

# Efficiency Vermont Overview

Peter Walke, Managing Director

# Who we've been

- The nation's first Energy Efficiency Utility
- We help Vermont transition to more affordable, low carbon energy
- We work through statewide engagement, education, incentives, and support for our clean energy workforce.



# The impacts of efficiency

**Over \$3.3 billion**

Lifetime savings from 2000-2023

**Over 14.1 million metric tons of CO<sub>2</sub>e**

Lifetime avoided from 2000-2023

**3.3 million cars off the road**

Equivalent impact of emissions avoided

**31% lower**

Vermont's average electricity bill, below the New England average

**9,969 jobs**

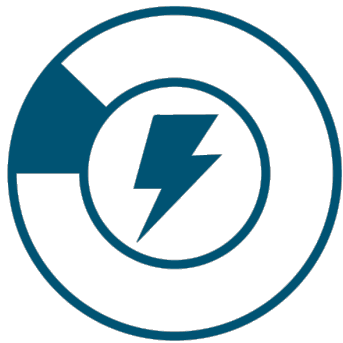
Vermont's energy efficiency jobs – 55% of the clean energy workforce

**+650 businesses**

Efficiency Excellence Network members

# The economic value of efficiency

Efficiency comprises **over 15%** of VT's electric portfolio, delivered at **79%** of the cost of purchasing new power.



**15.3%**

Percentage of Vermont's 2023 electric needs met by efficiency



**5.8¢/kWh**

Cost of saving electricity with efficiency



**6.9¢/kWh**

Cost of supplying electricity

**vs**



**\$16.32/MMBtu**

Cost of saving fossil fuel with efficiency

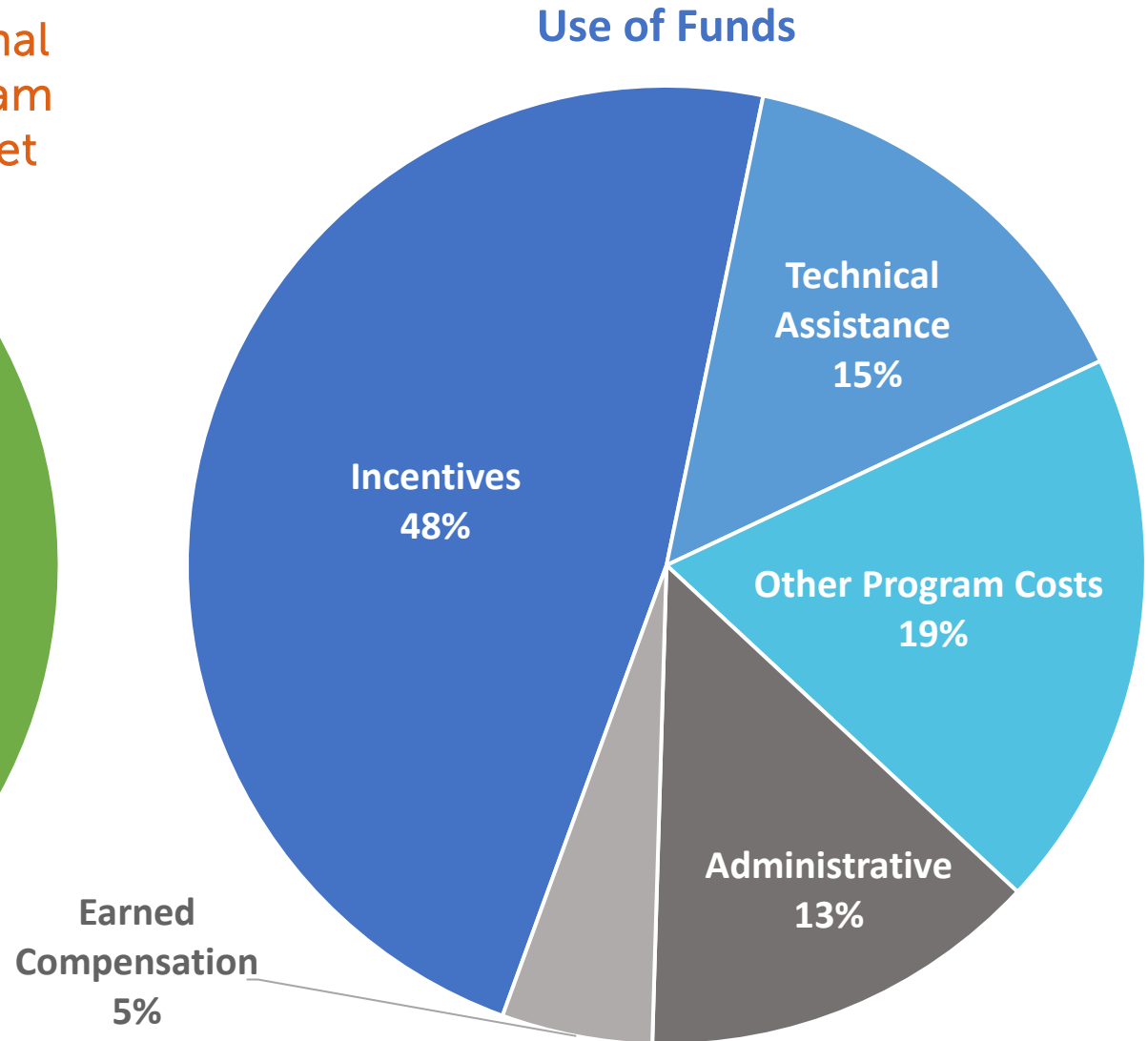
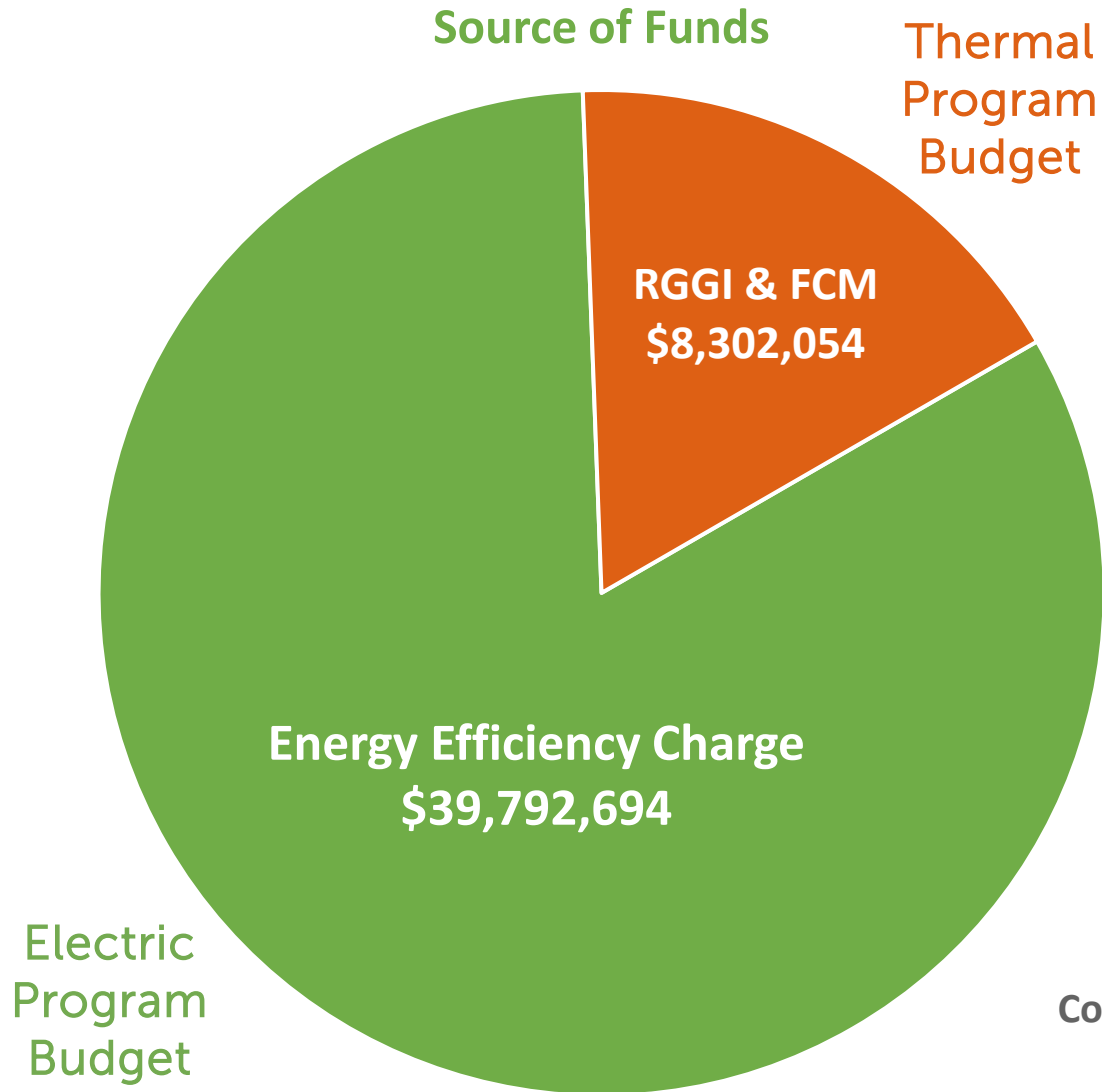


