

CLIMATE CATALYSTS INNOVATION FUND

Vermont Council on Rural Development

2021-2022 Report







Prepared by:

Vermont Council on Rural Development





In 2021, VCRD launched the Climate Catalyst Innovation Fund to support innovative local projects for which a small grant could have a meaningful impact at the community level. In its first round, the Fund received 32 applications for a total requested amount of over \$76,000. Of those, 18 projects were awarded small grants to support local innovators developing solutions that move Vermont closer to its climate and energy commitments.

Projects were chosen by a team of VCRD staff and Climate Economy Initiative Advisory Committee member representatives from VSECU and Efficiency Vermont. In making award decisions, we looked for projects that are innovative, replicable, collaborative, equitable, and have positive climate/energy impacts.

Thanks to the generous support of VLITE, the Green New Fund of the Vermont Community Foundation and VSECU who together provided \$40,000 in funding for this first round.

Due to the success of this first year, VCRD intends to continue this fund annually. A second grant round has just been awarded and a third round will be announced in late summer 2023. Join the VCRD email list at vtrural.org to stay informed.

This report describes outcomes of first round projects in the words of the awardees. We appreciate the dedication and efforts of each team and the collective impact of the work for Vermont's future.

All the best.

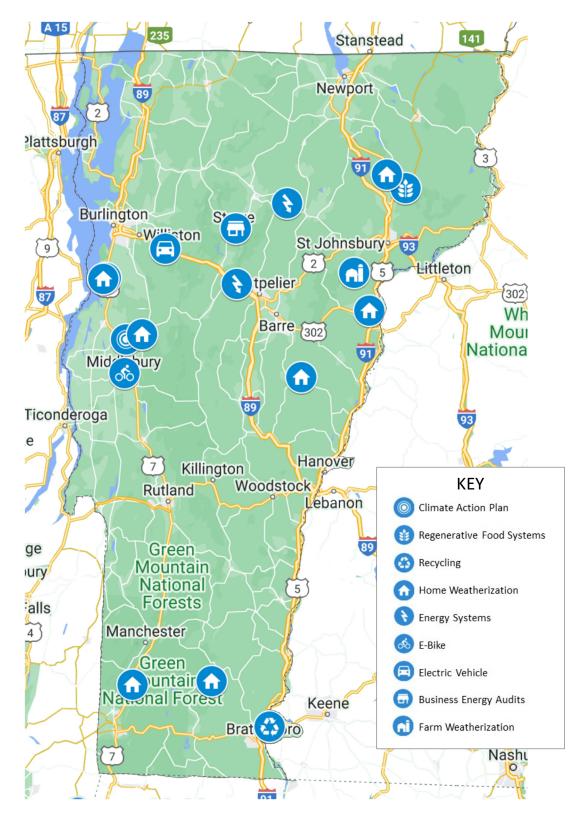
Laura Cavin Bailey

Climate Economy Program Manager

Location of Funded Projects

For an Interactive map of project locations, types, and descriptions:

www.google.com/maps/d/edit?mid=1hYZMYKaTsamvUUwgpPXVJFiPSsR1eHM&usp=sharing



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Here's a snapshot of outcomes of each project in the words of the awardees.

Bennington County Window Dressers | shireshousing.org/wd

Project: \$2,000 to assemble low-cost insulating window inserts through the Window Dresser's program, with approximately one-third reserved for low-income households.

Outcome: In two weeks over two hundred volunteers contributed more than 1,400 hours to build over 400 insulating, draft-stopping window inserts for customers across Bennington County and neighboring New York. Outreach to the community was an important aspect of our efforts. In all, we served 45 families and four non-profit organizations. A third of the families served were able to utilize scholarships to offset the cost of the inserts. Using the Window Dressers community build process, over 90% of those who ordered the inserts plus many others from the community gave their time to provide outreach to the community, make food, measure windows, build inserts and coordinate efforts. We were also very happy to tap into student volunteers from the regional college and high schools. The organizing group included members from five area energy committees, the Bennington County Regional Commission and staff from Window Dressers.





