



ANNUAL REPORT TO THE LEGISLATURE FISCAL YEAR 2024

[July 1, 2023 – June 30, 2024]

Published: January 2025

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

• Summary of Fiscal Year 2024

During the July 1, 2023, to June 30, 2024, Vermont's 2024 fiscal year (FY24) the Clean Energy Development Fund (CEDF or Fund) administered existing American Recovery and Reinvestment Act (ARRA), American Rescue Plan Act (ARPA), and State CEDF funded programs from past fiscal years, as well as grants issued with \$2 million in FY23 State funding directed towards supporting wood heating in Vermont schools.

The CEDF's work during the year was focused on the administration of grants funded with the \$15 million in ARPA funds appropriated to the Public Service Department (PSD) to be expended by the CEDF. No new funds were appropriated to the CEDF in FY24. With no new CEDF or federal funds coming into the CEDF and existing funds getting close to being fully expended; the PSD continued its preparations to close-out the operations of the Fund. In FY23 the legislature passed legislation that will sunset the Clean Energy Development Board on June 30, 2027.

The School Heating Assistance with Renewables & Efficiency (SHARE) program and the Small-Scale Renewable Energy Incentive Program (SSREIP) were the two active incentive programs administered by the CEDF in FY24. The SHARE program granted \$3.89 million in awards to twenty schools in FY23. Administration of these grants continued in FY24. The SSREIP experienced a lower uptake in incentives compared to the increases seen in FY23. The SSREIP expended all its ARRA funds and the incentives for pellet boilers ended on June 30th, 2024. The program still offers incentives for the purchase of biodiesel for heating fuel, and incentives for wood heating for residents in Windham County, with special funds.

During FY24 the CEDF expended a total of \$610,396 – the lowest amount since fiscal year 2006 (the year the Fund started). This total includes \$248,994 of federal ARRA funds. Of the total FY24 expenditure, \$196,600 paid for PSD staff and other administrative costs to manage the Fund and the Fund's programs. At the end of FY24 the Fund had a balance of \$394,355 in State CEDF funds and \$159,342 of ARRA funds. These fund balances were obligated in grants, incentive programs, MOUs, and administration costs for the FY25 Budget and described in the FY25 Annual Plan.¹

The last remaining CEDF loan was paid off in FY2024, leaving the ARRA funded loan to the City of Montpelier as the only loan still active in the CEDF Loan Program. The 2014 \$750,000 loan to the city was for their district heating system. The loan was made as an interest only loan made with the intention of transitioning to having the city pay the principal once the heating system's finances were stabilized. The city has not been able to improve the finances of the system to the point they could start to pay back the loan principal.

¹ The FY25 Plan can be found on the PSD's web site here: https://publicservice.vermont.gov/sites/dps/files/documents/FY25_CEDF%20Program%20Plan%20and%20Budget.pdf

■ Table of Contents

□ Summary of Fiscal Year 2024	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 FY24 Grants, Programs, & Contracts.	7
□ Continuing Awards & Programs from Prior Fiscal Years	7
□ Fiscal Year 2025 – First Half Preview.....	9
□ Conclusion	10
□ Appendix I - Statutory Authority & Clean Energy Development Board.....	11
□ Appendix II_CEDF Financial Reports for CEDF & ARRA Funds.....	12

• Purpose and Scope of This Report

The purpose of this annual report is to provide information to the Vermont Legislature, clean energy stakeholders, and other citizens of Vermont by detailing the Clean Energy Development Fund (CEDF) activities, revenues, expenditures, and progress made toward its goals and mission during fiscal year 2024 (FY24).

• 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.²

In support of CEDF's mission 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.