**\$28.60/MMBtu**

Cost of supplying fossil fuel

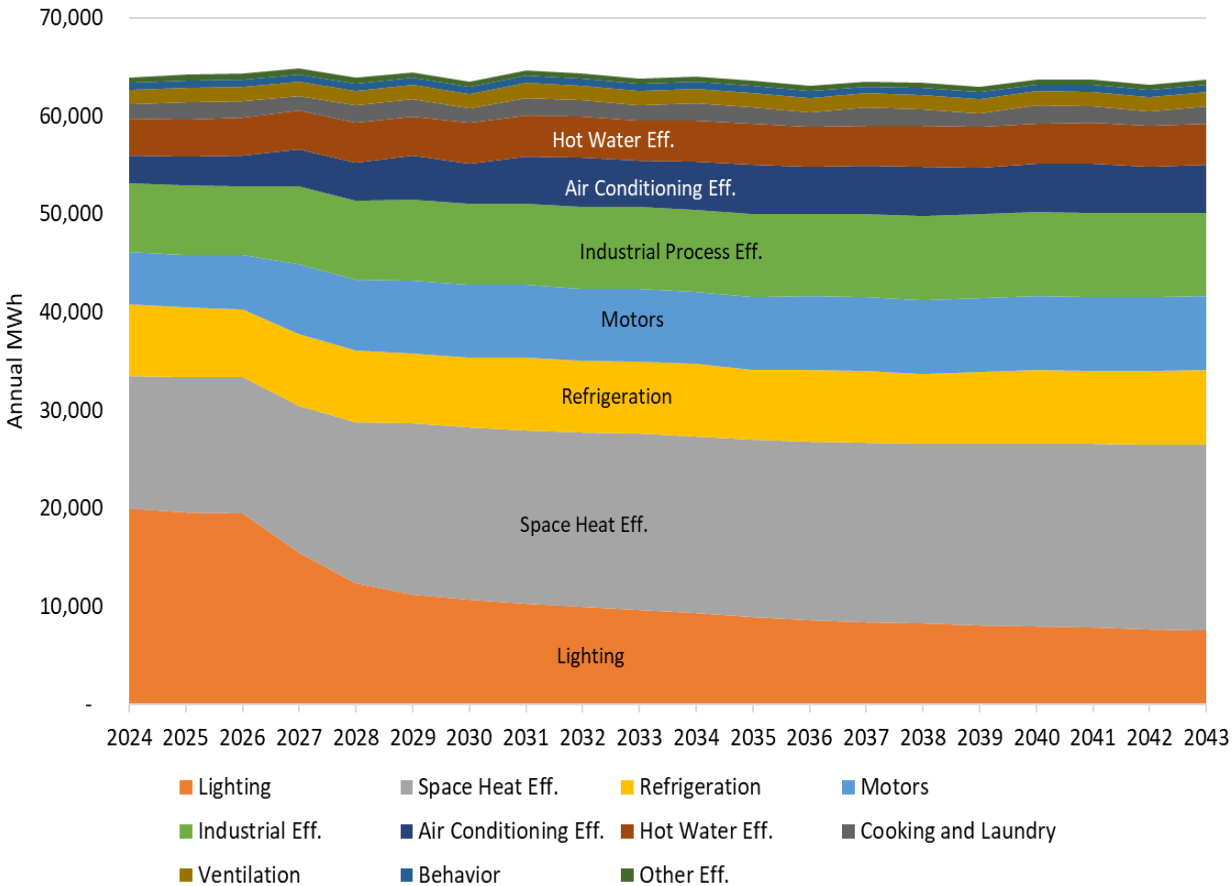
**vs**

# 2023 Efficiency Vermont budget breakdown



# Planning Vermont's efficiency investments

Portfolio Annual MWh Savings by End-Use



## Demand Resource Plan






- The Public Utility Commission oversees a long-term 10, 20-year plan for efficiency investments
- Efficiency Vermont develops modeling and forecast trends to propose future efficiency opportunities and investments
- Electric budget is approved by PUC, intended to achieve all reasonably-available cost-effective efficiency
- Thermal efficiency budgets are modeled based on RGGI & FCM revenue projections

# How we deliver





# Efficiency Vermont

 <b>Upstream Supply Chain Engagement</b>	 <b>Education, Promotion &amp; Events</b>	 <b>Rebates, Incentives &amp; Financing</b>	 <b>Engineering, Project Support &amp; 1:1 Guidance</b>	 <b>Statewide Partnerships</b>
<p>Workforce Development &amp; Training</p> <p>Efficiency Excellence Contractor Network</p> <p>Manufacturer Relationships</p> <p>Product Stocking</p>	<p>Campaign Development &amp; Advertising</p> <p>Website Development</p> <p>Digital Tools, Guides &amp; Online Resources</p> <p>Events &amp; Outreach</p>	