BurnRight Vermont | www.burnrightvermont.org

Project: \$1,000 to help inform residents in the NEK and neighboring towns about efficient wood burning practices.



It's not how we were taught, but place the biggest logs on the bottom, then crisecross smaller logs on top.





Outcomes: In the NEK and nearby towns, BurnRight Vermont accomplished the following: Coordinated with HEAT Squad and distribution of brochures; Published article and link in the Northern Vermont Development Association newsletter; Met with the Ryegate Energy Committee; Presented to members of Cold Hollow to Canada, an association for forest stewardship and conservation; Recorded Cold Hollow's webinar on wood heat (see left) and distributed to its spring CONNECTIONS newsletter; Published article in chimneys.com; and Presented to the NEK Regional Energy Committees. All of these initiatives were well received. BRVT has long experience that people are grateful for and receptive to information about cleaner and more economical wood burning and are interested in spreading the word.

Charlotte Library | charlottepubliclibrary.org

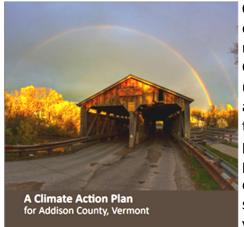
Project: \$1,000 to implement a town-wide program for the reuse, recycle and repurpose of materials based at the Charlotte Library and for signage at the library relating to water quality.

Outcome: We were able to offer a more accessible drop-off system, enabling our community to recycle their electronic waste and flexible plastic more conveniently and effectively. This not only increased the recycling rate in our town but also encouraged us to look for other recycling options that we could offer. To date, we now offer toothbrush and toothpaste tube recycling, battery recycling, can-topper recycling, and disposable shaving tools recycling.



Climate Economy Action Center of Addison County | ceacac.org

Project: \$3,000 to help the Climate Economy Action Center of Addison County (CEAC) generate and implement effective communications with partners and the general public about a Climate Action Plan for Addison County.



Outcome: The VCRD grant funds helped CEAC generate and implement effective communications to and from partners and the general public regarding a Climate Action Plan (CAP) for Addison County. We hired The Clark Group out of Montpelier, VT as communications consultants to help us advance and focus CEAC's public engagement and communications activities. We developed regular communications throughout the project that were published in our monthly newsletter and on our website. Our public engagement plan included 5 open public meetings, two which provided an overview of the entire draft CAP, and one each focused each on Transportation, Building Energy, and Agriculture. CEAC had a generally successful public engagement process last winter and spring and a final version of a Climate Action Plan was approved in June 2022. However, we

were not able to engage with BIPOC, low-income, and other underrepresented groups in Addison County as effectively as was envisioned. This work will continue through the winter and spring of 2023 with an approach that, while more time consuming, will ultimately result in a more just and inclusive process.

East Burke School | eastburkeschool.org

Project: \$3,000 to support the East Burke School's "Food Forest" program – a public demonstration center for regenerative agriculture.

Outcome: East Burke School was able to improve drainage around our Food Forest, complete an outdoor oven, and install signage to better educate and guide campus visitors. 2021 CCIF funds provided East Burke School with gravel to help direct and retain water around our plantings while reducing soil erosion, significantly improving the parking lot conditions surrounding our Food Forest. We were able to purchase the clay and pigment necessary to complete our outdoor cob oven—one that the students sculpted in the shape of an animal they have lovingly dubbed a







hippo-pig-a-moose and can now use for cooking produce grown right on campus. Perhaps most importantly, CCIF funds allowed us to acquire and install signage intended both to control traffic around our Food Forest and to educate visitors about the project's goals. Now, visitors to East Burke School see a school campus that is clearly thriving, and they can stop by our new informational kiosk to learn about the regenerative agricultural demonstration center that we are building in the heart of the Northeast Kingdom.

Ilsley Public Library | ilsleypubliclibrary.org/find-it/library-of-things-e-bike

Project: \$2,000 to purchase an electric bike for the Ilsley Public Library's e-bike lending program to help expand access and awareness around the benefits of e-bikes in the community.