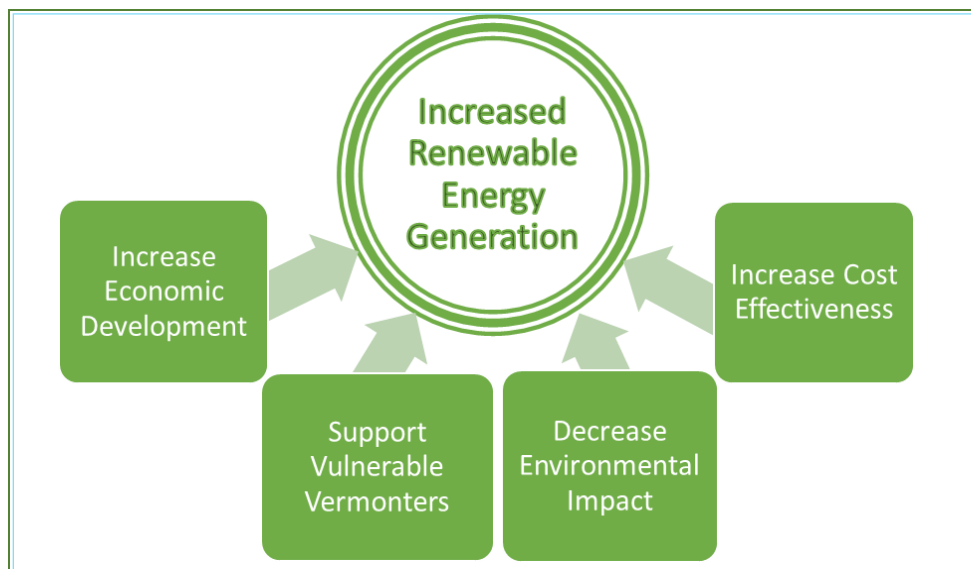


Figure 1. CEDF Mission and Goals

Strategies

In pursuit of the mission and four goals 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

² [CEDF 2018 Multi-year Strategic Plan](#)

- 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 [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 five fiscal years. Figure 2 does not include any of the \$22 million in American Recovery and Reconstruction Act (ARRA) funds that were appropriated to the CEDF in 2010, or the \$5M of ARPA funds appropriated to the PSD and managed by the CEDF.