<p>Point-Of-Sale Discounts &amp; Post-Purchase Rebates</p> <p>Supply Chain Sales Incentives</p> <p>0% Interest &amp; On-Bill Financing</p> <p>Incentive Processing</p>	<p>Virtual &amp; In-Person Consultative Services</p> <p>3rd-Party, Objective Support</p> <p>Technology/Subject Matter Expertise</p> <p>Project Planning &amp; Analysis</p>	<p>Facilitation &amp; Coordination</p> <p>Relationship Development</p> <p>Opportunity Identification</p> <p>Community Engagement</p>



# Efficiency Excellence Network

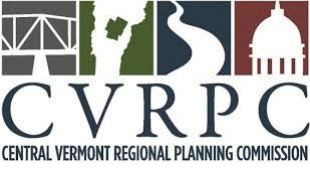
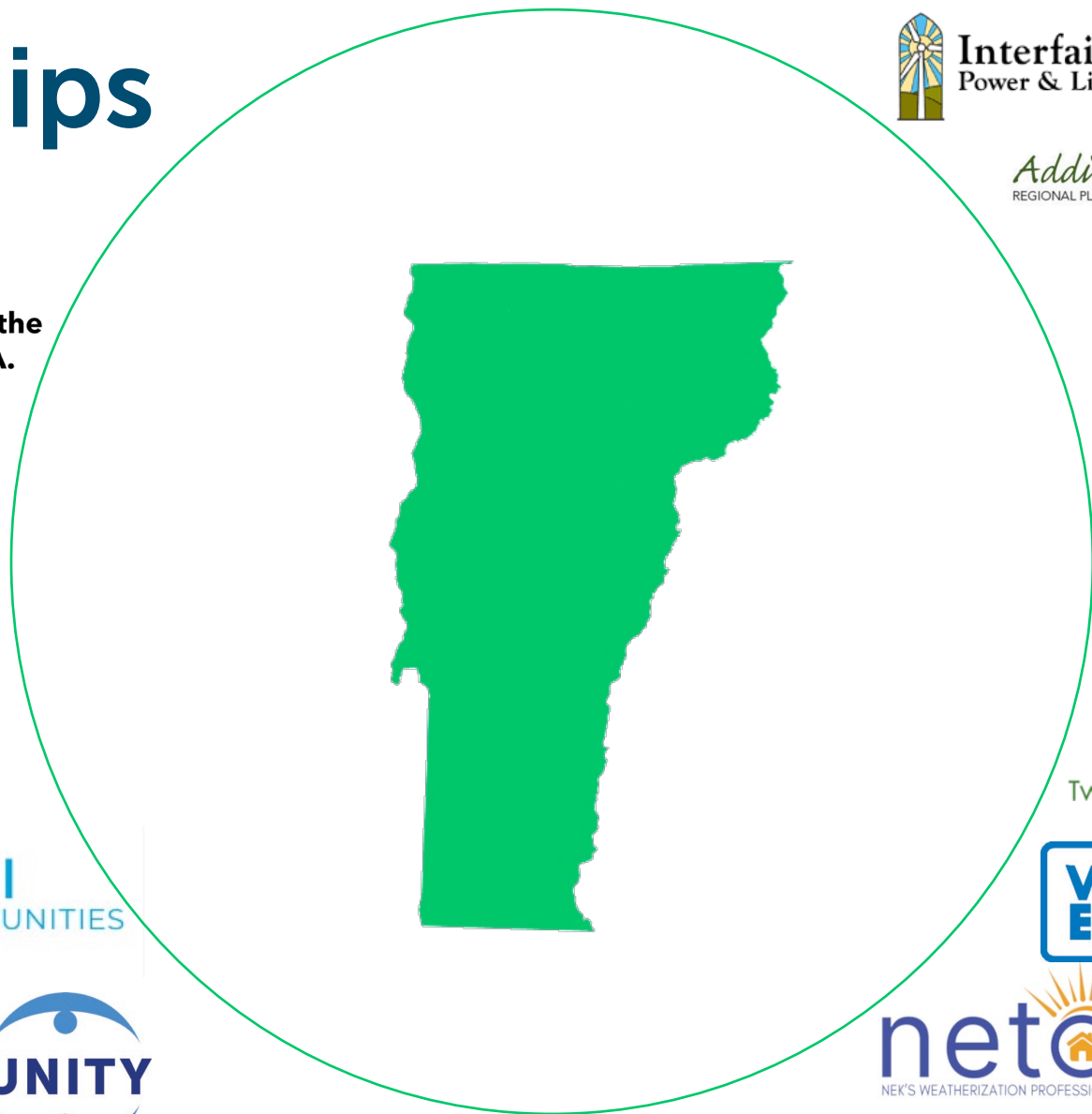
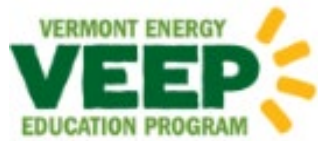
- Trade group of more than 650 independent contractors, suppliers, distributors, and dealers including:
  - All Vermont counties are represented
  - Over 100 members located outside VT
  - Combined enrollments reflect over 1,250 service listings
  - Over 50 EV dealers
- Trainings, certifications, & trade group calls
- Retail sales incentives for efficient products
- Annual **Better Building by Design conference** had its highest attendance in 2024: 1,000 participants, 80 presenters, 62 sponsors
- [Better Building By Design 2025:](#)  
**2030 on the Horizon: Assessing Vermont's Vision Versus Reality**