Outcome: We were able to purchase an e-bike and related equipment (helmet, carrier bags, etc.) for library patrons to check-out. This community e-bike allows people to try it before making such a large purchase and is also available for those who can't afford an e-bike but want to use one occasionally. E-bikes have many benefits for people and the planet—physical and mental health benefits, low per mile cost, accessible for seniors, and more, all while reducing the use of fossil fuels. Libraries are a great way for communities to share resources and ensure equitable access—we encourage other libraries to add an e-bike to their collection!

Middlesex Energy Committee | whatsnextmiddlesex.org/energy-committee



Project: \$1,000 to support the "Let's Get Together to Kick Some Gas" Energy Fair with the focus on alternatives to fossil fuels.

Outcomes: We hosted an Energy Fair at our local Elementary School in Middlesex attended by over 100 people. We created posters and flyers which were distributed widely and inserted into the current issue of the Green Energy Times, a free newspaper that highlights energy conservation and climate change issues. Folks

brought their electric cars, bicycles, lawn equipment, etc., and offered demos and rides. We showed how to cook with an induction cooktop plugged into an electric car and offered snacks! We provided lots of literature, working with our local weatherization assistance program—Capstone. We offered a door prize of

an electric generator for home use! Representatives from Washington Electric Co-op, Efficiency VT, and Drive Electric Vermont were there to answer questions. It was a great fair, and many people stayed late to talk about energy issues.





MAUSD - Beeman Elementary School | beeman.mausd.org

Project: \$2,000 to pilot the Window Dressers program in the Beeman Elementary School with window inserts that provide insulation to reduce heating costs and make rooms more comfortable for students and teachers.

Outcome: With supplies and instruction from Window Dressers, a Maine non-profit, plus many community volunteers, we measured and built custom insulating window inserts for the Beeman Elementary School in New Haven, VT. The school has had a long history of cold and drafty library and classrooms in winter because of poor window insulation. With the funds, we measured, custom built, and installed 18 window inserts in the two largest classrooms and the entire library. We also hired the building of custom window insert storage racks to store the inserts after the winter season. This project has a triple benefit: making the rooms much more comfortable in winter, reducing winter fuel bills, and, because less fuel is being used, reducing the resultant greenhouse gas emissions.







Northeastern Orange County Window Dressers

Project: \$1,500 to support a week-long Window Dressers Community Build event for residents of Northeastern Orange County where custom fit interior storm panels, offered at reduced or no cost, are made by customers and volunteers.

Outcome: The Northeastern Orange County Window Dressers held its Community Build at the Vershire Town Center Building from November 4-9. We built 188 insulating window inserts for a total of 27 households from

the four participating towns (Corinth, Vershire, West Fairlee and Bradford VT). We encouraged low-income customers to take advantage of the opportunity by including flyers in meals on wheels, food box depots, setting up tables at town events and visiting recycling centers. 11 of the 27 households that ultimately ordered interior storm windows were eligible for subsidies, which reduced or, in some cases eliminated, their out-of-pocket expense. We had also hoped to connect with seniors and were satisfied to see that 19 of the 27 homes we helped insulate were lived in by people over 65. It is estimated that an average Window Dresser insert saves fifteen gallons of heating fuel per season (see https://energizevermont.org/the-window-project).







Because the November 2021 price of a gallon of No.2 Fuel Oil in Vermont was \$3.20 this translated to a savings of \$48 dollars per window insert for just the first season of use—close to the actual cost of the insert itself. We have successfully met our major goal, which was to introduce Window Dressers to our four towns in this first year. We have established contact with a diverse group of volunteers, some of whom are likely to become customers next season and may even step up their involvement by helping to organize a future build.

Photos by Dave Celone

Peacham Energy Committee | peacham.org/energy-committee

Project: \$2,000 for micro-grants to help small-scale farming operations in Peacham develop strategies for implementing energy efficiency and weatherization, or for another project yet to be defined.

