

BGS Energy  
Efficiency and  
Resilience



# Municipal Energy Resilience Program (MERP)

House Energy & Digital Infrastructure Committee  
April 4, 2025

Brian Sewell, State Energy Program Manager, Dept. of Buildings & General Services

MERP

Program  
Establishment

Act 172 becomes law June  
2022.

Grant Program-\$45M in  
ARPA SFR

Loan Program -\$2.8M in IIJA  
for Loans

\*October 2022, Revenue  
Loss Replacement



The American  
Rescue Plan Act



# MERP

## Program Description

### Four Phases:

1. RPC Funding
2. Mini Grants
3. Assessments
4. Implementation

# \$45M Grant Program

**Phase 1 - \$2.4M** to VT Regional Planning Commissions (RPCs)

**Phase 2 - \$1.1M** for Mini Grants (\$4k max)

**Phase 3 - \$5M** for energy resilience assessments.

**Phase 4 - \$35.9M** in Implementation grants for municipalities (\$500k max)

# MERP

## Program Description

**Est.\$2.8M Loan Program**

**\$2M Energy Efficiency Block Grants**

**\$800K Energy Efficiency Revolving Loan Fund**

**May 2024 - DOE Award Adjustment**

**\$1.2M Loan Program**

**\$547K Energy Efficiency Block Grants**

**\$690K Energy Efficiency Revolving Loan Fund**

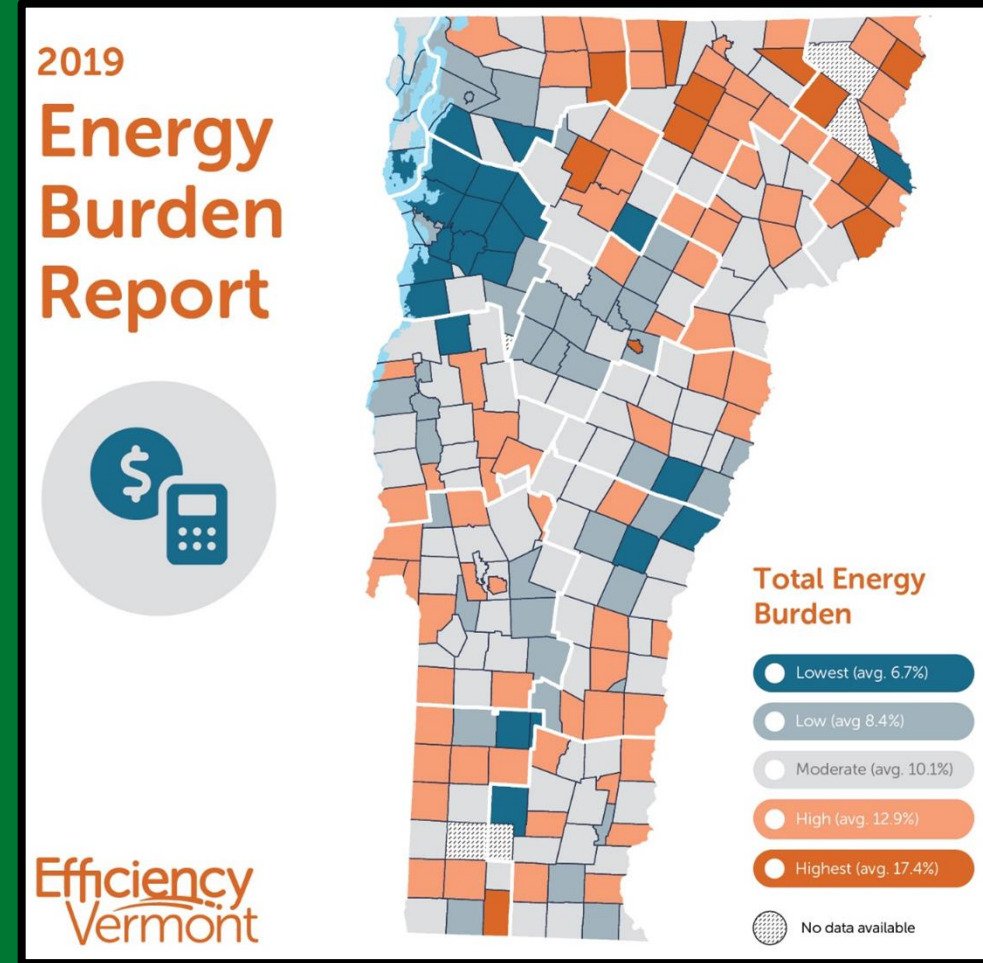
# MERP

## Program Description

### Requirements of the Law

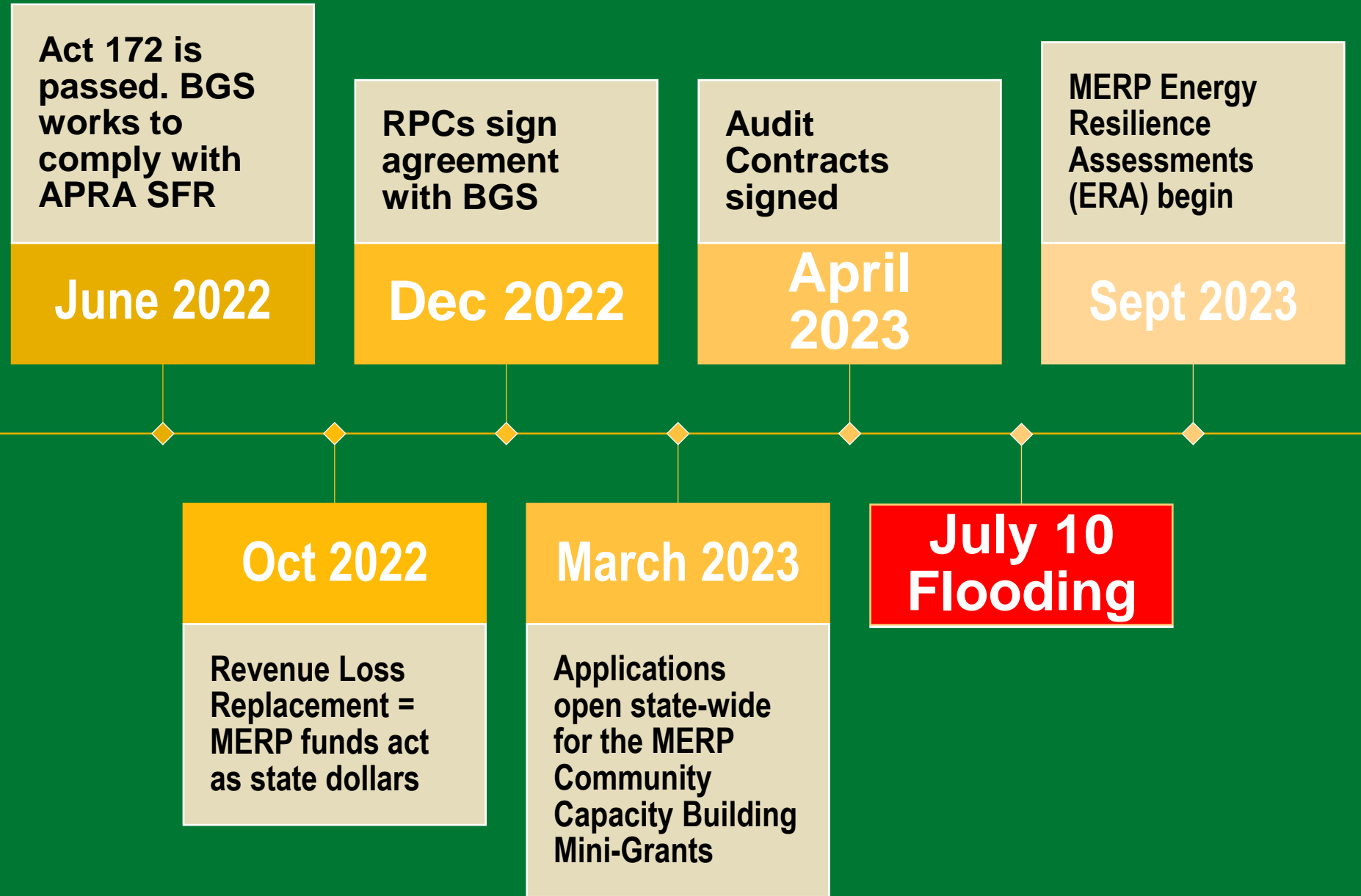
*(B) an equitable system for distributing grants statewide on the basis of need according to a system of priorities, including the following ranked in priority order:*

*(i) a municipality with the highest energy burden community needs and lowest resources, as defined in Efficiency Vermont's 2019 Energy Burden Report;*