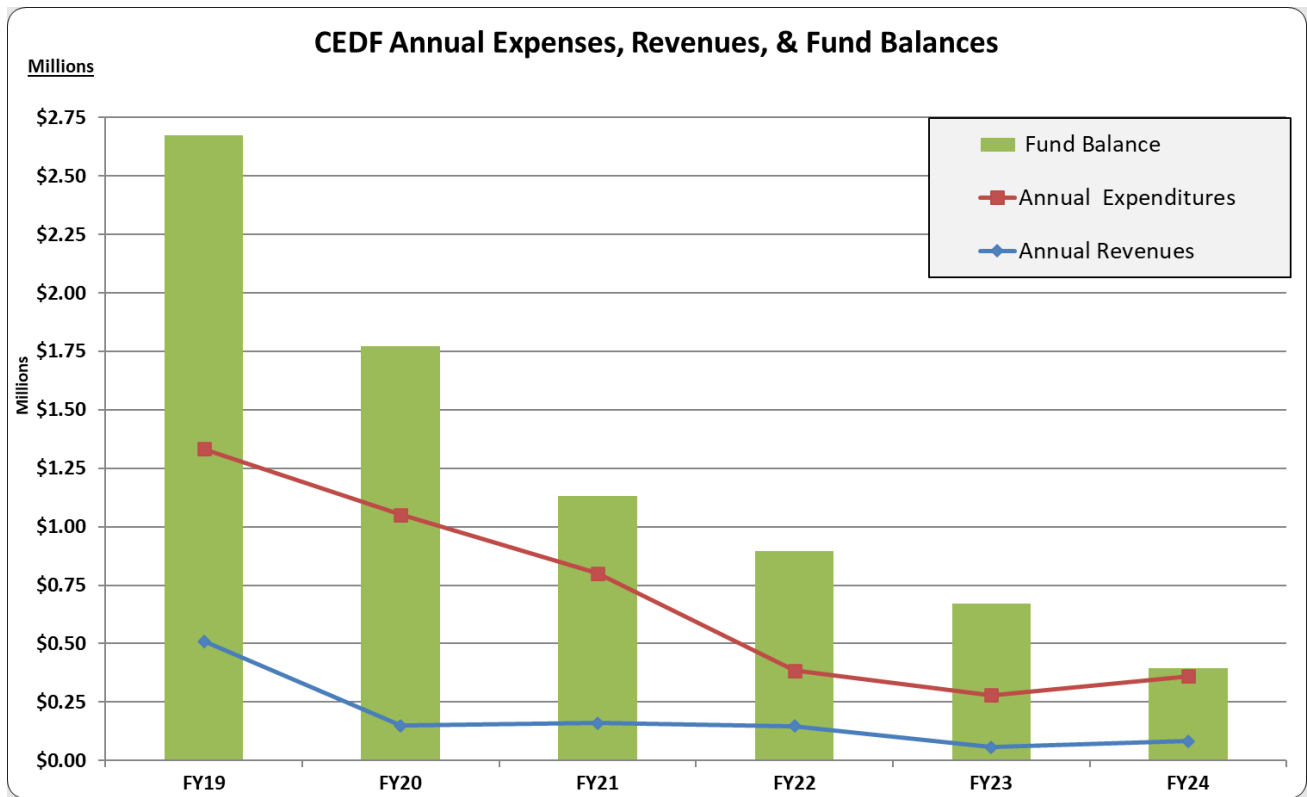


Figure 2. CEDF Annual Revenue, Expenses, and Fiscal Year-end Fund Balances over the previous six fiscal years FY19-24 (not including federal funds)

At the end of FY24 the Fund had a balance of \$394,355 in State funds and \$159,342 of ARRA funds. These balances were obligated in grants, incentive programs, and administration costs at the end of FY24 in the FY25 Budget and Annual Plan.

The only revenue into the Fund for FY24 was from the repayment of loans and interest on the cash balances. At the end of FY24 only one loan remained active. The one remaining CEDF funded loan was repaid in full by the borrower (Purpose Energy) at the end of FY24, with the funds from that loan coming from VEDA in the first quarter of FY25 and thus the repayment of \$220,200 does not show in the FY24 financials. The other loan is an ARRA loan with an outstanding balance of \$750,000 with an interest-only term of one percent to the City of Montpelier. The one percent interest payment made to the CEDF goes to VEDA to pay for their servicing of the loan. Therefore, CEDF hasn't received any interest or principal payments from this loan.

See Appendix II for a financial report of FY24's revenue and expenses.

• Administration & Program Delivery

Since the CEDF started in 2006 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.). Starting in FY24 the PSD started collecting their indirect administrative rate on CEDF expenditures to help cover their expenses in supporting CEDF's grants and contracts. In FY24 the indirect costs paid to the PSD totaled \$36,018.

In addition to the indirect costs the PSD uses CEDF funds to pay the CEDF Fund Manager and other PSD staff for hours worked on administering CEDF programs and grants. CEDF funds are also used for any per-diem to Clean Energy Development Board members (\$0 was requested for per-diems in FY24), and any expenses related to travel, conferences, membership dues related to CEDF programs. During FY24 the PSD spent a total of \$138,046³ on CEDF staff and CEDF staff administrative expenses.

These personnel and other administrative expenses equaled over 15% percent of the CEDF's FY24 appropriation of both state and federal funds. With staffing costs increasing but revenue decreasing the CEDF has been operating with a higher percentage of funds expended on administrative expenses in the last few years compared to historical amounts.

These percentages are above the statutory limit of five percent based on annual fiscal year appropriations to the CEDF⁴. However, since the fiscal year 2007 the Department has spent less than five percent of the CEDF appropriations administrative costs. Over the last seventeen fiscal years the PSD has spent an average of under six percent on administration costs. It was in FY24 that the first time CEDF's historical annual administrative expense was over five percent.

