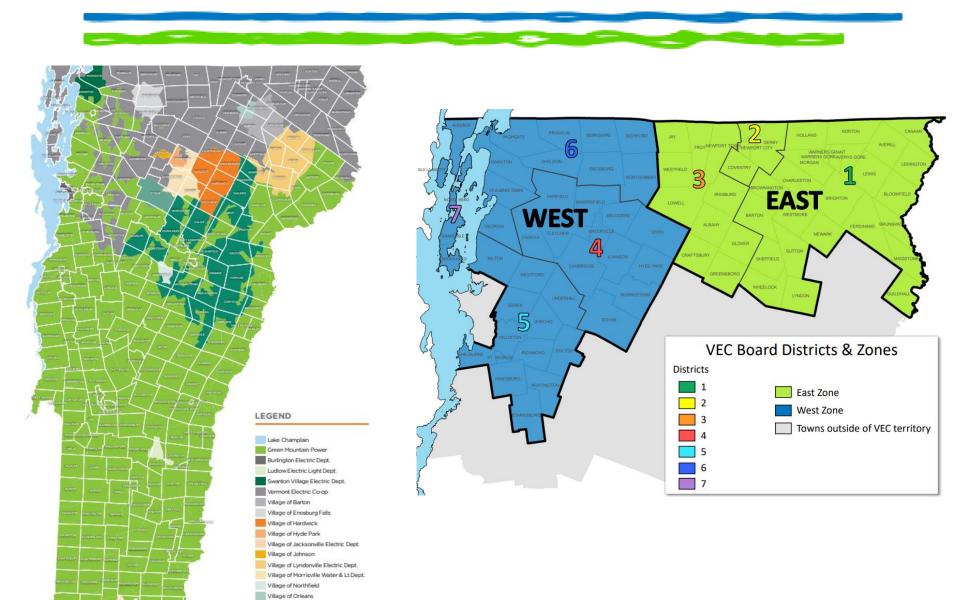




House Energy and Digital Technology January 24, 2025 Andrea Cohen, Leader, Government Affairs and Member Relations acohen@vermontelectric.coop



### January 2024



Village of Stowe Electric Dept.

Washington Electric Co-op



At a Glance			
Number of Members: 33,000 (approx.)	Annual Revenue (2023): \$ 94 million		
Meters Served: 40,726	Vermont Property Tax (2024): \$5 million		
Square Miles Served: 2,056	Number of Communities Served: 75		
Miles of Line: 2,880	Counties Served: 8 (Addison, Caledonia, Chittenden, Essex, Franklin, Grand Isle, Lamoille, and Orleans).		
Meters served per mile of line: 16			
2024 VEC Total Load: 511,761 MWh	VEC 2024 Peak Load: 82 MW		
	Sun 12/22/24 hour ending 6:00 pm		



**VEC Energization Day 1938** 

#### **About VEC and Our Member-Owners:**

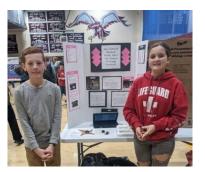
- Established in 1938 to bring electricity to rural underserved Vermonters.
- Largest locally owned and second largest electric distribution utility in Vermont.
- Not-for-profit, member-owned cooperative with 106 employees.
- Democratically controlled: one member, one vote.
- Approximately one-half of electric sales are residential.
- In 2024, 50% of residential members were on fixed incomes, 53% percent were age 65 or older, 47% have been member-owners for 20 years or more.
- Serves five of the top nine Vermont towns (and three of the top five counties) with greatest energy burden,
- Excellent record of member satisfaction.
- Meets or exceeds all Service Quality and Reliability Goals (SQRP).







Since 2015 VEC's Community Fund made 224 awards to local community groups totaling just under \$160,000.