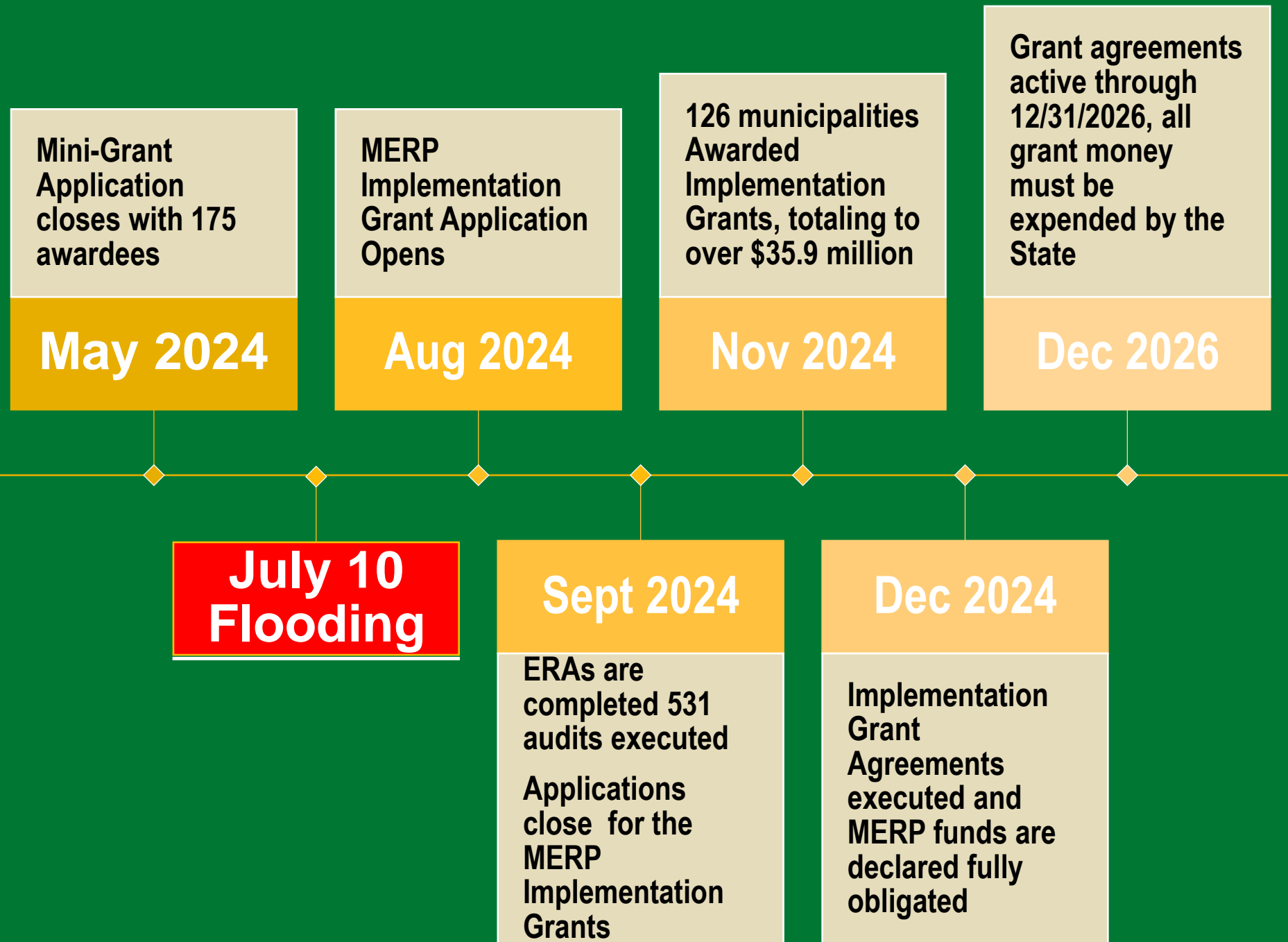
# MERP

## General Timeline Pt. 1



# MERP

## General Timeline Pt. 2



# MERP

## Phase 1. Establish Partnerships

MERP Administrative Partnerships stipulated in Act 172:



MERP Partnerships not stipulated in Act 172,  
but established through course of the program:





# MERP

## Phase 2. Mini Grants

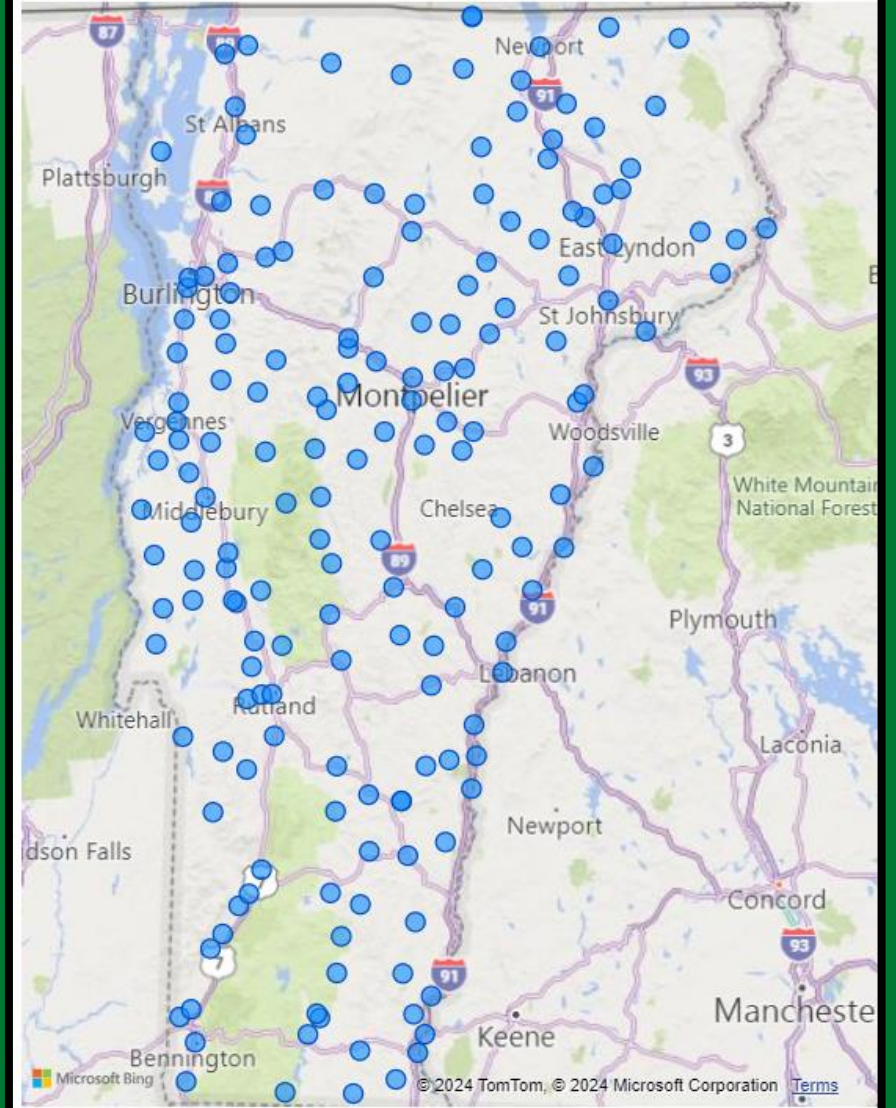
### Goal: Kickstart Capacity Building and Town Planning

