

2023

# State Agency Energy Plan Update

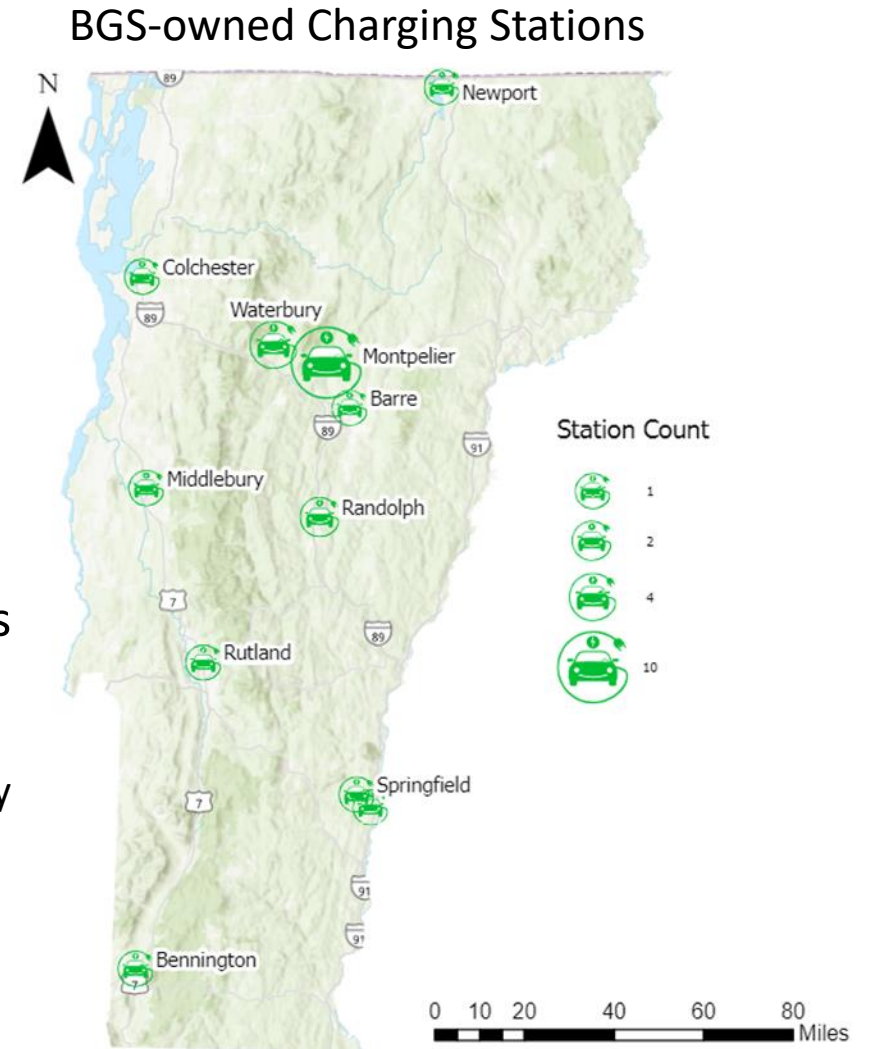
Department of Buildings and General Services

## State Energy Management Program Performance for Fiscal Year 2023

- 2 New Projects Completed
- 3 Buildings Received Energy Audits: 43,828 SqFt Total
- \$134,695 in First Year Savings
- \$878,064 in Lifetime Savings
- \$73,988 in Savings from Solar PPAs

# FY2023 Strategies & Actions

- SEMP Project Integration with roll out of BGS Workplace Integrated Management System
  - Will improve project identification and assignment
- Updated Billing data upload process
  - BGS implemented a new bulk data upload sheet which has reduced labor hours on data entry with Energy Star Portfolio Manager
- New building enrollment in Flexible Load Management Pilot
- \$1,000,000 in newly appropriated funds for EV charging stations
  - Appropriated in the FY24/25 Capital Bill
  - Additional \$1,000,000 requested from the Department of Housing and Community Development under the Agency of Commerce and Community Development



# State Energy Management Program Performance for Fiscal Year 2023

Table 1. FY23 Savings

Site	Project Focus	Cost	KWH*	MMBTU**	First-year \$Savings	Lifetime \$Savings	Payback Period
Numerous Locations	Efficiency VTPrescriptive Projects		273644	-47	43650	562655	
Numerous Locations	Solar Net Metering***				73988		
Colchester Paint Shop	Boiler Replacement	78190		5	3970	119105	19.7
Mahady Courthouse Basement	LED Lighting	15565	66291		13087	196304	1.2
Totals		93755	339935	-42	134695	878064	

\*Annual Kilowatt-hours of electricity saved.

\*\*Annual million British thermal units (MMBTUs) representing thermal project savings.

\*\*\*Solar net metering savings are annual savings, not first-year savings. These projects were not funded by SEMP funds

# Municipal Energy Resilience Program Rollout

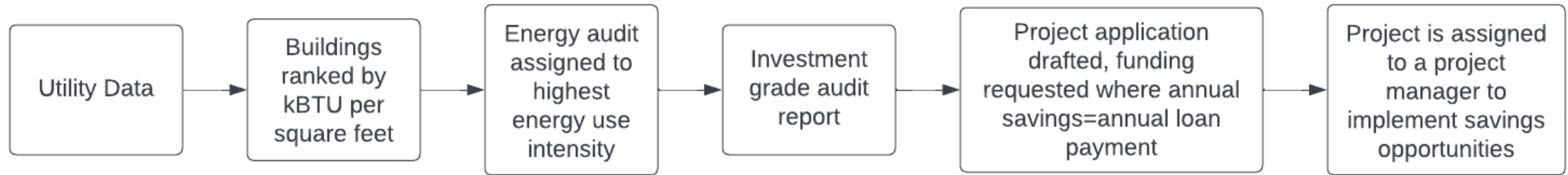
Municipal Energy Resilience Program | Buildings and General Services (vermont.gov)

