



VERMONT PUBLIC FINANCING CLIMATE COLLABORATIVE

The Vermont Public Finance Climate Collaborative (the “Collaborative”) is a joint effort by the financing instrumentalities of the State of Vermont representing municipal, commercial, and residential sectors to create a collective home for climate financing initiatives in the state.

In forming the Collaborative, the members bring a combined \$9 billion of financing experience to the deployment of existing and new financial resources to combat Climate Change. The Collaborative also represents a uniquely Vermont approach to climate financing by using what works and eliminating the need for new financing entities.

The potential for public investment as well as Vermont’s own ambitious climate goals demand a shared front door for climate financing. This will allow ease of use, consistent marketing, comprehensive program development, and if available, the receipt of federal dollars.

On the federal level, the Collaborative will ensure Vermont is prepared to pursue and administer climate-focused resources quickly and efficiently. The Inflation Reduction Act of 2022 includes the [Greenhouse Gas Reduction Fund](#) that will provide nearly \$27 billion in competitive awards by 2024. Eligible recipients under the proposed program must be non-depository public and non-profit entities designed to leverage private capital and provide financial assistance for qualifying projects.

The Collaborative is positioned to use existing organizational infrastructure and experience to ensure Vermont is prepared for these opportunities without needing to stand up a new financial or institutional entity. Moreover, the competitive nature of potential awards means that tapping into existing expertise will be critical in accelerating Vermont’s response.

The Collaborative is also poised to help the state regardless of what happens in Washington. Vermont will require significant investments in clean energy and resilience measures according to the [Vermont Climate Action Plan](#). The need for a collaborative approach among financing agencies in meeting climate outcomes is also highlighted in the [2022 Comprehensive Energy Plan](#) (CEP) written by the Vermont Department of Public Service.

The Collaborative members have a long history of deploying private capital, state resources, and federal resources to meet Vermont’s strategic initiatives and goals.

Climate Financing Deployment

The Collaborative members have existing experience financing the cross-sector needs identified in the state’s climate documents.

Vermont’s draft CEP called on the need to mobilize private investment “with the latitude and flexibility to design and implement tested or novel solutions.”

At the forefront of the Collaborative’s work will be continuing to collectively provide access to capital and efficient financing for our existing constituencies. As needed, the Collaborative would also address potential financing gaps focusing on risk mitigation (such as credit enhancements or co-investing strategies to entice other finance market participants); bundling transactions (to reduce inefficiencies for smaller projects); direct lending (for clean energy projects that cannot be financed by private financial institutions); and playing the role of connector between finance

institutions, government agencies, and private market actors. Below are potential project categories cross referenced with the existing work and statutory authority of the Collaborative members across the public, commercial, and residential sectors.

	VBB	VEDA	VHFA
Renewable energy generation	✓	✓	✓
Building energy efficiency, fuel switching, and electrification	✓	✓	✓
Industrial decarbonization		✓	
Grid technology such as transmission, distribution, and storage to support clean energy distribution, including smart-grid applications	✓ (municipal only)	✓ (storage)	✓ (storage)
Agriculture and forestry projects that reduce net greenhouse gas emissions		✓	
Clean transportation including EVs and related vehicle charging as well as other low carbon mobility solutions	✓	✓	✓ (charging)
Climate resilient infrastructure	✓	✓	
Emerging technologies and other sector identified by the federal government		✓	✓

Leveraging Capital, Experience, and Partnerships

By using the Collaborative to leverage energy and climate investments, Vermont gains the specialized underwriting, financial capacity, capital markets experience, relationships, and generally financial acumen that results from over \$250 million in annual loan activity.

This includes industry leading effort to expand green and social impact financing structure within the state (ex. Local Impact Bonds, Green Bonds, and Social Bonds).

Each member of the Collaborative additionally brings deep ties to Vermont’s broader financial sector. Existing partnerships with Vermont’s banks, credit unions, community development financial institutions, municipalities, and other key financial stakeholders will ensure a high level of cross-industry collaboration across every level of Vermont’s financial services industry. Leveraging this experience and knowledge will accelerate the deployment of climate finance across the state.

Each of the instrumentalities of the Collaborative are previous creations of Vermont’s General Assembly aimed at meeting the state’s financing needs. The state can count on these organizations to provide a responsive and effective framework as Vermont looks forward to new and evolving opportunities for Climate-focused investment initiatives.