**\$1.1M Budget** in noncompetitive grants for municipalities: up to \$4,000



### MERP Mini-Grant Awardees

*Scroll or pinch to zoom in/out. Click and drag to pan around.*



# MERP

## Phase 2. Mini Grants

**175 Awards & Almost \$700K spent**

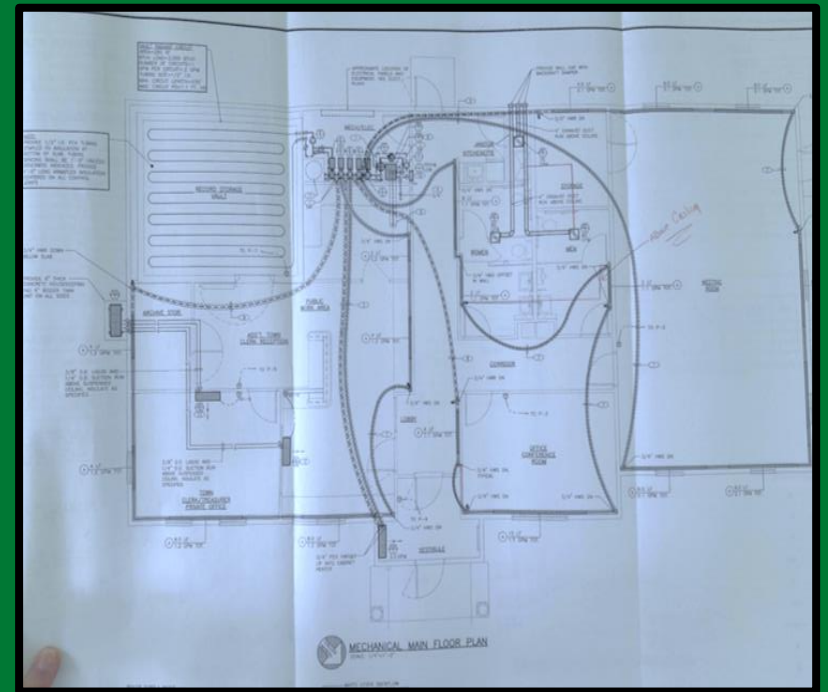
Activity	\$
Consultant	\$257,356.22
Energy Planning	\$86,923.83
Community Meeting	\$85,023.76
Website Enhancement	\$51,157.08
Flyers	\$60,723.81
Stipend	\$32,923.83
Energy Committee	\$101,817.14
Community Event	\$2,333.33
Miscellaneous	\$15,600.00
<b>Total</b>	<b>\$693,859.00</b>



# MERP

Phase 3.  
Energy  
Resilience  
Assessments

**\$5M Budget**  
**\$3.2M Spent**



Sunderland Town Hall Mechanical Floor Plan (image via DuBois & King)



Hartland Public Library Solar Feasibility (image via John Turner Consulting)

# MERP

## Phase 3. Energy Resilience Assessments

**Level 1:** A streamlined assessment meeting Act 172 §2(d) requirements, qualifying recipients for implementation grant funding.