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 FY24 the Board consisted of the following members (with the year their term ends and their appointing authority):

- Cara Robeck, Chair, PSD Commissioner, 2027
- David Farnsworth, PSD Commissioner, 2025
- Ken Jones, Senate Energy Committee Chair, 2025
- Johanna Miller, House Energy Committee Chair, 2025
- Sam Swanson, PSD Commissioner, 2027

³ \$11,266.98 of which were federal ARRA funds.

⁴ 30 V.S.A. § 805 (e)(2) During fiscal years after FY 2006, 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.

- Paul Zabriskie, Vice-chair, Senate Energy Committee Chair, 2027
- Vacant, House Energy Committee Chair, 2027

The Board met five times during FY24. The Board 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 members, see Appendix I.

• New FY24 Grants, Programs, & Contracts.

No new programs were started during the fiscal year. There were also no new grant awards issued by the CEDF in FY24. The CEDF did manage ARPA funded grants as part of the CEDF designed School Heating Assistance with Renewables & Efficiency (SHARE) program, but the funds were appropriated to the PSD and not the CEDF and thus are not detailed in this report. However, there is information below on the ARPA funded programs that the CEDF was involved in.

There was one new contract for just under \$10,000 for the creation of the 2024 annual Vermont Clean Energy Industry Report. The Report was completed in the first part of FY25 and is discussed below in the overview of the first half of FY25.

• Continuing Awards & Programs from Prior Fiscal Years

AMERICAN RESCUE PLAN ACT FUNDS

For FY22 \$5 million in ARPA funds were appropriated to the PSD by the State Legislature; these funds required the involvement of the CED Board in the allocation of the funds. CEDF continued to administer the following ARPA funded programs in FY24:

1. Home heating incentives for biodiesel heating fuel via the Small-scale Renewable Energy Incentive Program (SSREIP) for low- and moderate-income households.
2. Clean heating grants to high-poverty school districts, for repair of existing wood heating systems and replacement of broken/unrepairable heating systems (\$3.89M)

CEDF staff continued to assist the PSD with the \$10 million appropriation in a prior fiscal year for an Affordable Community Renewable Energy Program (ACRE) for low-income Vermonters that was to be developed “consistent with the parameters of the Clean Energy Development Fund.” In FY23 the \$10 million ACRE program design was finalized, and four awards totaling \$9.5 million were made to Vermont electricity distribution utilities covering all the utilities in Vermont except Burlington Electric Department and Hyde Park Electric, both of which declined to apply for awards. The utilities began implementing their community low-income solar programs in FY 2024.

SMALL-SCALE RENEWABLE ENERGY INCENTIVE PROGRAM (SSREIP)

The SSREIP is a market-based, first-come, first-served incentive program. Initiated in 2007, the SSREIP has been CEDF’s longest running program. It has proven to be an effective program in getting renewable energy systems installed and building the local clean energy market.

For FY24 the program offered a \$3,000 incentive per household for an installation of a pellet boiler. CEDF ended this incentive due to a lack of funds at the end of the 2024 fiscal year.

At the start of FY24 ARPA funds used to increase the amount of the incentive for low- and moderate-income households installing pellet boilers/furnaces. In addition, ARPA funds were used to offer incentives to low- and moderate-income Vermont households to change out old wood stoves for new highly efficient wood stoves and/or to repair a wood stove, chimney, or hearth to improve the health and safety of homes heating with wood. The ARPA funds were fully expended in the first quarter of FY24