Vermont Bond Bank



The Vermont Bond Bank has served the evolving needs of Vermont’s municipalities, school districts, and special districts for over 50-years by providing low-cost capital across the state. Over the last decade, energy efficiency, renewable energy, and climate resilience projects became a regular use of loans provided by the Bond Bank—including helping communities rebuild following Tropical Storm Irene.

In the last five years alone, the Bond Bank financed nearly \$26 million in related projects. These ranged from a \$400 thousand wood pellet boiler replacement to an energy efficiency retrofit in excess of \$7 million.

As a result of the Bond Bank’s unique structure, projects of all sizes can benefit from the same low cost of capital and low transaction costs.

Climate Financing Over the Last Five Years	
Energy Efficiency	\$16.17 million
Renewable Energy	\$5.80 million
Climate Resilience	\$3.95 million
Total	\$25.92 million

Additionally, the Bond Bank serves as the financial administrator of the State of Vermont Clean Water and Drinking Water State Revolving Loan Funds (“SRF”). In addition to fiduciary activities, the Bond Bank provides financial analysis and underwriting on municipal loans for clean water projects with climate implications. In 2020 alone, the Bond Bank assisted \$36 million in SRF loans and loan amendments.

In addition to energy savings and renewable energy produced, the Bond Banks’ work also includes tangible environmental health improvements for thousands of students following the replacement of fossil fuel systems.

Case Study: Vermont Climate Finance

In 2017, the Bond Bank issued its first Green Bond and in 2019, received the Bond Buyers “Deal of the Year” award for Small Issuers. This was awarded in recognition of the enhanced disclosure represented in its Local Investment Bonds quantifying social and

Case Study: Energy Efficiency

ADDISON NORTHWEST SCHOOL DISTRICT

ADDISON COUNTY

ENROLLMENT: 1,000 students

ISSUE

The District was planning to undertake multiple improvements at all four of its district campuses. The largest improvements related to energy efficiency upgrades subject to an energy performance contract. The District hoped to secure a low cost of capital for the improvements to maximize the budgetary savings related to reduced energy use.

BOND BANK SOLUTION

The Bond Bank approved the District’s request for financing in the amount of \$7.63 million. The District will draw on the funds over the course of a year while undertaking the improvements. In total, the energy efficiency upgrades are expected to save the District over \$200 thousand annually by reducing energy consumption by approximately 275 thousand kWh. All improvements were completed in 2018.

Estimated impacts for projects anticipated to be funded by the 2019 Bonds include:

- Serving a population, including indirect users, of over 200,000;
- Saving approximately 500,000 kWh annually;
- Constructing or upgrading over 250,000 feet of facilities;
- Converting 50,000 gallons of oil to biomass heat annually;
- Enhancing over 1,200 student seats;
- Improving over five miles of streetscape and roads;
- Purchasing two fire trucks; and
- Upgrading one recreation facility located in an Opportunity Zone.

Governmental Unit	Loan Amount	Term (Years)	Zip Code	Environmental Benefits		Social Benefits				Project Description
				Water/Sanitation	Stormwater/Storm Event	Education	Public Spaces	~50% AMT	80-100% AMT	
Addison Northwest School District	\$ 380,000	5	05491			X				Building improvements to Ferrisburgh Central Elementary School.
Champlain Water District	1,090,607	15	05403	X			X	X		Improvements to District’s public drinking water supply system.
Town of Chester	250,000	7	05143					X		Road paving projects.
Town of Northfield	1,700,000	20	05663		X					Road reconstruction.
Town of Pownall	600,000	20	05261				X			Construction of new town hall and history center attached to historic schoolhouse.
South Burlington School District	2,500,000	20	05403			X	X	X		Improvements to multiple school facilities.
City of St. Albans	2,500,000	20	05478				X	X		Continuation of neighborhood sidewalk replacement and streetscape improvements within economic development district.
Town of Williston	900,000	20	05495		X					Replacement of culvert and related improvements.
Town of Wilmington	5,500,000	20	05363					X		Improvements to public safety facilities.
Town of Windsor	3,152,000	20	05089	X	X			X		Improvements to water and sewer systems; refinancing infrastructure constructed following storm event, sidewalk, road and drainage.