Outcome: Four small-scale farms in Peacham each received a \$500 mini-grant to help jumpstart energy efficiency upgrades within their homes and operations. The Peacham Energy Committee learned early on that none of the farms were interested in having a home energy audit completed and several indicated they were already aware of the major upgrades (in the \$10s of thousands) needed. All four farms were grateful for the help that \$500 could provide toward pre-identified problem areas. For example, one farm will use the money to replace the door on their milk room. Their old one is falling apart, and hopefully this will help with the cost of heating the milk room this winter. One farm will use the funds to



Farmhouse basement to be insulated

help insulate one of the farmhouse basements. However, many of the projects have been sidelined due to ongoing labor and supply chain delays, shortages, and price hikes.

Rich Earth Institute | richearthinstitute.org

Project: \$2,000 to support the expansion of the Rich Earth Institute's nutrient recycling network in southern Vermont through outreach, education, and demonstration activities.

Outcome: The primary activities conducted and completed through this grant included: Completing retrofits for our fleet of 17 urine diverting portable toilets; Hiring a part-time position to support portable toilet operations and expansion; Constructing and operationalizing a new collection depot serving the towns of

Westminster and Rockingham, VT; Direct contact with over 1,000 people, engaging new audiences through outreach and education events; Engaging at least 50,000 people through social media posts and videos; Building overall volunteer engagement supporting our work by at least 75 people; and Increasing the volume of nitrogen Rich Earth diverts from the Connecticut River Watershed from 600 pounds to at least 750 pounds.





Sutton Energy Committee | suttonvt.org/sutton-burke-and-wheelock-residents

Project: \$2,000 to support the Sutton Energy Committee in their work to roll out the Window Dressers program for Sutton residents to outfit their homes with custom-fit, insulating window inserts to help reduce

heating costs and CO2 emissions.

Outcome: Thirty-seven volunteers came together on four days to make 109 interior storm window inserts for 11 families and the Sutton Town Office. The funds were spent to pay for interior storm inserts for families who would otherwise not be able to afford them. \$1,850 paid for the inserts and \$150 was donated to the not-for-profit organization for use of their space in





order to defray heating and electrical costs incurred during our community build. In the typical home, the use of 10 inserts saves an average of 105 gallons of heating fuel per year and pay for themselves in less than two years.

Town of Richmond, Police Department



Project: \$3,000 toward the purchase of a Tesla cruiser for the Richmond Police Department as a pilot to save taxpayer dollars and reduce Richmond's carbon footprint.

Outcome: Purchased a Tesla Model 3 as a pilot program to test the feasibility of an EV police cruiser in Richmond, VT. Though the Model 3 may not be the best suited vehicle for patrol, mainly due to its size, it has proven that a fleet inclusive of EVs is tenable and is a successful endeavor.

Town of Stowe, Stowe Energy Committee | townofstowevt.org/index.asp?SEC=60C56184-B0F9-457F-9201-EF0DA8CB89DA&Type=B BASIC

Project: \$1,000 to provide Stowe businesses with free energy audits and gift certificate incentives to help them understand steps they can take to reduce their carbon footprint and cut energy costs.

Outcome: The Stowe Energy Committee offered local businesses free energy audits and gift certificate incentives to help them reduce their carbon footprint. We accomplished this by reaching out to local businesses through personal relationships, door-to-door and cold-call outreach, Front Porch Forum posts, and announcements in the Stowe Reporter. We organized walkthroughs for 10 local

businesses. The audit provided businesses with an objective, third-party view of where energy is being wasted, a prioritized list of recommendations for steps they can take to save energy, and information about financial incentives and custom rebates to minimize project costs.





Town of Wolcott | wolcottvt.org

Project: \$2,000 to help the Town of Wolcott install efficient outdoor solar lighting for the Town office, community garden & community green place to replace aging and potentially dangerous electric systems.

Outcome: The awarded funds allowed the Town of Wolcott to move forward with replacing 5 electric parking lot lamps with 5 solar operated parking lot lamps. The electric lamps were using 100 Watt standard bulbs each. In addition to the electricity use the old lamps were in a state of disrepair due to corrosion with exposed wiring. The new solar lamps allowed the Town to disconnect the electric hookup alltogether with a much-improved safety factor. The electric lamps were burning





approximately 2,190 Kilowatt hours per year at an approximate cost of \$438.25. It is our expectation is that the new lamps will have a lifespan of 10 years at a total cost savings of \$4,380. The solar lamp structure was chosen to be consistent with the Town Plan to provide aesthetically pleasing lamps that are consistent with the Town's historical school street and train depot building.