- Assigned \$45M in American Rescue Plan Act (ARPA) State Fiscal Recovery (SFR) funds to the Program
  - \$5M in investment grade building assessments
  - \$1M for the creation of four limited-service staff positions
  - \$2.4M for RPCs' support for Program operations
  - \$36.6M in project implementation funds
    - capped at \$500K per municipality
- Further assigns \$2.8M in Infrastructure Investment and Jobs Act (IIJA) funds
  - establish a revolving loan fund for use by municipalities beyond the scope of ARPA SFR monies
- Progress To Date
  - 136 applications approved for Community Capacity Building Mini-Grants of up to \$4k
  - 223 municipalities submitted applications for 627 Building Energy Assessment Grants to date



Photos: Top-Reading Energy Board Energy Fair funded by mini grant. Bottom-Canaan Town Office Assessment

# Continued Strategies, Funding, and Ideas Implemented in Fiscal Year 2023



- BGS continues to install EV charging stations to expand charging station accessibility for employees, fleet, and members of the public
  - BGS fleet electrification has displaced 15% of gasoline used since 2015
  - 30 level 2 charging stations installed to date
- 4 BGS buildings are now enrolled in the Flexible Load Management Pilot Program with Green Mountain Power

# FY 2024 Strategies and Projects Under Development

Table 2. Projected Savings

Energy type	KWH	MMBTU	\$ Savings
Electricity	1710086		316990
Thermal Fuels		19545	
Solar Photovoltaic Net-Metering	6494609		71141
Totals	8204695	19545	388131

## In Addition

- The Flexible Load Management Pilot is entering the third iteration
  - New terms for load building events, new incentive structure, enhanced savings opportunities
  - BGS is seeking to enroll more buildings under additional controls vendors
- Staffing vacancies are anticipated to be filled in the coming months

# 2024 Detailed Project List

Table 4. FY2024 Detailed Project List

Site	Project Focus	kWh	MMBTU	\$ Savings
Southern State Correctional Facility	LED Lighting, HVAC, Demand Control Ventilation	409602	2902	79258
133 State St Mont.	LED Lighting, HVAC	241068	704	40108
Bennington Courthouse	LED Lighting	60122		3802
Rutland Courthouse	Envelope, HVAC, Lighting	187920	400	34501
Bennington Bennco	LED Lighting, Controls	20482	41	3651
St. Albans Courthouse	LED Lighting, Equipment, Weatherization	22690	367	7471
New Haven Public Safety Campus	LED Lighting, Building Equipment, Weatherization	22250	61	4349
109 State St & Connector Montpelier		273377	718	40879
Bennington Welcome Center	LED Lighting, Controls	30008	4.2136	4557
115 State St & Annex Montpelier	LED Lighting, BAS, HVAC, Controls	93403	12399	12399
McFarland State Office Building	LED Lighting, HVAC	90984	999	33467
133 State St	VFD Retrofit	6099	21	793
120 State Street CVO	LED Lighting	1584	5	211
1 Baldwin Street Montpelier	LED Lighting, Insulation	891	134.5	2390
144 State Street Montpelier	HVAC	3194		586
Berlin Psychiatric Care Hospital	HVAC, Weatherization	117150	950	22383
Middlesex Central Services	Lighting	75063	256	17316
St Albans State Police Barracks	Lighting, HVAC, Weatherization	31860	134	4927
6 Baldwin Montpelier	LED, HVAC Controls	22339	153	3942
Totals		1710086	19545	316990



# Future Projects Under Development from Completed Audits

Table 5. Future Projects Under Development from Completed Energy Audits

Site	kWh	MMBTU	\$ Savings
Windsor County Courthouse (6420)	0	285.6	12920
Fair Haven Welcome Center (9250)	9977	33	1985
Guilford Southeast Welcome Center (9734)	12980	30	2346
Pittsford Admin Building (6288)	6441	1	1290
Pittsford Firehouse (6272)	5565	271	4906
Pittsford Warehouse (Behind Firehouse) (6284)	396	48	859
Rutland McKinley Ave - COMPLEX	14213	17	2452
Rutland Motor Vehicles (6307)	6374	36	1380
Barre McFarland State Office Bldg. (6071)	90984	690	27032
St. Johnsbury State Office Building (6340)	12925	58	2727
Burlington Costello Courthouse (6173)	229800	2420	54350
Montpelier 6 Baldwin St (6004)	34729	191	6780
Montpelier 126 State St (6022)	2492	217	4082
Montpelier 122 State St Boiler Plant (6021)	52510		6166
Montpelier 10 Taylor St Shop and Storage(6013)		117	1347
Marble Valley Regional Correctional Facility	139	4609	109075
Montpelier 110 State St (6015)	24988	741.6	15430
Montpelier 128 State St (6023)	4572	199.8	4202
Berlin State Hospital (6091)	117150	626	73005
Montpelier 132 State St (6024)	1693	154.9	3009
Montpelier 136 State St (6026)	2769	186.9	3693
Totals	630697	10932.8	339036

# Planned Energy Audits

Table 6. Future Scheduled Energy Audits

<b>Property Name</b>	<b>Property GFA - Self-Reported (ft<sup>2</sup>)</b>
Colchester New Health Lab (6204)	61600
Montpelier 111 State St (6016)	46672
Bradford Rest Area (9707)	6861
Colchester Bldg. 1710 (6201)	12798
St. Johnsbury CCWC - CAMPUS	28437
Newport NSCF	135985
St. Albans NWSCF - CAMPUS	94185
Totals	386538