**Pros:**

**Shorter Duration**

**No documents**

**Cons:**

**No blower Door test**

**Not applicable to loans**

**Level 2:** A comprehensive assessment including §2(d) items, an ASHRAE II energy audit, and a blower door test.

**Pros:**

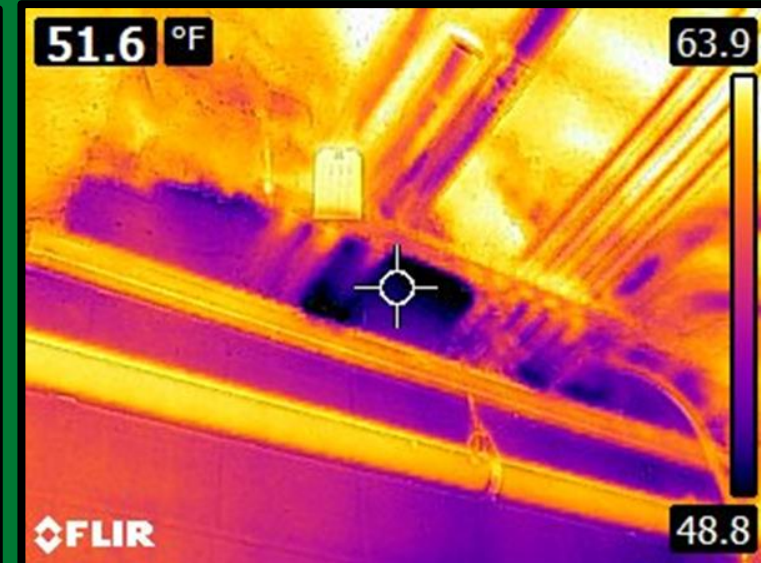
**Enhanced Savings calculations**

**Applicable for