Charlotte Energy Committee | charlotteenergy.org

Project: \$1,500 to build broad enthusiasm for and participation in the Charlotte Weatherization Project (CWP) that offers free energy visits and materials for home weatherization projects.

Outcome: Through this grant, the Charlotte Energy Committee hired a local woman from the target demographic to serve as weatherization campaign consultant. She

made an enormous difference in effectively reaching to lower-income households with free DIY weatherization materials, support, and information. In the words of a participant, "the CWP provides the tools, materials, and education needed to fill, seal, and insulate the holes, cracks, gaps, windows, doors and pipes that are not in ideal condition for the significant weather we experience here in Vermont. The

home improvements significantly help Charlotte residents save on utility bills, reduce environmental impacts of energy and fuel usage through lowered consumption, promote longevity for appliances and the home itself, and make for more comfortable, cleaner living spaces."





A few projects have been extended:

Town of Ryegate is working to convert from fuel oil to geothermal heating systems in the town garage and fire station in Ryegate Corner. www.ryegatevt.org.

Wardsboro Energy Committee will reach low-income residents through its fall 2022 Window Dressers program providing window inserts for winterizing homes and businesses. wardsborotowncommittees.org/ energy-committee.

Climate Catalysts Innovation Fund Press

Some media and news articles of funded projects:

Bennington County Window Dressers

- youtube.com/watch?v=yMWoi5N4RLs&t=41s
- benningtonbanner.com/local-news/county-wide-window-insulation-program-in-the-works/article_74cd73de-acf4-11eb-b41b-0f1ee8a981c1.html
- <u>benningtonbanner.com/community-news/be-cozy-this-winter-with-community-built-insulating-window-inserts/</u> article 08b819aa-e5a8-11eb-a006-7776ddcaae6d.html
- <u>benningtonbanner.com/local-news/window-insert-efforts-kick-off-second-year/article_82486d96-99ae-11ec-939f-afa39ad25113.html</u>

BurnRight Vermont

chimneys.com/burn-your-fire-cleaner-more-economically/

Charlotte Library

charlottenewsvt.org/2022/01/13/library-news-january-13-2022/

Climate Energy Action Center of Addison County

- addisonindependent.com/2022/02/17/county-climate-plan-focuses-on-local-action/
- mailchi.mp/359e48bc4c0c/ceac-e-news-14144049
- <u>middleburyclimateeconomyinitiative.files.wordpress.com/2022/06/ceac-climate-action-plan-for-addison-county-final-061422.pdf</u>

Northeast Orange County WindowDressers

uppervalleyvtnh.substack.com/p/dressing-windows-in-vershire-vt

Rich Earth Institute

- nytimes.com/2022/06/17/climate/peecycling-farming-urine-fertilizer.html
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- cbc.ca/listen/live-radio/1-2-as-it-happens/clip/15920582-call-duty https://www.newstalk.com/podcasts/highlights-from-moncrieff/pee-cycling
- arstechnica.com/science/2022/08/should-we-be-trying-to-create-a-circular-urine-economy/
- theguardian.com/environment/2022/jun/20/peecycling-could-donating-your-urine-to-farmers-help-feed-the-world
- newstalk.com/podcasts/highlights-from-moncrieff/pee-cycling
- nowthisnews.com/earth/watch-can-recycled-urine-turn-into-plant-fertilizer
- nature.com/articles/d41586-022-00338-6

Richmond Police Department

• <u>sevendaysvt.com/vermont/richmond-police-fight-climate-crisis-with-an-all-electric-tesla-cruiser/Content?</u> oid=36158887

Charlotte Energy Committee

- https://www.vtcng.com/thecitizenvt/opinion/opinion_columns/charlotte-energy-group-says-weatherization-works/ article c3215eb6-50a3-11ed-be14-1bca99fc1b52.html
- https://www.charlottenewsvt.org/2022/09/29/free-weatherization-supplies-to-keep-charlotters-warm-this-winter/

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