North Country Supervisory Union Science and Engineering Fair



Wood4Good-Lamoille County



Abenaki Nation of Missisquoi Food Pantry Swanton



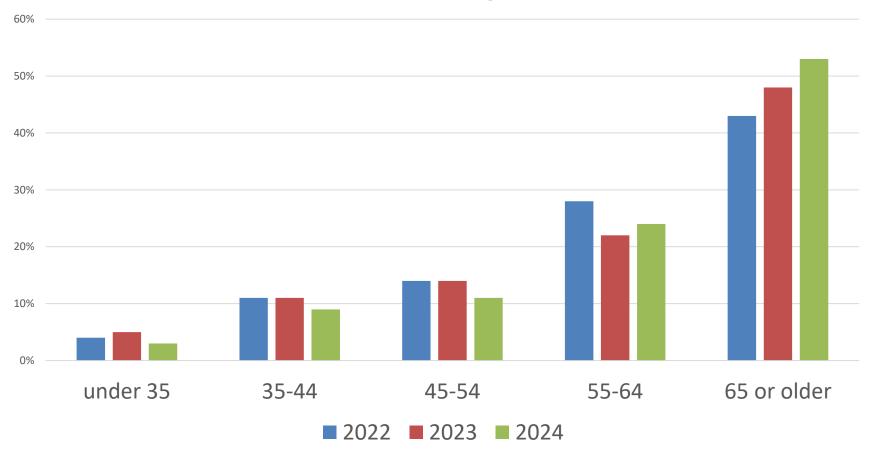
Alburgh Volunteer Fire Dept

### **VEC Member Capital**

A distinct advantage of Co-op membership is the allocation of member capital. Since 2013, the VEC Board has authorized the distribution of over \$13 million to VEC's member-owners.

## **VEC Member Demographics**

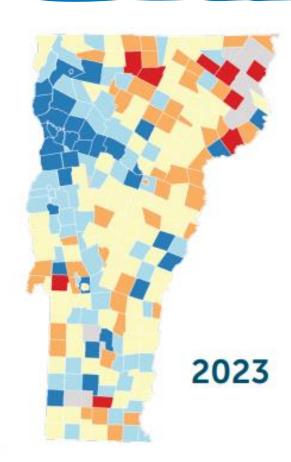
### Member Age





## **Energy Equity and Affordability**





2023 Efficiency Vermont Energy Burden Report Red areas indicate high burden and blue areas indicate low burden.

## 7 of top 11 Towns with largest energy burden

	В	С	
1	Montgomery	Franklin	23.1%
2	Charleston	Orleans	19.1%
3	East Haven	Essex	18.9%
4	Lowell	Orleans	17.1%
5	Concord	Essex	15.9%
6	Brighton	Essex	15.5%
7	Castleton	Rutland	15.2%
8	Dover	Windham	15.2%
9	Bloomfield	Essex	15.1%
10	Eden	Lamoille	14.8%
11	Jay	Orleans	14.7%
12	Pawlet	Rutland	14.7%
.13	Windsor	Windsor	14.4%

## **Priorities**



Keeping the lights on!

**Ensuring Affordability** 

Reducing Carbon

## 100% Committed



100%

Carbon-Free in 2023

100%

Renewable in 2030









## **Power Supply Member Priorities**

**VEC 2024 Annual Member Survey** 

Low-cost energy continues to be more important than renewable or carbon free energy.

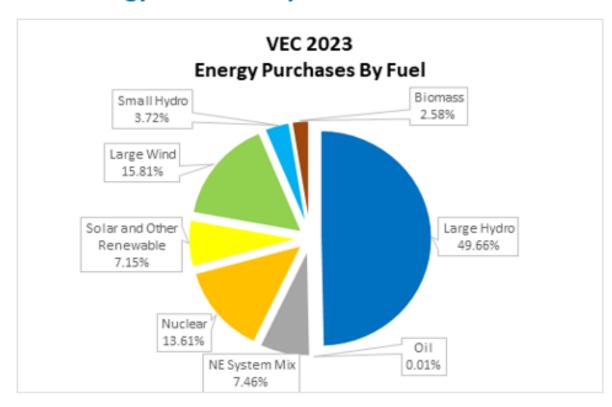
Renewable energy continues to be more important than <u>carbon free</u> energy.

<u>In-state v. not in-state</u> negligible difference.