loans**

**Cons:**

**Longer Duration**

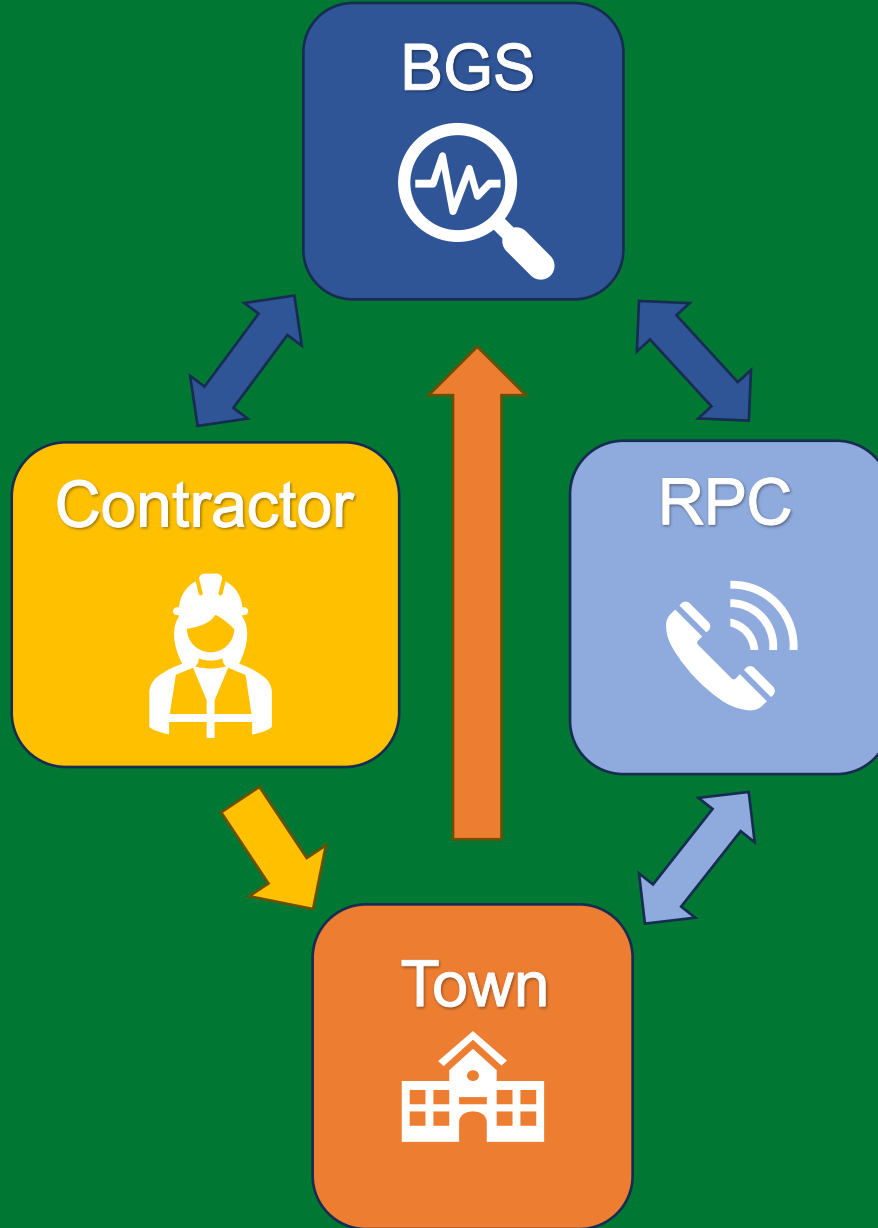
**Additional Documentation**



# MERP

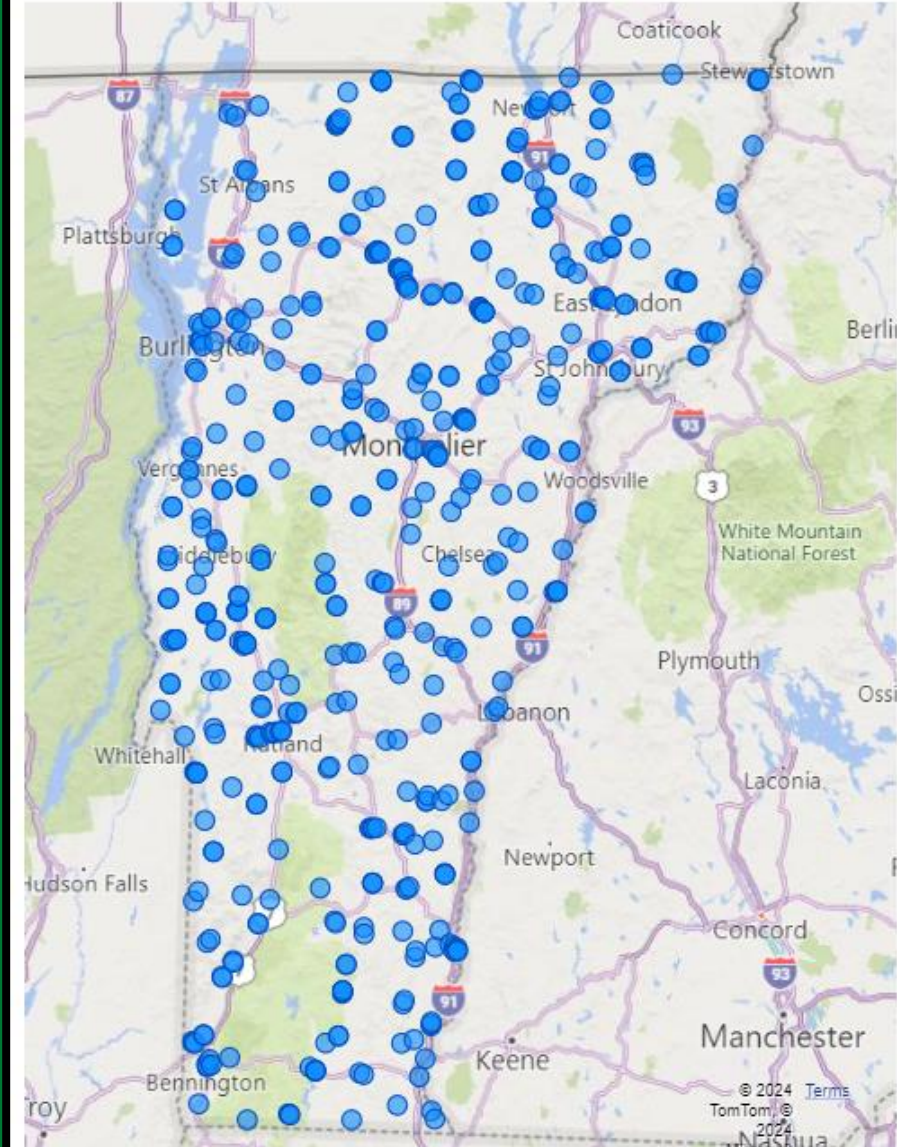
Phase 3.  
Energy  
Resilience  
Assessments

## 201 Level 1 & 330 Level 2



## MERP Completed Site Visits

Scroll or pinch to zoom in/out. Click and drag to pan around.



