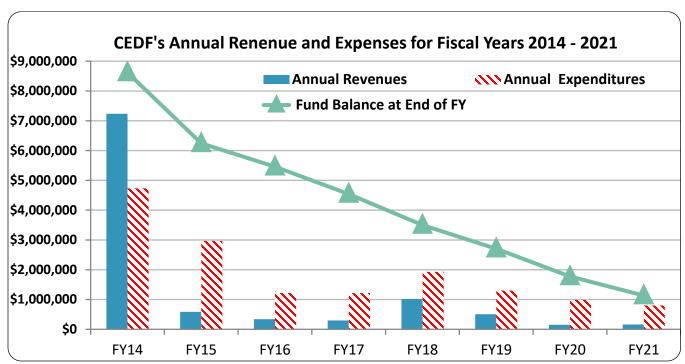


Figure 2. CEDF Annual Revenue, Expenses, and Year-end Fund Balance (does not include ARRA funds)

At the end of FY21 the Fund had a Balance of \$1.13 million of State funds and \$376,021 of CEDF-ARRA funds, plus approximately \$600,000 held by VEDA in their CEDF-ARRA revolving loan account.

There are five remaining outstanding CEDF loans. Two of the loans are CEDF funded with a combined outstanding balance of \$396,240. The other three are ARRA funded loans with a combined outstanding balance of \$962,043. One of the ARRA loans for \$750,000 has an interest only term of 1%, which goes to VEDA to service the loan. Therefore, CEDF doesn't receive any interest or principal payments from this loan.

Loan repayments to the CEDF for FY21 equaled just over \$145,578 from CEDF loans, including \$70,500 that paid-off the remainder of a \$206,200 loan to Bolton Ski Area for the installation Northwind 100kW wind turbine in 2010. CEDF also received \$87,413 from ARRA loans. See Appendix II for a financial report of FY21 revenue and expenses.

At the end of FY21 the CEDF had just over \$2 million in fiscal obligations (i.e., signed grant agreements, contracts, and program commitments) for its combined CEDF and CEDF-ARRA funds.

The CEDF via the PSD's State Energy Office maintained its obligations to report and administer the CEDF-ARRA funds (which retain all their original ARRA restrictions and obligations) that were paid back to the CEDF from borrowers.

Administration & Program Delivery

During FY21 the Fund spent \$129,839² on staff and administration expenses. This represents 9.4% of the total expenditures of \$1.38 million. As a percentage of revenue, administration costs are close to 50% of revenue for FY21. Revenue into the CEDF was only \$261,638 for the year consisting of interest on fund and loan balances and repayment of loan principle. With staffing costs running constant but revenue decreasing the CEDF has been operating with a higher total program management and administrative expenses as a percentage of its revenue.

The CEDF statute states that "up to five percent of amounts appropriated to the Department of Public Service from the Fund may be used for administrative costs related to the Clean Energy Development Fund." The CEDF statute does not define what should be included in administrative costs. If administrative costs are only the costs such as travel, conferences, and trainings with the wages and benefits of the CEDF Fund Manager and any other PSD non-administrative staff that work to develop, manage, and deliver CEDF programs, grants, and contracts (on a pro-rated basis based on hours worked on CEDF programs) are excluded, then the administrative costs as a percentage of revenue are under the 5% limit at 4.3%.

For administrative simplicity and to allow more of CEDF funds to be used for renewable energy incentives and grant awards, the PSD has not used any CEDF funds to cover the costs incurred by PSD's Administrative Services Division staff in providing services to the CEDF (such as processing invoices, financial reports and accounting, State budgeting, etc.), nor has the PSD used any CEDF funds to cover overhead expenses (i.e., rent, office equipment, internet, etc.).

CLEAN ENERGY DEVELOPMENT BOARD

While the Fund is administered by the PSD, a seven-person Clean Energy Development Board (Board) oversees CEDF programs, planning, and spending. The Board members are appointed by the Chairs of the legislature's two energy committees (two appointees each) and the Commissioner of the PSD (three appointees).