### 2023 Energy Purchases by Fuel



### 2023 Final Position (Represents RECs Retained)

1 I	,
Large Hydro	79.16 %
Nuclear	15.45 %
Solar & Other Renew.	5.39 %
Small Hydro	.01 %

2023 Energy Attributes 100% Carbon-Free 84% Renewable (VT RES)



VEC Coop
Community Solar
Serving Members
Since 2016

Cost-effective—Solar sponsorship provided at cost -- brings direct value to participants as well as all Co-op members.

Well sited—Projects are located at sites that optimize grid efficiency.

Local Renewable Energy—VEC retires the Renewable Energy

Certificates for all sponsored panels, helping us to meet the VT

Renewable Energy Standard goals and requirements.

**Inclusive**—Opportunity for members who do not have suitable sites, don't own their home, or who are not able or interested in making a long-term commitment.

**Exit Option**—Participants can "opt out" of the program at any time for any reason and receive back a pro-rated portion of their sponsorship.

Affordable—Financing option allows all income levels to go solar.

### **Current status (Jan 2024)**



- 28,400 panels (just over 7 MW) at three well-located sites (Alburgh 1 MW, Grand Isle 5 MW, Hinesburg 1.3 MW,).
- Designed to produce over 9 million kWh annually= 1,200 homes annual usage.
- To date, 26% percent of the operating panels have been sponsored.

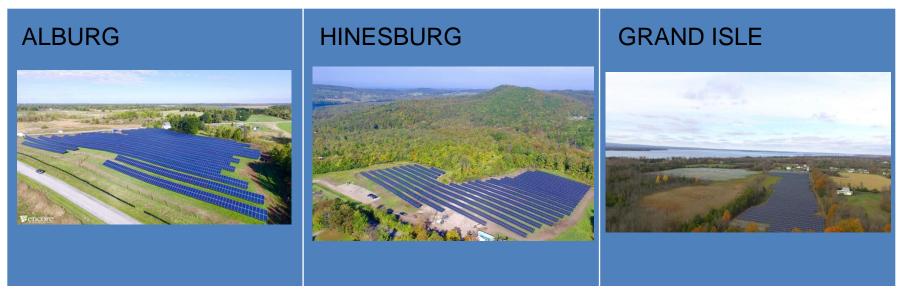


Photo: Courtesy of Encore Renewable Energy

Photo: Courtesy of Encore Renewable Energy

# Affordable Community Renewable Energy (ACRE)

Phase 1- Jericho Landfill solar project



Photo courtesy of Encore Renewable Energy

ACRE- VEC is using the Jericho LF Solar project and invited WEC to partner.

- ACRE Grant Award \$2,693,663.
- Phase 1 provides for 480 memberships.
- \$2,700 in bill credits for each participant (\$45/month for 60 months).
- Phase 1
   enrollment for
   VEC completed
   Oct. 2024.
- Phase 2 site not yet permitted or developed but PPA executed.

# **Energy Transformation & Carbon Reduction**





Little Charlie's Sugarbush (Jay):

.57 mile line extension to displace 7,907 gallons of propane per year.

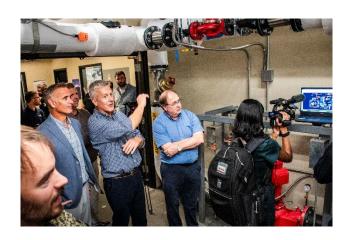


**Northeast Sand and Gravel:** Line extension to facilitate conversion from diesel generators for crurshing and paving.



#### **Mayotte Sugarhouse (Fletcher)**

Over 50,000 taps. High-Brix RO- Service upgrade to displace approximately 7,960 gallons of #2 Fuel Oil per year.



**Jay Peak Resort** – Dynamic Electrification for main hotel and water park. Reduce 450,000 gallons of propane/year.

# **Energy Transformation & Carbon Reduction**





Full Suite of incentives for qualifying products. Electric Vehicles, EV Charging Equipment, Ducted and Ground Source Heat Pumps, Heat Pump Water Heaters, Pellet Stoves, Induction Cooktops, Electric Forklifts, and more.