# MERP

## Phase 3. Energy Resilience Assessments

### Air Sealing and Insulation



# MERP

## Phase 3. Energy Resilience Assessments

### Heating Ventilation Air Conditioning



# MERP

## Phase 3. Energy Resilience Assessments

### Fuel Switching

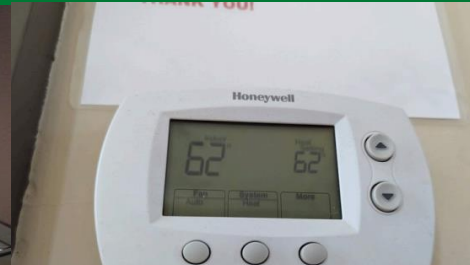




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## Phase 3. Energy Resilience Assessments

### LED Lighting & Controls



# MERP

## Phase 3. Energy Resilience Assessments

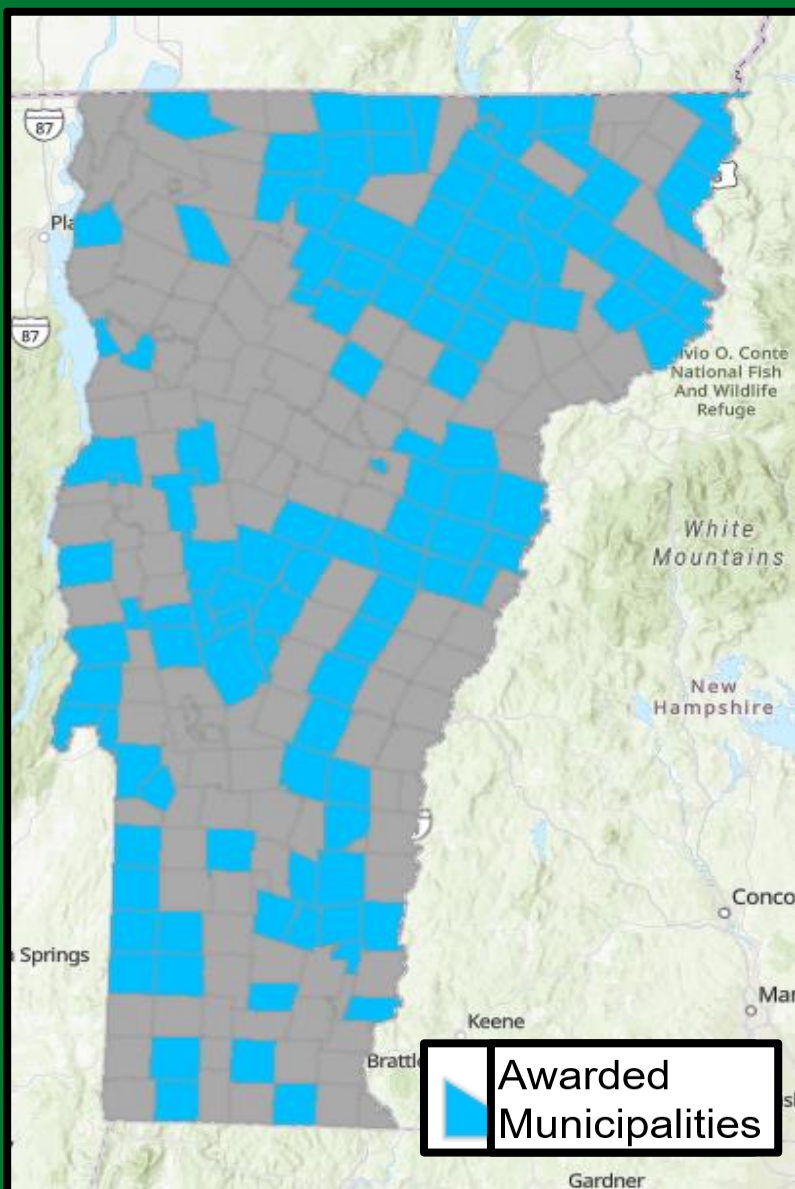
### Assessment Summary Stats

Sqft	# of Bldgs	% Total	Avg Assessment Cost	Min Assessment Cost	Max Assessment Cost	Avg Cost per sqft
1-5,000	338	64%	\$6,443.63	\$2,115.00	\$25,825.00	\$3.04
5,001-10,000	116	22%	\$9,279.66	\$3,909.00	\$29,140.05	\$1.30
10,001-15,000	32	6%	\$13,472.93	\$4,850.00	\$30,977.75	\$1.13
15,001-20,000	18	3%	\$14,108.34	\$4,850.00	\$36,831.12	\$0.79
20,001-25,000	9	2%	\$12,740.10	\$5,332.04	\$20,223.00	\$0.56
25,001-30,000	8	2%	\$12,170.26	\$5,659.36	\$25,270.00	\$0.44
30,001-35,000	4	1%	\$15,253.91	\$6,316.94	\$25,507.30	\$0.49
35,001-40,000	2	>1%	\$17,500.00	\$17,500.00	\$17,500.00	\$0.44
40,001-45,000	2	>1%	\$12,775.63	\$7,850.00	\$17,701.25	\$0.31
45,001-50,000	1	>1%	\$20,007.75	\$20,007.75	\$20,007.75	\$0.42
>50,001	1	>1%	\$21,075.68	\$21,075.68	\$21,075.68	\$0.28
<b>Total</b>	<b>531</b>	<b>100%</b>	<b>\$8,100.17</b>	<b>\$2,115.00</b>	<b>\$36,831.12</b>	<b>\$2.35</b>