¹ Source: ACS and PolicyMap. AMT = Area Median Truncated Income. * indicates the location where the projects are located. Michael Gaughan (michael@vtbondagency.org) is signed in.

environmental benefits of the underlying loans. The Bond Bank continually innovates to expand the number of ESG Investors bring dollars to Vermont.

Vermont Economic Development Authority



History of Financing the Clean Energy Sector

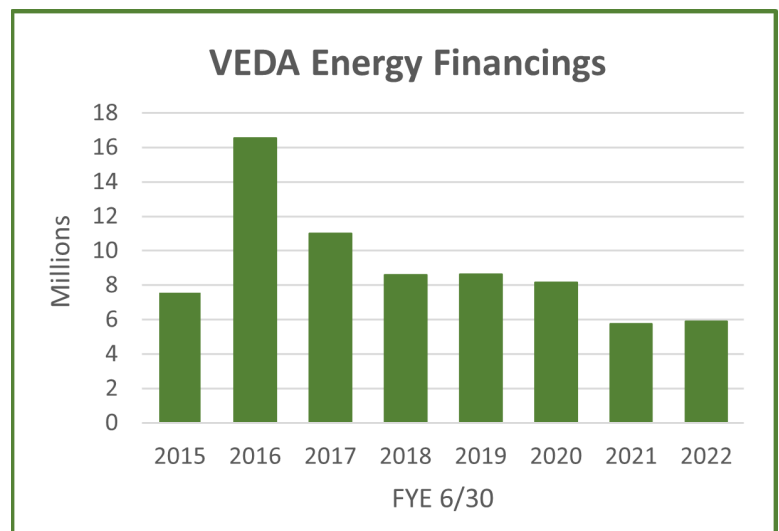
The Vermont Economic Development Authority has over two decades of experience financing clean energy, energy efficiency and energy technologies in support of the state's goals in mitigating the global climate change crisis.

In 2009, VEDA partnered with the Clean Energy Development Fund (CEDF) to administer a portion of the ARRA funds designated for state energy programs. VEDA originated 22 loans for \$9 million during the program's existence.

In 2013, the legislature recognized there was a financing gap in the commercial energy sector and looked to VEDA to help fill the gap. Act 87 was enacted that year which created the Vermont Sustainable Energy Loan Fund within VEDA ([Subchapter 013 \(10 V.S.A. § 280cc\)](#)). The Fund consists of several loan programs addressing renewable energy, energy efficiency and energy technologies, and further gives VEDA the authority to establish: *"New financing programs that the authority determines are necessary to encourage and promote sustainable energy projects and reduce reliance upon fossil fuel sources."*

In 2015, VEDA received \$10 million from the State Treasurer under the Credit Facilities for Local Investments Act (Act 199 of 2014) in the form of a 10-year interest bearing note. This direct state funding has been leveraged with VEDA's funding from the capital markets to **originate over \$70 million in energy loans**, and further leveraged with private funding to complete **clean energy projects totaling approximately \$187 million**.

Over the years VEDA has originated loans for a broad range of clean energy projects, including solar arrays (ground and roof mounted) biodigesters, EV charging stations, thermal heat systems, hydro, and energy efficiency projects.



In addition to the direct lending programs, VEDA underwrites, services, and administers portions of five loan programs for the state: Brownfields Revitalization Revolving Loan Fund; Drinking Water Revolving Loan Fund; Clean Water Revolving Loan Fund; Clean Energy Development Fund; and State Infrastructure Bank.

Since 2007, VEDA's energy financing has...

- ✓ Created approximately **1,300 FTEs** in the energy sector (based on Vermont's REMI model maintained by ACCD).
- ✓ **Reduced green house gas emissions by 54,715 tons per year**, the equivalent of ...
- ✓ **...Removing 12,000 cars** from the roads.
- ✓ Generated **318,043 MMBtus** of renewable clean energy per year, enough...
- ✓ **...To power 18,213 average households**