For FY21, the Board consisted of the following members (with the year their term ends and their appointing authority):

- Kate Desrochers, House Energy Committee Chair, 2023
- Jared Duval, Co-Chair, PSD Commissioner, 2023
- David Farnsworth, PSD Commissioner, 2025
- Ken Jones, Senate Energy Committee Chair, 2025
- Johanna Miller, House Energy Committee Chair, 2025
- Sam Swanson, Co-Chair, PSD Commissioner, 2023
- Paul Zabriskie, Senate Energy Committee Chair, 2023

² \$8,885 of which were federal ARRA funds.

³ 30 V.S.A. § 8015 (e)

The Board met five times during FY21 and provided review and guidance (and ultimate approval) on the CEDF Annual Plan, Annual Budget, and other programs developed by the PSD to carry out the CEDF mission. For more details on the Board, see Appendix I.

■ New FY21 Awards & Activities

No new grant awards were issued in FY21. One new contract was awarded for the annual Clean Energy Industries Report. The CEDF was on a path to cease operations by the end of FY23 and thus the plan was to use the funds available for existing programs for the next two years.

The CEDF did create a new incentive within the Small-Scale Renewable Energy Incentive Program (SSREIP) using some of its ARRA funds made available from re-paid loans. An additional incentive was added to the pellet boiler incentive for those homes and businesses that were replacing a coal fired heating system (boiler, furnace, or stove). The coal change-out adder varies on a project-by-project basis to bring the total CEDF incentive package up to 50% of the total project cost. The amount of each adder was be determined on a project-by-project basis and can be up to \$7,000 for homes and \$27,000 for businesses. These incentives are available in addition to the existing \$3,000 incentives offered by CEDF and Efficiency Vermont for pellet boilers/furnaces.

Also, within the SSREIP, a new incentive for bulk pellet bins that started taking reservations at the end of FY20 had nineteen installations in FY21. The goal of the voucher program is to grow the market for bulk pellet delivery in Vermont. The pellet storage incentive was up to \$3,000 and was offered to customers via select participating vendors for approved pellet storage bins.



*Figure 3 – type of bulk pellet bin eligible for a CEDF incentive*⁴.

⁴ Photo credit: www.sustainableheating.org

CLEAN ENERGY INDUSTRY REPORT

The eighth annual report describing the status and characteristics of Vermont's clean energy industry revealed a pandemic employment in the sector of over 17,502 workers. The report, completed via a contract with BW Research Inc., showed that clean energy jobs in Vermont declined by 7.4 percent—a loss of roughly 1,400 jobs in 12 months—wiping out four years of job growth as total employment levels dropped back to the 2016 baseline. While these are historic job losses for Vermont's clean energy sector, clean energy businesses shed fewer jobs compared to overall statewide job losses. By comparison, the statewide economy contracted by 8.6 percent between 2019 and 2020, displacing an estimated 26,700 workers in the state.

Clean energy jobs accounted for about six percent of total employment in Vermont at the end of 2020, and clean energy job losses accounted for 5.3 percent of all jobs lost during this time.

With a pre-COVID total employment of over 18,900 workers, the clean energy sector is a significant part of the Vermont economy, representing about 6% of all workers. The report shows that the number of clean energy jobs grew by 0.1% between the 2019 and 2020 reporting periods.

As of the fall of 2019, Vermont was home to a total of 18,910 clean energy workers. Since 2013, clean energy jobs grew by 27.9 percent, or 4,122 workers. Over the last three years, clean energy employment has remained relatively steady, mirroring the overall statewide labor

market. Between the 2019 and 2020 reporting periods, Vermont's clean energy labor market grew by 24 jobs, a growth rate of 0.1 percent—slightly below the overall statewide employment growth of 0.2 percent.

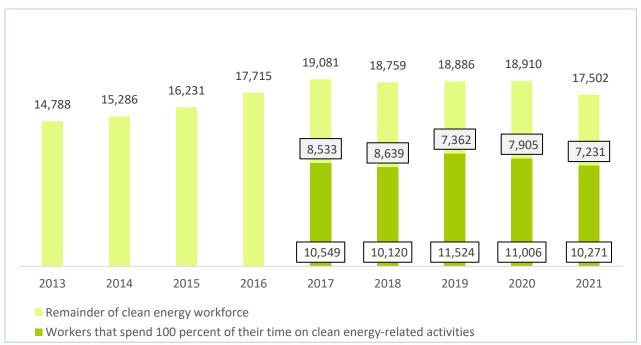


Figure 4. Number of VT Clean Energy Workers from the 2021 VCEI Report.