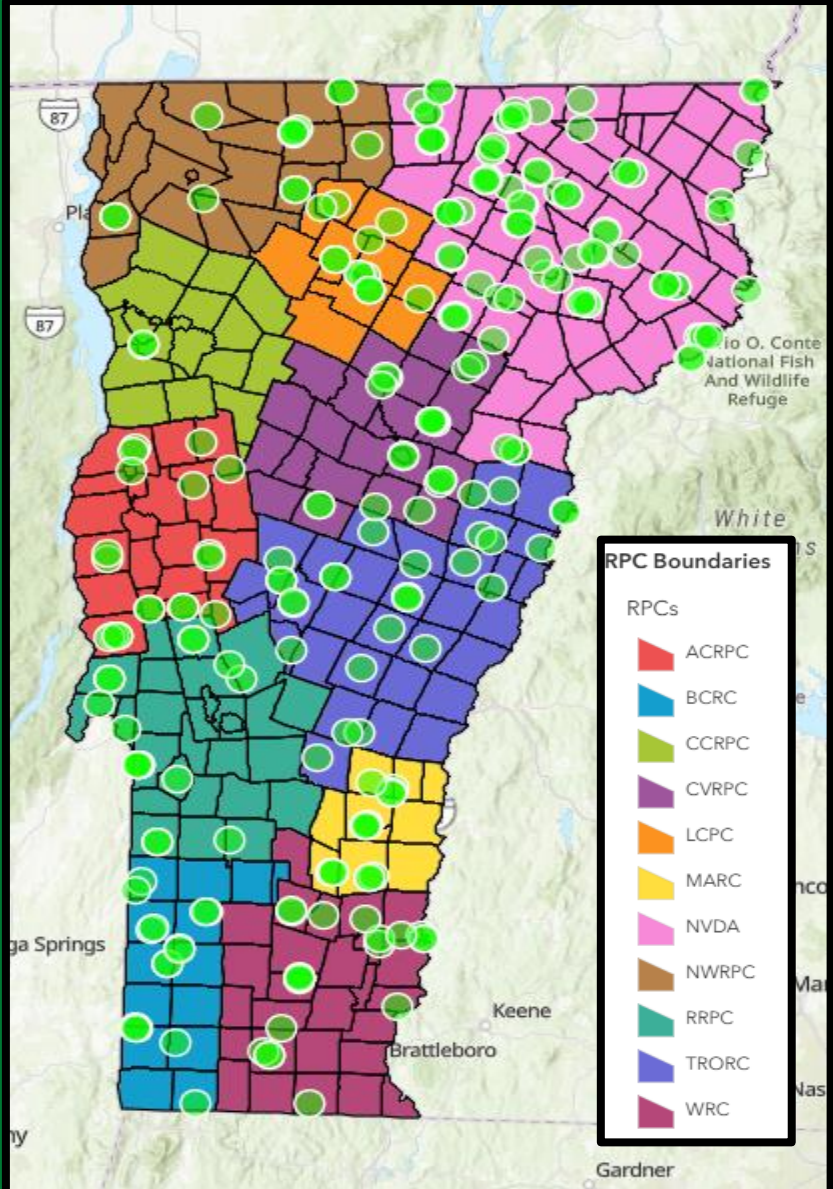
# MERP

## Phase 4. Implementation Grants

MERP Implementation Grant –  
Awarded Municipalities



MERP Implementation Grant –  
Awarded Buildings

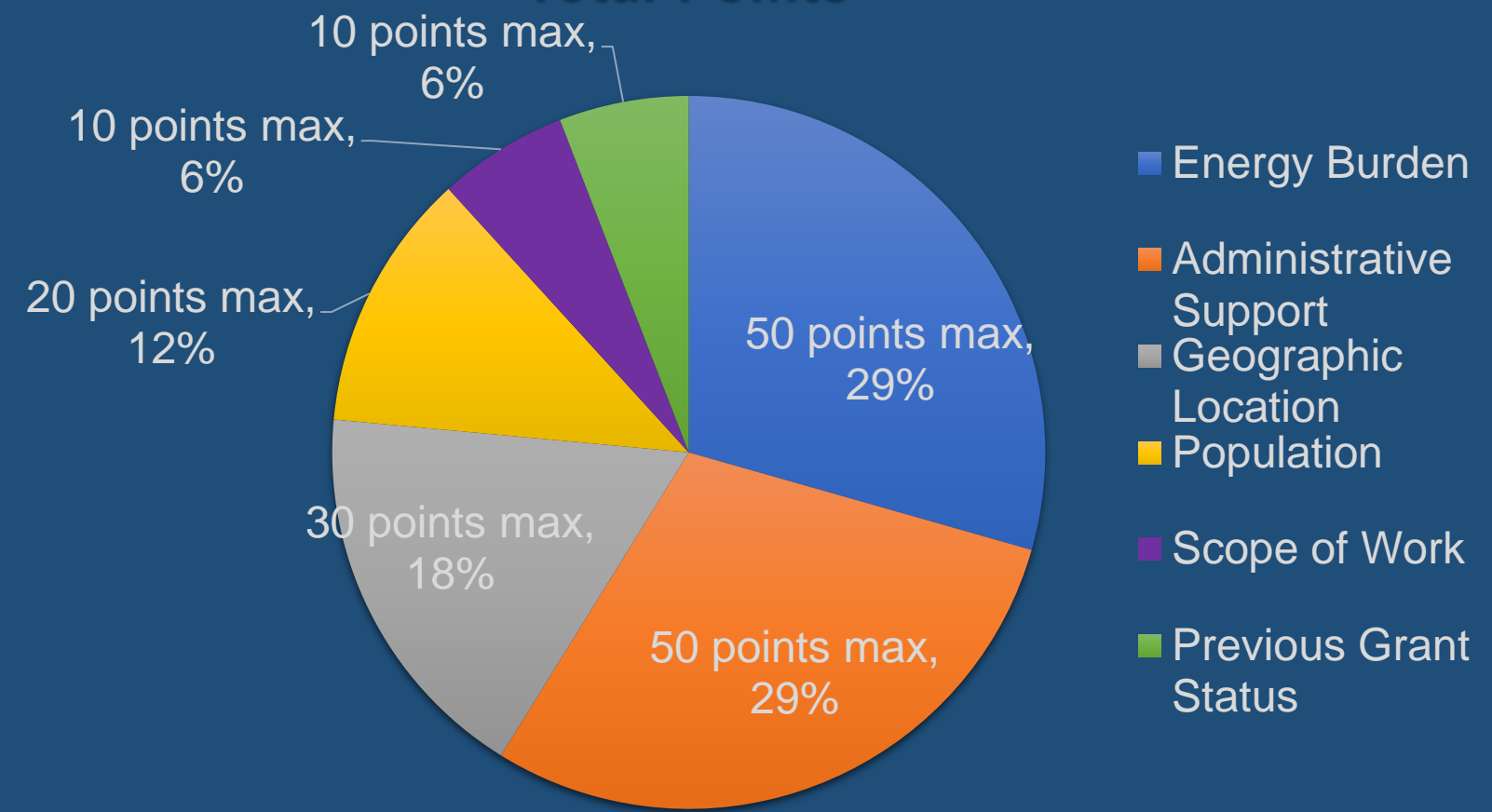


# MERP

## Phase 4. Implementation Grants

### Award Selection Criteria

#### MERP Implementation Grant Scoring Metrics: 170 Total Points



# MERP

## Phase 4. Implementation Grants

Building envelope



Equipment  
Electrification and  
Fuel Switching



Resilience

#	Measure
234	Thermal Envelope Projects
136	Smart Control Systems
148	LED Lighting Upgrades
74	ERV Installations
106	ADA Improvements

232	Heat Pumps
5	Radiant Infrared Heaters
7	Geothermal Heating Systems
10	Wood Pellet Heating Systems
46	Conversions to High Efficiency Boiler

76	Solar Photovoltaic Systems
56	Battery Backup Systems
56	EVSE Level 1 & 2 Chargers



Image via SunCommon



Image via Medford Go Green Initiative