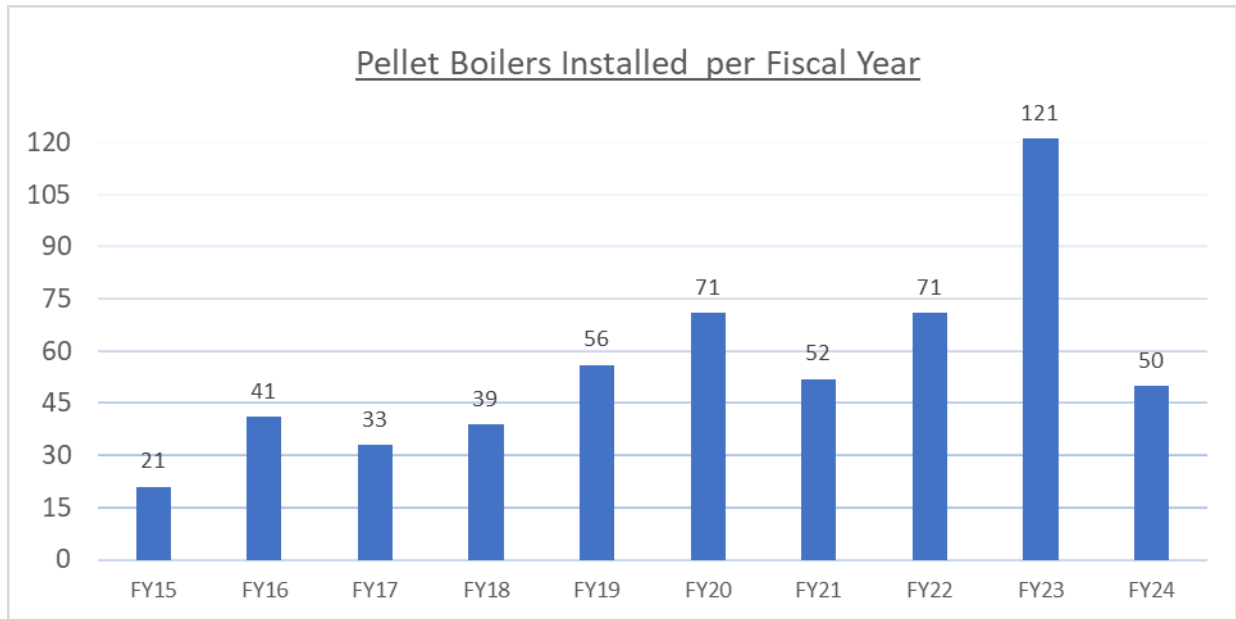


Figure 6. CEDF incentivized Pellet Boiler Installations (residential and commercial) via the SSREIP.

Total project costs for the 50 pellet systems installed with CEDF incentives were \$1,652,811. The CEDF incentives totaled \$198,000, meaning the program leveraged over \$1.4 million of private investment in pellet heating systems in Vermont – not including the cost of the pellet fuel, some of which is purchased from Vermont’s one pellet mill.

The average residential installation cost for a pellet system in the program was \$30,612, only a few hundred dollars more than in FY23.

As with CEDF’s other wood heating grants, the new heating systems installed were required to 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.

WINDHAM COUNTY DEDICATED FUNDS

The funds allocated for use in Windham County were designed to help area business, schools, municipalities, and institutions achieve energy savings and environmental improvements. At the start of FY 24 the Windham County Funds were being administered by the Windham Regional Commission (WRC). The WRC had committed the remaining available grant funds to two large wood heating projects but neither project was able to move forward in the time remaining on the grant, which expired at the end of 2023. The WRC did not choose to extend the grant and did not think the two projects would move forward with their wood heat projects. The CEDF moved the remaining funds (approximately \$275,000) to be used for SSREI Program incentives to residential or small commercial projects installing advanced wood heat systems.

• Fiscal Year 2025 - First Half Overview

CEDF presented a budget and program plan for FY25 to the Clean Energy Development Board at the end of FY24. The Board approved the plan and budget in June of 2024. During the first half of FY25, the CEDF continued to administer existing programs. Activities in the first half of FY25 included:

2024 VERMONT CLEAN ENERGY INDUSTRY REPORT (VCEIR)

The CEDF completed its eleventh annual clean energy employment survey, which revealed a slight increase in clean energy employment in Vermont of 172 jobs for a total of 18,156 clean energy workers. While the state's clean energy economy showed recovery from the pandemic induced job losses, total clean energy employment remained slightly below pre-pandemic job levels. However, total Full-time equivalent employment reached pre-pandemic levels. Vermont continues to lead the nation in the number of clean energy jobs per capita and has continued to see increases in the percentage of time each clean energy employee spends on clean energy work as part of their job.