See the report for a complete description of the findings and other details about the state's clean energy workforce. The full report can be found on the PSD's web site at: https://publicservice.vermont.gov/renewable_energy/cedf/reports

AMERICAN RESCUE PLAN ACT FUNDS

During the FY21 legislative session new American Rescue Plan Act (ARPA) funds were allocated to the Public Service Department with \$5 million of those funds to be allocated by the Clean Energy Development Board and \$10M for an Affordable Community Renewable Energy Program for low-income Vermonters that was to be developed "consistent with the parameters of the Clean Energy Development Fund".

During the 4th quarter of FY21 the CEDF started to plan and develop programs for the use of these ARPA funds.

■ Continuing Awards & Programs from Prior Fiscal Years

SMALL SCALE RENEWABLE ENERGY INCENTIVE PROGRAM (SSREIP)

The SSREIP is a market-based, first-come, first-served incentive program. The SSREIP has been CEDF's longest running (since 2007) program. It has proven to be the most effective program in getting renewable energy systems installed and building the local clean energy market. In FY20 the program provided incentives for wood stove change-outs and for pellet boilers. The program provided \$355,600 in incentives for 222 advanced wood heating systems and stove change-outs for homes, business, and institutions across Vermont.

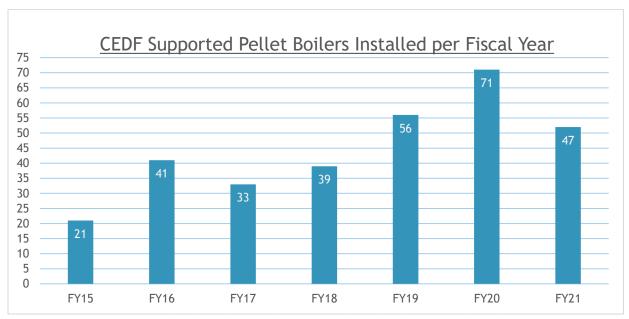


Figure 5 – CEDF incentivized Pellet Boiler Installations (residential and commercial) via the SSREIP

The CEDF expanded the SSREI Program to include an additional incentive for pellet heating systems (or a pellet stove) for Vermonters that get rid of a coal heating system. The CEDF

provided \$300,000 of repurposed ARRA funds for the adder. The Coal Change-Out Adder, combine with pre-existing CEDF incentives, provides an additional incentive for a home or business owner to replace their coal heating system with an advanced pellet heating system. The adder, with the existing SSREI Program incentive, provides a rebate up to 50% of the cost of a new heating system with a cap of \$10,000 for a home and \$30,000 for a business (including the \$3K regular CEDF incentive). Interest in the program has been strong but limited due to the small number of coal systems still in use.

During the year the program changed-out four coal stoves, and six coal fired heating systems to pellets for residential customers and one small commercial coal system was changed-out for a pellet boiler.



Figure 6 - a new pellet system installed in East Montpelier that replaced an old coal boiler.

The SSREIP provided incentives for the installation of forty-seven pellet boilers. Forty-two of the installations were residential. There was a noticeable slowdown that was caused by the pandemic induced health issue, workforce shortages, and global supply chain issues.

The total installed cost of the stoves and boilers supported through the SSREIP was over \$1.78 million, meaning the SSREIP leveraged \$1,518,927 of private investment with the \$265,308 paid out as incentive (a 5.7 to 1 ratio).

GRANTS

➤ Bourne's Energy completed improvements to their bulk pellet handling and storage operations in Hyde Park. These improvements will support their statewide distribution of

bulk wood pellets. The total cost for the project was \$184,966. \$51,479 of the total was reimbursed with the CEDF Grant.