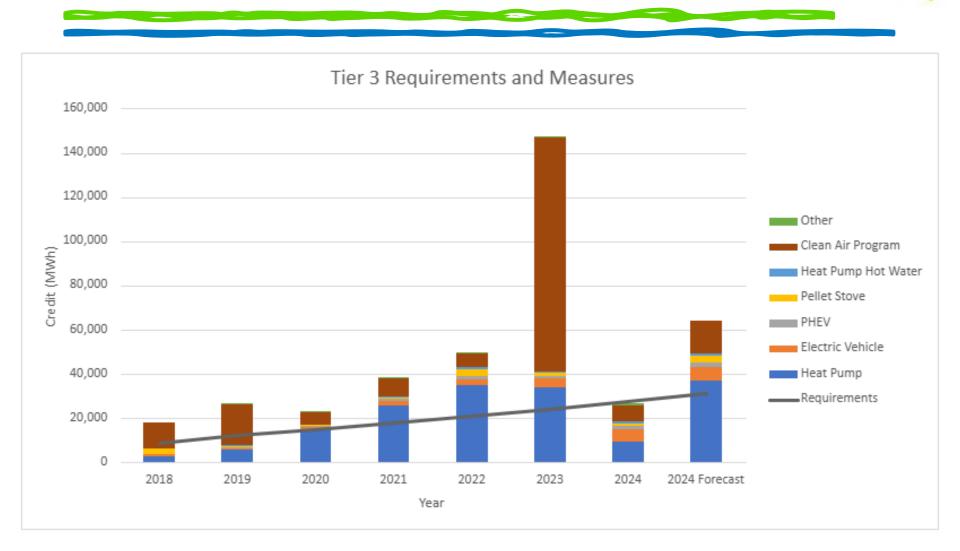






# **Energy Transformation & Carbon Reduction**





## Community Scale Energy Storage

2019- Hinesburg





2024- North Troy (In partnership with GMP)





# Load Management Grid Management Innovation



VEC is committed to grid innovation and is working with members through incentive-based flexible load programs to promote lower costs and a cleaner electric grid.

#### **Home Battery Management Incentive**

VEC offers an incentive to members willing to allow VEC to use their home battery a limited number of times per year when we are anticipating peak demand. Participants receive a monthly bill credit, or they choose an upfront payment with a lower monthly bill credit.

#### **EV Charger Incentive**

VEC offers level II EV chargers to members at no charge. The member must enroll their charger in a communications platform so that VEC can request that the charger not operate during peak events and enroll in VEC's Beat the Peak Program to receive alerts when VEC expects high demand for electricity.

#### **EV Flexible Load Incentive**

A member without a compatible level II charger could enroll their vehicle directly. VEC would send a signal to the vehicle and request that it not charge when peak demand is anticipated.

Programs will continue to evolve as we learn more and technology advances.

## Reliability and Resiliency

Reliability: Keeping the lights on every day. Resiliency: Investing to prevent and recover from events.





- Build resiliency and climate hardening
- Invest in infrastructure excellence
- Prioritize cybersecurity







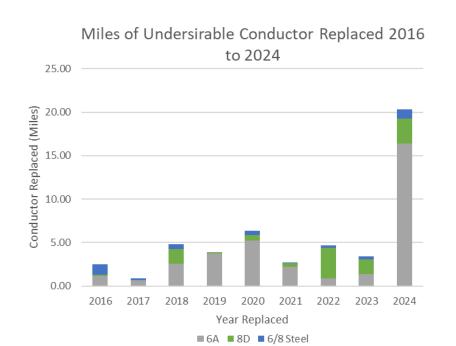


### Resiliency

**West Charleston project** (Charleston, Derby, Holland, and Morgan). \$400K, 75% FEMA

- -Sectionalizing-adding recloser and fuses.
- 3-phase small wire replaced with larger covered wire
- Moved wire from right-of-way to road
- -Added tie-line for backup
- Retired lines not needed.

Reduced number of outages by 39% Reduced outage time by 94%.





VEC retired over 20 miles of small wire in 2024 which was the most small wire removed from our system in a single year.

Undergrounded part of 1-2G in Fairfield to improve reliability – moved roadside, added tie point for redundancy, and resolved voltage issues.

## Thank you!