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 CEDF's Report page on the PSD's web site at:

<https://publicservice.vermont.gov/renewables/clean-energy-development-fund-cedf/reports-documents>

• Conclusion

The CEDF continues to work on meeting its mission to serve the citizens of Vermont by increasing the local supply and utilization of distributed, small-scale, community-supported renewable energy, while targeting local economic development.

In FY24 fifty pellet systems were installed with CEDF incentives. All but one of these systems was a residential system. Of the fifty systems installed two were in new construction and one replaced electric heat. The other forty-seven replaced fossil fuel heating systems, including 34 oil systems, eight coal systems, two old cord wood boilers, and one each of propane and natural gas systems. In total the pellet heating systems will avoid the consumption of over equivalent of 20,000 gallons of #2 heating oil annually.

The wood stove repair and replacement incentive funded with ARPA funds was a success and showed a great need for upgrading the wood stoves and chimneys in Vermont. This incentive, which started in FY 23 was for low-income households to replace or repair their cord wood stove or repair their chimney so that they could safely heat with their wood stove. During FY 24 there were 45 wood stove incentives for a total of \$213,542. Unfortunately, the funds ran out while there was still a strong demand for the incentives.

The wood heat incentives also provided five incentives for bulk pellet bins for those homes that replaced a cord wood stove with a pellet stove. The pellet bin incentives totaled \$11,337.

While greatly reduced from prior years the CEDF's incentives and activities continue to increase local renewable energy production and to support vital economic development and employment in Vermont's renewable energy business.

• 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 an advisory function to the Commissioner of the PSD. The Board consists of seven members appointed to four-year terms 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 FY24, Appointing Authority, and Fiscal Year Term Ends:

- Cara Robechek, Chair, PSD Commissioner, 2027
- David Farnsworth, PSD Commissioner, 2025
- Ken Jones, Senate Energy Committee Chair, 2025
- Johanna Miller, House Energy Committee Chair, 2025
- Sam Swanson, PSD Commissioner, 2027
- Paul Zabriskie, Vice- Chair, Senate Energy Committee Chair, 2027
- *Vacant*, House Energy Committee Chair, 2027

Department of Public Service Personnel Involved in CEDF Management & Administration

June E. Tierney – PSD Commissioner
TJ Poor – Director of Regulated Utility Planning
Andrew Perchlik – CEDF Fund Manager
Edward Delhagen – Clean Energy Finance and Program Manager
Christopher Heine – Clean Energy Program Specialist
Anne Nelson – Financial Manager
Patricia LaRose – Financial Manager

• Appendix II_CEDF Financial Reports for CEDF & ARRA Funds

**Fiscal Year 2024 CEDF Fund
Revenues and Expenditures**

Revenues	\$
Fund Interest	26,694
Loan Interest	21,708
Loan Repayments	24,035
Other Revenue	10,850
Total Revenues	\$ 83,287
EXPENDITURES	
	\$
Salary & Benefits	126,778.86
Misc. Administration	36,017.88
Total Administrative Expenses	\$ 162,797
VEDA - Loan Admin.	3,278
SSREI Program Contract	36,338
SSREI Program Incentives	123,672
Contracts - other	9,854
Grants	25,463
Total Program Expenses	\$ 198,605
Total Expenditures	\$ 361,402
June 30, 2024 CEDF Fund Balance	\$ 394,355

Fiscal Year 2024 CEDF's Federal ARRA Revenues and Expenditures	
REVENUES	
Small Fund Interest	1,542
Loan Repayments	21
Loan Interest Income	5,718
Total Revenues	\$ 7,280
EXPENDITURES	
PSD Salary & Benefits	11,109
Misc. Administration	3,156
SSREI Program Incentives	175,330
SSREI Program Admin.	11,139
BGS MOU	39,860
VEDA MOU	8,399
Total Expenditures	\$ 248,994
June 30, 2024 Fund balance	\$ 159,342