- ➤ Lyme Green Heat completed the bulk pellet infrastructure purchases that were made possible with the \$130,000 CEDF grant. Lyme Green Heat placed four 30-ton auger boom trailers in Vermont and purchased a new tractor trailer truck. The two pairs of auger boom trailers will be used to provide a local loading spot for a 12-ton pellet delivery truck that can make residential deliveries of bulk pellets. The loading trailers will be stationed at in the two strategic delivery areas of Barre and Brattleboro. The total projected cost for the truck and trailers is \$325,000.
- Maine Energy Systems, (DBA Vermont Energy Systems) was awarded a \$150,000 grant to build a 100-ton bulk pellet silo in St. Johnsbury with an estimated total projected cost of \$375,000. Due to the pandemic this was put on hold and then, in FY22 they canceled the project entirely.

> RESIDENTIAL WOOD STOVE CHANGE-OUT PROGRAM WITH THE OFFICE OF ECONOMIC OPPORTUNITY

In FY19 the CEDF and the Office of Economic Opportunities (OEO) at the Department of Children and Families agreed on a Memorandum of Understanding (MOU) to develop and administer a wood stove change out program for families eligible to participate in the Vermont Home Weatherization Assistance Program (WAP). The program pays 100% of the cost to swapout old, dangerous, inefficient, and polluting wood and other solid fuel heating appliances with newer, safer, and cleaner EPA-certified cord wood or pellet stoves, or to install new pellet stoves to displace fossil fuels. The program was funded with \$500,000 of ARRA funds repurposed for this program.

During the year, WAP agencies completed the program by installing 17 new pellet stoves and 30 cord wood stoves for low-income Vermonters around the state. All 47 stoves installed were rated at or below the standard of 2.0 grams per hour of particulate matter (PM 2.5) at efficiencies of no less than 70 percent. These new units will reduce ambient air pollution and save homeowners on their fuel bills.

> RUTLAND WEST NEIGHBORHOOD HOUSING SERVICES INC. DBA NEIGHBORWORKS OF SOUTHWESTERN VERMONT

NeighborWorks of Western Vermont continued its existing CEDF grant helping low- and moderate-income families lower their heating costs. The program focused on an expansion of the program from just Rutland and Bennington Counties to the three Northeast Kingdom Counties. The program provides incentives to install cord wood/pellet stoves (and/or change-out old ones) coordinated with thermal energy efficiency audits and retrofits to reduce energy consumption and save money.

With the expansion into Essex, Orleans, and Caledonia counties the program was able to install 56 stoves (27 of which changed-out an old polluting stove) even with COVID restrictions. The program also completed 7 energy audits this year (up from 3 last year).

As with CEDF's other wood heating grants, new heating systems must be EPA certified with particulate emissions of not more than 2.0 grams per hour and at least a 70 percent efficiency rating. When coupled with health and safety upgrades to accommodate new stoves in the homes, the investment in new wood stoves provides substantial opportunity for improvement to human health and the local environment, while also stimulating the local advanced wood heating market.

This program will continue until they expend the maximum grant amount, which is estimated to be in the third or fourth quarter of FY22.

WINDHAM COUNTY DEDICATED FUNDS

The funds allocated for use in Windham County continue to help area business, schools, municipalities, and institutions achieve energy savings and environmental improvements. In 2015 the General Assembly appropriated over \$7.5 million to the CEDF, including a one-time payment of \$5.2 million from Entergy Vermont Yankee (EVY). The Legislature allocated half of that EVY payment (\$2.6 million) for projects in, and for the benefit of, Windham County.

The CEDF continued administration of two active awards using the dedicated Windham County funds in FY21:

➤ Windham Wood Heat Initiative

The Windham Wood Heat Initiative (WWHI), administered by the Windham Regional Commission (WRC), is designed for the development of advanced wood heating systems for schools, municipalities, and public-serving non-profits located in Windham County. In FY21 the program completed a grant payment for a new wood heating system at the Leland and Gray school in Townshend.

The Initiative continues to hold \$200,000 for a grant with the Town of Brattleboro to help fund a wood fueled district heating project downtown to provide heat to two municipal buildings. This grant to WRC was amended to add the remaining funds from WRC's Renewable Energy Grant Program (see below) and to extend the term for another two years to give the Brattleboro time to develop this project and make use of WWHI funds.