# MERP Municipal Highlights Phase 4. Implementation Grants



Sunderland Town Hall (via GNAT)



Irasburg Town Garage and Fire Station



Lyndon Public Safety Building



Barre Municipal Auditorium



Arlington Town Hall

# MERP Municipal Highlights Phase 4. Implementation Grants

## Plainfield Flood Disaster - July 2024

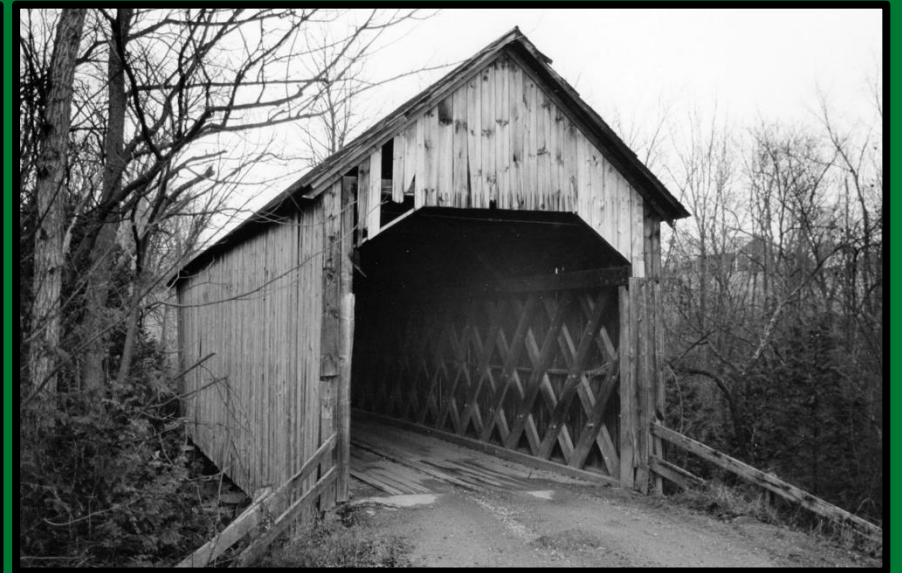


# MERP

## Phase 4. Implementation Grants

### HP Review and Town RFPs For Installation

*“Historic property or resource” is “any building, structure, object, district, area, or site that is significant in the history, architecture, archaeology, or culture of this State, its communities, or the nation;” and includes any resource that is fifty (50) years of age or older that retains sufficient integrity.*





# Thank you!

[BGS.Vermont.gov/municipal-energy-resilience-program](https://BGS.Vermont.gov/municipal-energy-resilience-program)

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