# Partnerships



Community is at the Heart of VPPSA.



# Education & Promotion

71% — Vermonters familiar with Efficiency Vermont brand

95% — Efficiency Excellence Network member satisfaction

## Website Engagement

- More than 625,000 users per year
- More than 2 million pageviews annually

## Newsletters

- Over 33,300 Watts New (residential customers) subscribers
- Over 3,200 Business Solutions (business customers) subscribers
- Over 2,100 The Link (contractor/trade ally) subscribers

## In-person & online educational events & tabling

Drive Electric Vermont: Electric vehicle (EV) info, rebates, & more  
<https://www.driveelectricvt.com/>



# DRIVE ELECTRIC VERMONT



# Residential Energy Coaching

## Virtual Home Energy Visits

- 4 Energy Consultants (plus 4 offering technical assistance)
- **670 completed (2023)**

## Energy Advisor Team

- 8 Energy Advisors
- Provides review of utility bill(s), diagnosis of high-energy using devices, best next steps, and helps with program navigation
- **More than 21,000 calls handled annually (2023)**

*"It was easy. A quick video call – no selling, no pushing. It was really about helping me understand, and it was a million times better than trying to read about it on the Internet. I wish all things were that easy."*

- Bill in Barre, VT



# Engineering & Project Support

- Free Energy Consultations
  - Deliver an understanding of which systems are wasting energy
  - Offer professional guidance on the best way to save energy based on a customer's building, operations, and budget
- Customers get a prioritized plan and resources for cost-effective projects
  - Objective, third-party recommendations
  - Understand current financial incentives and custom rebates to minimize up-front cost
  - Investments that unlock value and growth
- Technology-specific subject matter expertise







How we've evolved  
to meet Vermont's  
changing energy  
needs

Efficiency  
Vermont

How we've evolved:

Cold climate heat  
pump (CCHP)  
market  
transformation

Efficiency  
Vermont





# Efficiency Vermont supports the heat pump market supply chain



**Manufacturers**  
Supporting designs for heat pumps needed for Vermont's cold climate



**Partners**  
Sharing offers & processing rebates for utilities & weatherization partners



**Customers**  
Easy-to-navigate programs, consistent offers & technical support



**Distributors & Retailers**  
Ensuring rebate-eligible heat pumps with cold climate performance are available

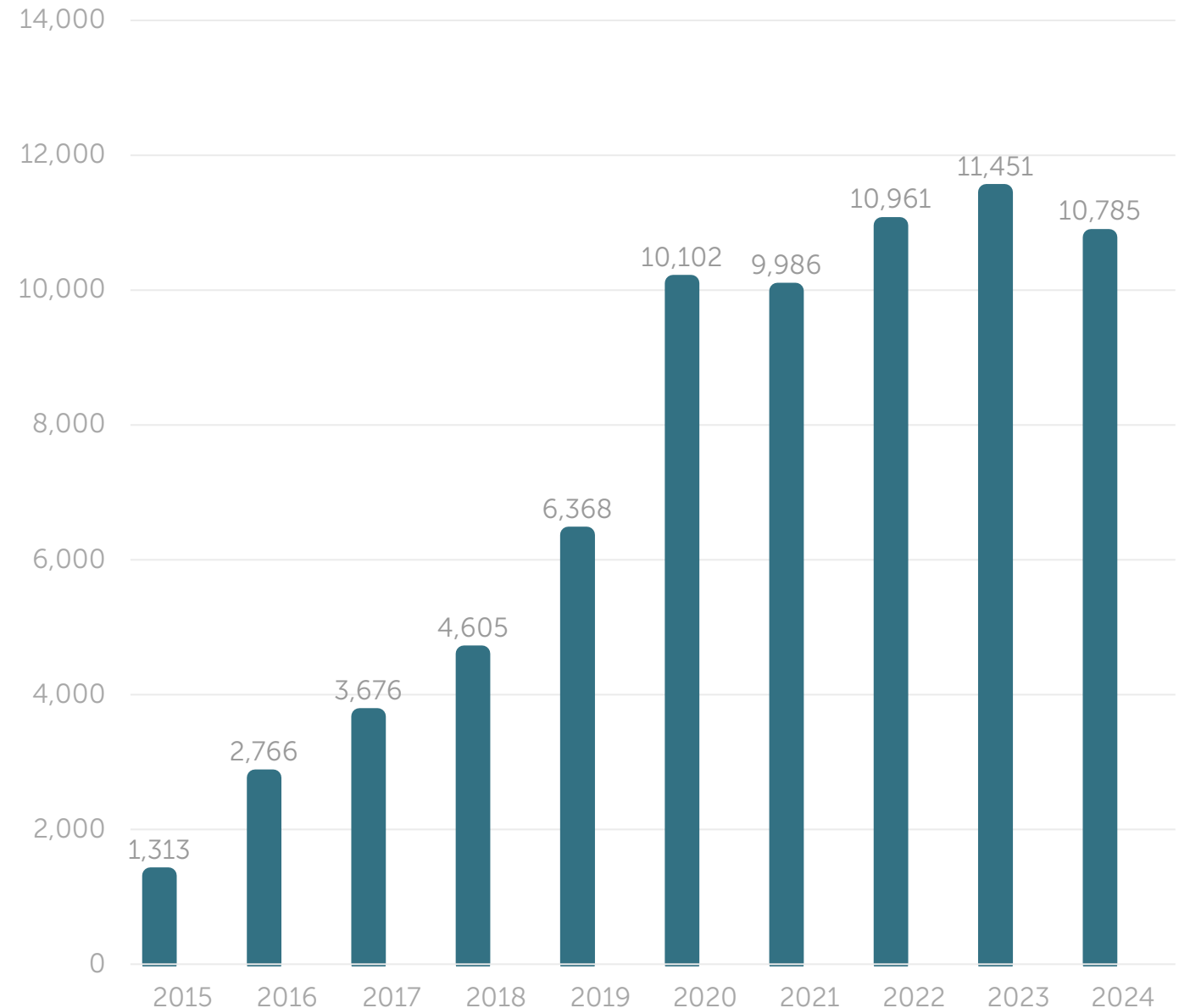


**Workforce**  
Outreach, trainings & info sharing to contractors, installers & the Efficiency Excellence Network

# A decade of heat pump adoption

- Collaboration with heat pump manufacturers to design “cold-climate” capabilities
- Piloted in 2015, expanded to include more heat pump types in 2019
- +10 years building a midstream “point of sale” rebate infrastructure with supply chain partners
- Workforce training & product promotion
- Sustained customer engagement helped a new technology gain rapid adoption

Historic CCHP installations by year



# Heat pump success

A decade of support has led to Vermont leading the northeast with per capita heat pump installations

*"Cobb says their five technicians have been staying busy, installing around 300 pumps annually in recent years. He believes government incentives, including from Efficiency Vermont, are a big factor in their popularity."*

- [WCAX story](#)

*"Installing a heat pump was the best purchase I made in my twenty years as a homeowner. Couldn't be happier!"*