Windham Renewable Energy Grant Program

During FY21, the Windham Regional Commission (WRC) closed out this program. The remaining \$97,000 was not granted out during the fiscal year and therefore it was de-obligated from this Program and added to WRC's WWHI grant.

OTHER PROJECTS AND ACTIVITIES

> State Wood Energy Team (SWET)

The CEDF continued to be active throughout the year in this inter-agency effort that works to facilitate collaboration and participation of several key stakeholder groups in the promotion of advanced wood heating in Vermont. The SWET is led by the Department of Forest, Parks and Recreation's Wood Energy Coordinator.

Fiscal Year 2022 - First Half Preview

CEDF presented a budget and program plan for FY22 to the Clean Energy Development Board at the end of FY21. The Board approved the plan and budget in July of 2021. During the first half of FY22, the CEDF continued to administer existing programs. Activities in the first half of FY21 included:

- ARPA FUNDS. For the \$5 million of ARPA funds to be allocated by the Clean Energy Development Board the CEDF designed five new programs and submitted them for approval to the Agency of Administration:
 - 1. Home heating incentives via the Small-scale Renewable Energy Incentive Program for low- and moderate-income households (\$1M)
 - 2. A program providing comprehensive whole-home clean energy assistance for low- and moderate-income households (\$1M)
 - 3. A pilot program that will support the financing of clean heating systems for low- and moderate-income households (\$250K)
 - 4. A grant program that will provide grants to the impacted hospitality industry for clean HVAC system replacement and repairs (\$250K)
 - 5. Clean heating grants to high-poverty school districts, for repair of existing wood heating systems and replacement of broken/unrepairable heating systems (\$2.5M)
- NEW CLEAN ENERGY SPECIALIST HIRED. For the first time since 2011the PSD/CEDF has hired a new position. The part-time limited-service Clean Energy Specialist position will assist the PSD and CEDF developing and administering the new ARPA funded programs.
- SMALL SCALE RENEWABLE ENERGY INCENTIVE PROGRAM (SREIP) The CEDF issued a RFP for proposals to administration of the program for the next two years, including administering the influx of ARPA dollars into the Program. Two proposals were received and the current administrator VEIC of Winooski was the low-bidder. VEIC was selected to continue to administer the program for the CEDF. A new contract was completed by the end of the 2021 calendar year. The program continued to offer incentives for new pellet central heating systems, including an additional incentive if the pellet system is replacing a coal system.
- Cancelation of Vermont Energy Systems grant. This \$150,000 grant to build a \$375,000 project consisting of a pellet distribution depot and related infrastructure in the St. Johnsbury area for the bulk filling of pellet trucks was postponed was postponed due to Covid and then in FY22 canceled. The \$142,175 remaining will be re-allocated by the CED Board in FY22.
- **Vermont Clean Energy Industry Report 2022** The CEDF commenced on the ninth clean energy industry survey and report. The survey data was collected by BW Research at the end of 2020 and the Report will be issued in the spring of 2021. The report will describe the impact COVID-19 has had on jobs in Vermont's clean energy sector and will provide useful insights that Vermont can use to support growth in its clean energy industries.

Conclusion

The CEDF continues to support focus its efforts on improving the lives of Vermonters, especially those vulnerable to the effects of air pollution and fluctuating fossil fuel prices. CEDF funded 150 renewable energy installations which will avoid the consumption of over 91,000 gallons of fossil fuel and the emission of an estimated 881 metric tons of CO2e annually.

The CEDF incentivized and increased the local renewable energy activities that supported vital economic development in Vermont's renewable energy business sector, with its specific focus on the advanced wood heating sector.

With the influx of \$5 million in ARPA funds the CEDF has changed course away from its plan for an organized cessation of grants to ramping-up to establish five new major renewable energy programs and is assisting the PSD with their \$10 million Affordable Community Scale Renewable Energy Program for low-income Vermonters.