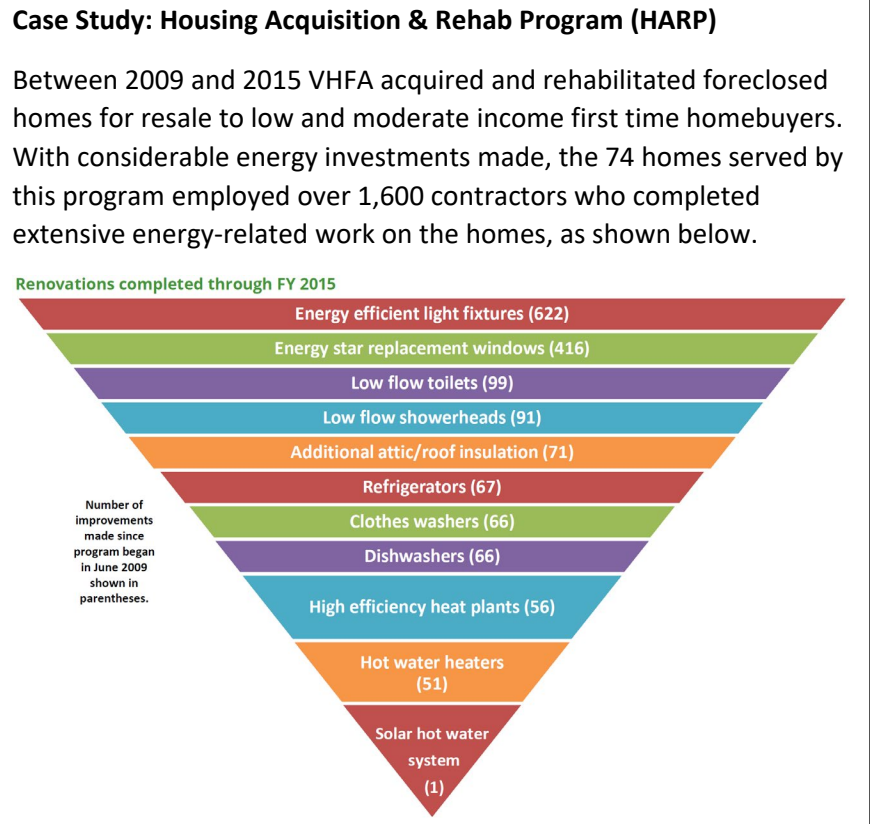
Weatherization Repayment Assistance Pilot (WRAP)

VHFA has developed and will administer a first-of-its-kind, statewide, on-bill financing program. The Public Utility Commission approved several utilities’ tariffs for the program, which will cover approximately 80% of the state when it launches in October 2022. WRAP will pay, upfront, for income-eligible households weatherization measures that will result in cost savings. That assistance will be repaid over time via the resident’s utility bill. Financing is tied to the home’s meter instead of the individual, meaning the current resident who is enjoying the benefit of lower-cost heating is the one responsible for repaying the charge, and this transfers to the next resident through simple disclosure.

Energy Efficient Mortgages & Homeownership Improvement Financing

Since the 1970’s, VHFA has helped to address a range of challenges to the efficiency, safety and comfort of single family, multi-family and manufactured housing in the State. With almost \$9 million of investments, VHFA has operated programs focused on:

- ✓ Energy conservation loans to homeowners (\$2M commitment).
- ✓ Energy upgrades in 71 homes through Home Energy Investment Loan Program (\$300,000).
- ✓ Established Energy Rated Homes of VT, a rating system to help lower income and first-time home buyers avoid high energy costs.
- ✓ Launched 4-Star Energy Program where borrowers qualified with higher loan-to-value ratios to facilitate qualifying energy efficiency improvements (\$1.8 million).
- ✓ Created a stepped rate program so households could qualify at a low rate with a higher loan-to-value ratio, knowing the utility savings would then help affordability after substantial energy investments were made (\$4 million).
- ✓ Funded a weatherization pilot of the Public Service Department (\$750,000).
- ✓ Provided funding for 230 households to purchase either Energy Star or Zero Energy



Modular homes through the state housing tax credit program. \$6.4 million in tax credit equity has leveraged over \$21.7 million in other financing serving households with an average household income of \$45,000.

Housing For All Revenue Bond

In 2018, the Agency issued its \$37 million Housing for All Revenue Bonds, the proceeds of which were used to fund 34 new affordable housing developments in 23 Vermont communities containing a total of 843 new housing units. These bonds earned the State’s first Sustainability Bond designation by virtue of the investment of proceeds in projects deploying advanced energy efficiency approaches including high performance building envelopes, balanced ventilation, and advanced electric heating. All housing created met VHFA’s Green Building Design Standards, which required higher standards of efficiency and climate-sensitive sourcing than Vermont’s basic energy standards.