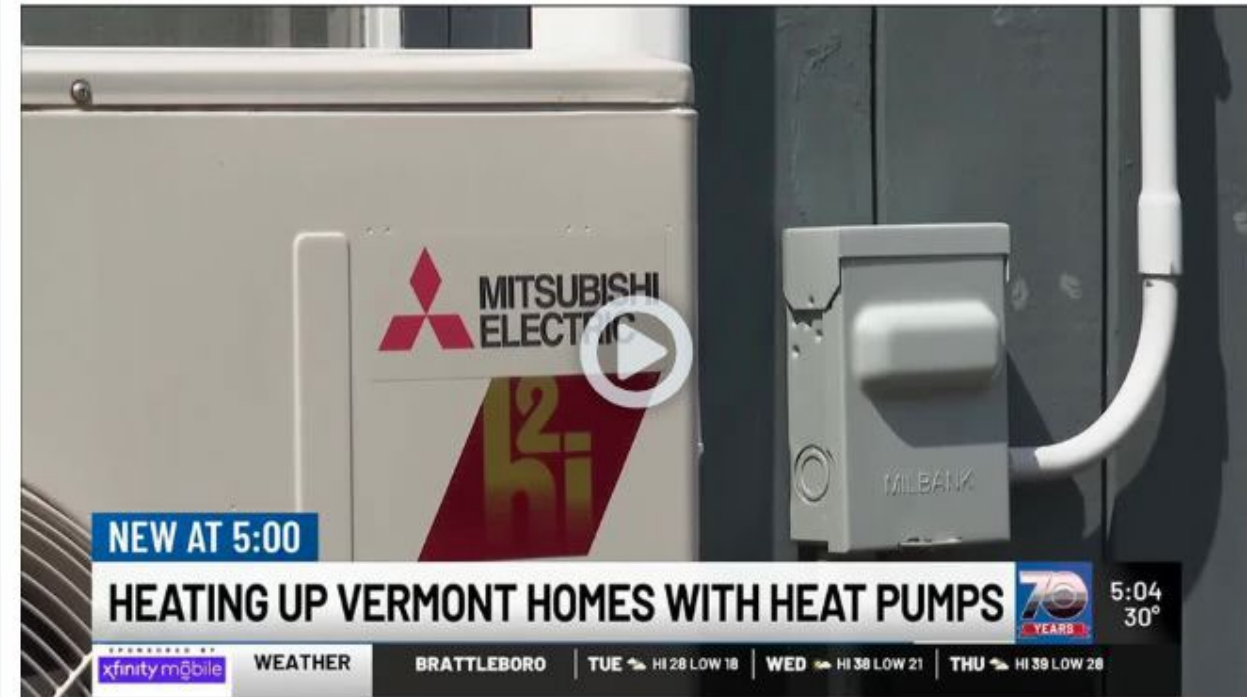
- Rutland County customer feedback

*"I really appreciate Efficiency Vermont's dedication to partner with distributors. We participate in many state programs (...) and from my perspective Efficiency Vermont is the best."*

- Dean Bekkering, FW Webb manager of corporate projects, PUC Case No. 23A-4098



## Vermont leads the NE region in heat pump installs



By Sophia Thomas

Published: Jan. 29, 2024 at 3:31 PM EST



BURLINGTON, Vt. (WCAX) - A new report shows Vermonters are opting for heat pumps in a big way. Efficiency Vermont says the Green Mountain State has more heat pumps per capita than any other state in the Northeast.

At Energy Co-op of Vermont, service manager Joe Cobb says heat pumps have taken the main stage. "For a small company, it's a huge portion of our business now," he said.

Heat pumps, which use electricity rather than fossil fuels, have gained popularity as an eco-friendly alternative to traditional heating and cooling systems.

# Continuous innovation

## New pilot project helps rent access the efficient heating & cooling benefits of heat pumps

- In Sept. 2024, launched a pilot for window HPs targeting 60 low-income renters
- Pilot will assess customer experience, cold climate performance, and DIY installation
- Helps address equity challenges for low-income households & renters
- Avoids workforce barriers and installation costs of traditional heat pumps

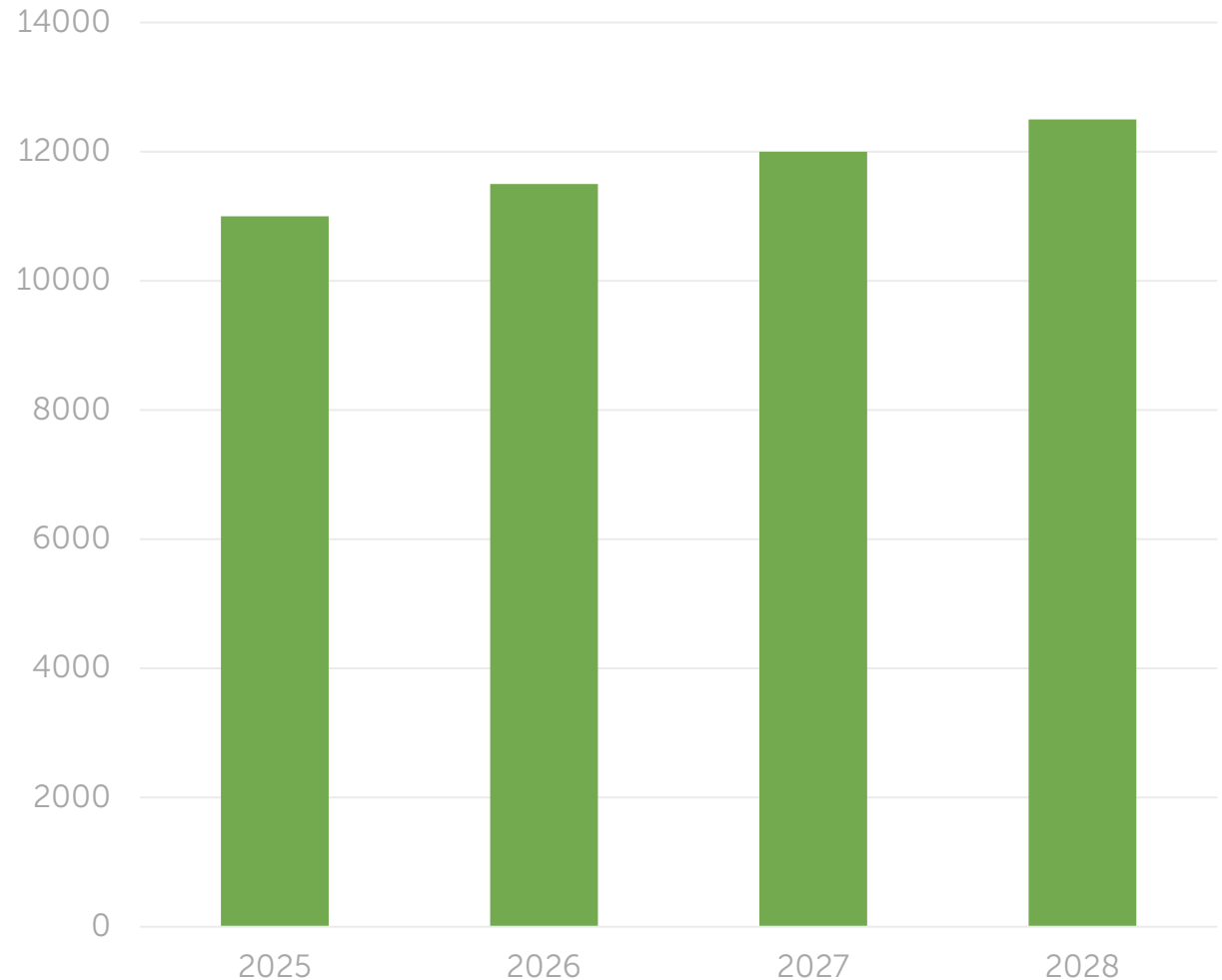


# Heat pumps in 2025

## Market changes & program updates

- Administering Dept. of Public Service's IRA-funded HEAR program's HP rebate
  - Post-installation rebate up to \$8,000/home
  - Includes challenging federal requirements
- Legacy refrigerants being phased out in 2025
  - Shift to more efficient & climate-friendly refrigerants
  - HP models using new refrigerants will cost more
- DU budget constraints make maintaining consistent support for midstream rebates challenging
- Longstanding workforce constraints around installing & servicing heat pumps