Appendix I - Statutory Authority & Clean Energy Development Board

In 2005, the Vermont General Assembly established the Vermont Clean Energy Development Fund (CEDF) through Act 74.

PURPOSE (30 V.S.A. § 8015(c))

The purposes of the Fund shall be to promote 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.

ADMINISTRATION

The Department of Public Service (PSD) administers the CEDF to facilitate the development and implementation of clean energy resources. The PSD hires a Fund Manager to oversee the day-to-day operations of the fund.

Assisting the PSD is a Clean Energy Development Board with decision-making and approval authority with respect to the plans, budget, and program designs of the CEDF. The Board also serves in an advisory function to the Commissioner of the PSD. The Board consists of seven members appointed in the following manner:

- Three members appointed by the Commissioner of the Public Service Department
- Two members appointed by the chair of the Senate Natural Resources and Energy Committee
- Two members appointed by the chair of the House Energy and Technology Committee

CED Board Members During FY21, Appointing Authority, and Fiscal Year Term Ends:

- Kate Desrochers, House Energy Committee Chair, 2023
- Jared Duval, Co-Chair, PSD Commissioner, 2023
- David Farnsworth, PSD Commissioner, 2025
- Ken Jones, Senate Energy Committee Chair, 2025
- Johanna Miller, House Energy Committee Chair, 2025
- Sam Swanson, Co-Chair, PSD Commissioner, 2023
- Paul Zabriskie, Senate Energy Committee Chair, 2023

Department of Public Service Personnel Involved in CEDF Management & Administration

June E. Tierney – PSD Commissioner

TJ Poor – Director of Planning, Efficiency & Energy Resources

Andrew Perchlik – CEDF Fund Manager

Anne Margolis – Renewable Energy Development Director

Edward Delhagen – Clean Energy Finance and Program Manager

Anne Nelson – Financial Manager

Patricia LaRose - Financial Manager

Tod Zeigler – Financial Analyst

Appendix II - CEDF Financial Reports for CEDF & ARRA Funds

VERMONT CLEAN ENERGY DEVELOPMENT FUND

Fiscal Year 2021 Revenues and Expenditures

REVENUES						
Fund Interest		3,516				
Loan Interest		11,255				
Loan Repayments		145,578				
Total Revenues	\$	160,349				
EXPENDITURES						
Salary & Benefits		109,455				
Misc. Administration - all remaining		11,500				
Total Administrative Expenses	\$	120,955				
VEDA - Loan Admin.		5,714				
VEIC Contract		37,337				
SSREI Program Incentives		153,000				
Contracts - other		7,874				
Grants		475,891				
Total Program Expenses	\$	679,816				
Total Expenditures	\$	800,771				

Fiscal Year 2021 CEDF-ARRA Revenues and Expenditures

Fiscal Year 2021 CEDF-ARRA Revenues and Expenditures

REVENUES						
Small Fund Interest		2,464				
Loan Repayments		87,413				
Loan Interest Income		11,411				
Total Revenues	\$	101,289				
EXPENDITURES						
PSD Salary & Benefits		8,885				
NeighborWorks Grant		145,037				
SSREIP		98,485				
Other Grants		320,569				
VEDA		11,081				
Total Expenditures	\$	584,056				

Appendix III - Carbon Reduction Metrics

The renewable energy activities funded during the CEDF FY21 contribute toward the State's greenhouse gas emission requirements.⁵

The CEDF programs saved over 91,000 gallons of fuel oil annually and combined to yield net carbon dioxide equivalent reductions of approximately 881metric tons per year.

FY21 Annual Greenhouse Gas and Fossil Fuel Metrics

Technology	Number of Grant Program Installs	Number of SSREI Program Installs	Total Net Metric Tons CO2e Savings	Total Net Fossil Fuel Savings (gallons)
Wood Stoves	46	4	31.1	1,425.0
Pellet Stoves	52	0	26.2	883.5
Pellet Boilers - Non-residential	0	6	579.6	62,365.98
Pellet Boilers - Residential	0	42	244.9	26,342.4
Totals	98	52	881.7	91,016.9

⁵ Global Warming Solutions Act of 2020 (Act 153, 2020)