Tentative heat pump forecast





# How we've evolved:

## Deploying new funding to support

- Flood recovery
- Electrification
- Removing barriers to weatherization







## Flood recovery rebates

- Rapidly launched Sept. 5, 2023, to respond to catastrophic flooding; expanded to support victims of 2024 flooding



Up to \$10,000 for appliances, heating, and water heating

- Residential offer for qualifying home appliances & heating systems



Up to \$9,500 for air sealing and insulation

- Residential offer for weatherization that's part of a flood recovery project



Up to \$16,000 in rebates for businesses impacted by flooding

- EEC-funded offer for heating systems & commercial kitchen equipment



Additional help via sustained customer support, increased financing, and other offers



# Supporting electrification with Home Electrical System Upgrades

- Up to \$10,000 for income-eligible homes to upgrade an electric panel to 200 amps
  - Covers costs include labor, wiring, trenching, health/safety upgrades, & more
- Combines rigor of participating contractor network with the simplicity of post-purchase rebate
- Available statewide through partnerships with EEU's and GMP



# Electrifying a home's hot water with Heat Pump Water Heaters



- Income-eligible households can get 100% of costs covered to buy and install a heat pump water heater
- More than 680 projects since launching in April 2024
- Available statewide with Vermont Gas & Burlington Electric collaboration
- Efficiency Vermont now supporting VGS customers due to strong demand



# Removing barriers to weatherization

## \$25M ARPA weatherization funding supports new Home Repair program

- Income-eligible homeowners can get up to \$15,000 to complete repairs needed for a weatherization project
- Program covers an extensive list of eligible repairs
  - drainage, roof repair, remediation (asbestos, vermiculite, mold), foundation repair, ventilation, siding/sheathing, and more
- Only supports repairs necessary to address underlying issues blocking weatherization



How we've evolved:

Reducing emissions  
through energy  
efficiency

Efficiency  
Vermont





# Reducing emissions through refrigerant management

- Introducing cutting-edge “natural refrigerant” systems to Vermont
  - increased efficiency
  - significantly lower Global Warming Potential (GWP) than traditional refrigerants
- Lawson’s Finest Liquid’s new 3,500-sq-foot walk-in cooler among the first to use CO2 as a refrigerant
- Over \$13,000 a year in energy savings
- Avoids 223,000 pounds of CO2-equivalent emissions annually







## Piloting low-emissions solutions to Vermont's housing crisis with Advanced Manufactured Homes

- Factory-built housing meets Dept. of Energy & Efficiency Vermont high efficiency specifications
  - Low energy consumption & fossil fuel free
  - Higher standards for durability, comfort, and indoor air quality.
- New, highly-efficient housing for \$143 per square foot (\$173/sq. foot with rooftop solar)
  - Other affordable housing \$350-\$550/square ft.
- Partners: Vermont Housing and Conservation Board, Vermont Housing Finance Agency, Champlain Housing Trust, Vermont Low Income Trust of Energy (VLITE), & others





# Reducing emissions through weatherization

## An on-ramp for every Vermonter

### DIY Weatherization Program

- \$100 rebate to homeowners who complete small weatherization projects on their own

### Low-Income Multifamily Retrofit

- Support for renters and multi-family dwellings through a contract with 3E Thermal

### Increased Home Performance rebates

- **Low-income:** 90% of costs back (up to \$9,500)
- **Moderate-income:** 75% back (up to \$9,500)
- **Higher income:** 75% back (up to \$4,000)
- Rebates available to Rental Property Owners







# Weatherization supports

## Free weatherization for LI households

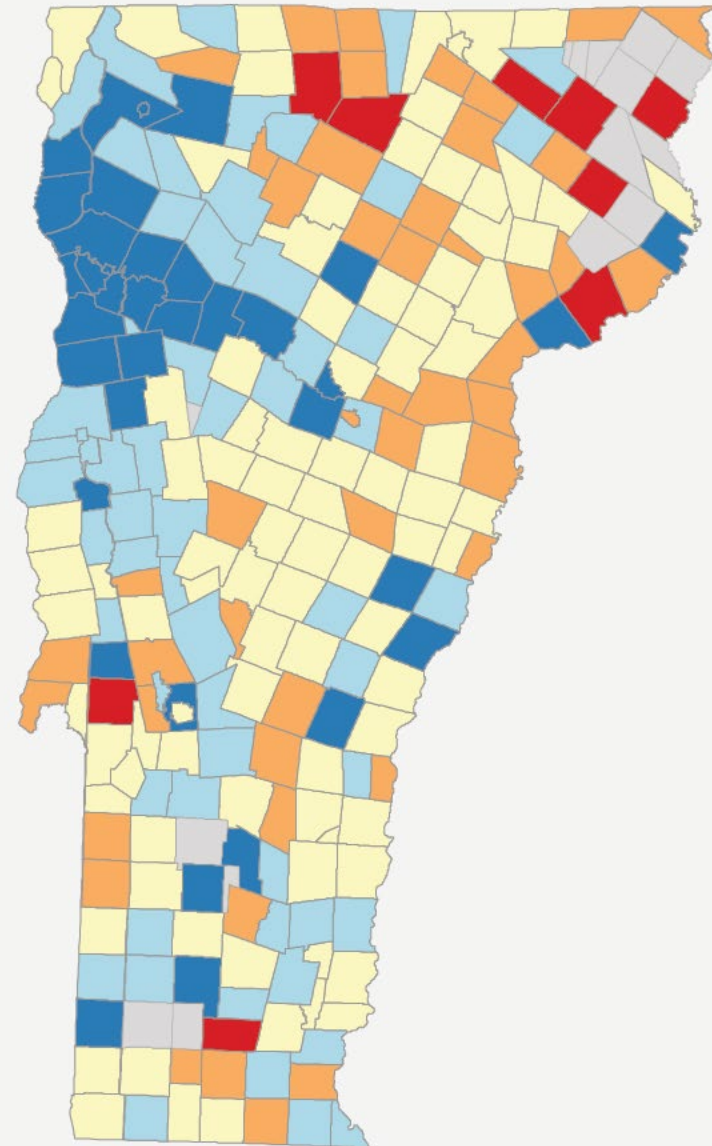
- Support for OEO/Weatherization Assistance Programs
- Additional rebates to boost a home's overall efficiency after weatherization is completed

## Working holistically across the supply chain to increase capacity & recruitment

## Financing support

- **Home Energy Loan:** financing up to \$25,000 (up to \$30,000 for flood recovery projects) and 0% interest for LMI households
- **WRAP (Weatherization Repayment Assistance Program):** on-bill financing for weatherization & other projects on a monthly utility bill

# How we've evolved: Building energy equity in Vermont



### Total Energy Burden

- 15.1%+
- 12.1% - 15%
- 10.1% - 12%
- 8.1% - 10%
- up to 8%
- No data

# Energy Equity in Practice

Generate as much energy savings as possible



Provide additional incentives and support to customers who need it most

**Performance-based regulation sets metrics and targets designed to ensure Efficiency Vermont delivers aggressive energy savings, while ensuring accessibility for all customers.**



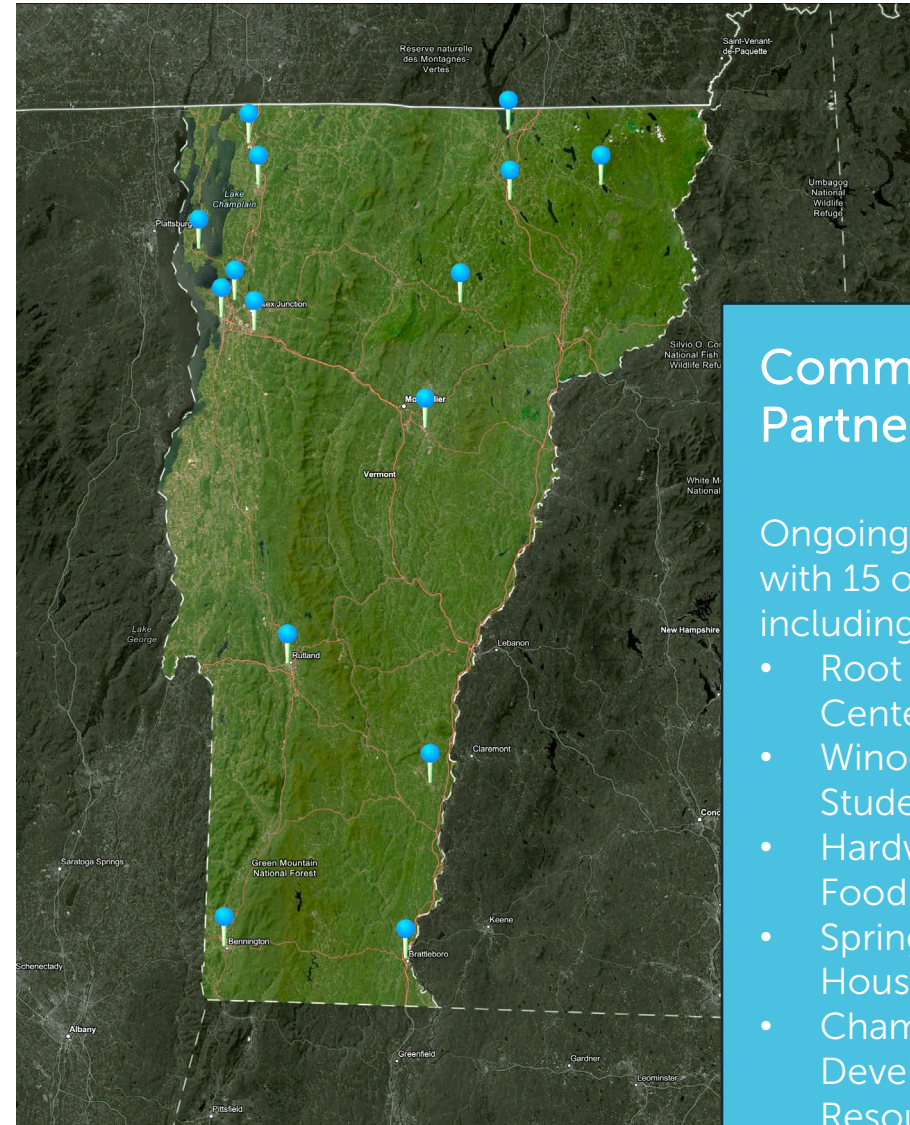
# Equity & Community Engagement

## Building Trust & Partnerships



2024:

- Participated in 117 events
- Connected with 2,250 Vermonters



## Community-based Partnerships

Ongoing collaboration with 15 organizations, including:

- Root Social Justice Center (Brattleboro)
- Winooski Parents and Students Project
- Hardwick Area Foodbank
- Springfield Supportive Housing
- Champlain Islanders Developing Essential Resources (CIDER)

# Questions?

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