



**Washington
Electric
CO-OP**

House Committee on Environment and Energy

Louis Porter - General Manager

**Stephen Knowlton - Board
President**

Washington Electric Cooperative, Inc.
East Montpelier, VT

Jan. 17. 2023

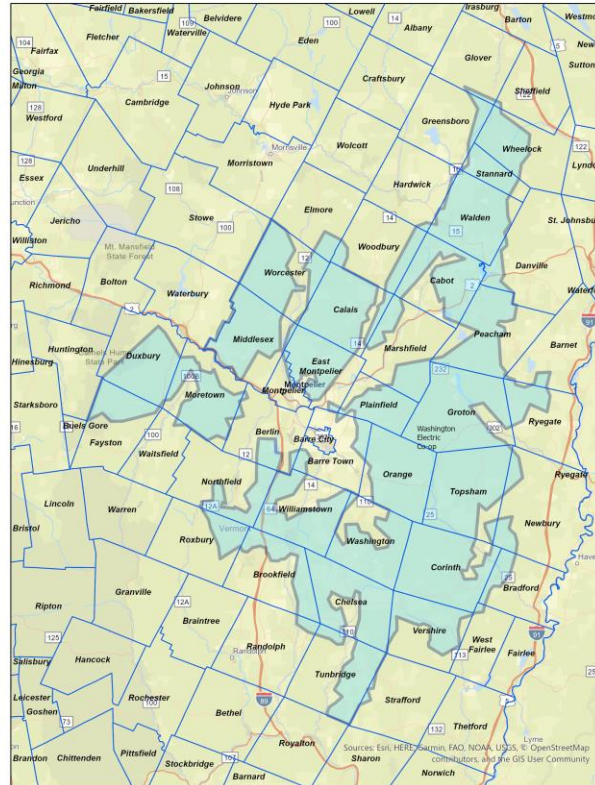
WEC begins operating in 1939

Many Rural Electrical Cooperatives created in early 20th century U.S.

- WEC created by local residents in rural areas unserved by commercial utilities of that day.
- WEC's situation today reflects its history as rural provider



Running lines in WEC territory - cross country.



WEC service territory (in blue) transected by major roads

- excludes most town centers & densely populated areas



WEC today still shaped by its size, rural character, demographics, and co-op principles

- ❖ 11,600 members
- ❖ 40 employees:
 - run and maintain generation, transmission, distribution infrastructure
 - provide all financial and member service needs
 - respond to regulatory mandates
- ❖ Most rural utility territory
 - 1,300 miles of distribution line to be maintained
 - fewer than 9 members per mile⇒ Higher cost of electricity
- ❖ Few sizeable commercial/industrial customers
 - Membership 94 percent residential
 - Revenue 89 percent residential
 - > Cost of running system and state programs borne mainly by residential ratepayer
 - > Equity concerns
- ❖ Not-for-profit; returned more than \$9 million to members in capital credits since 1998.

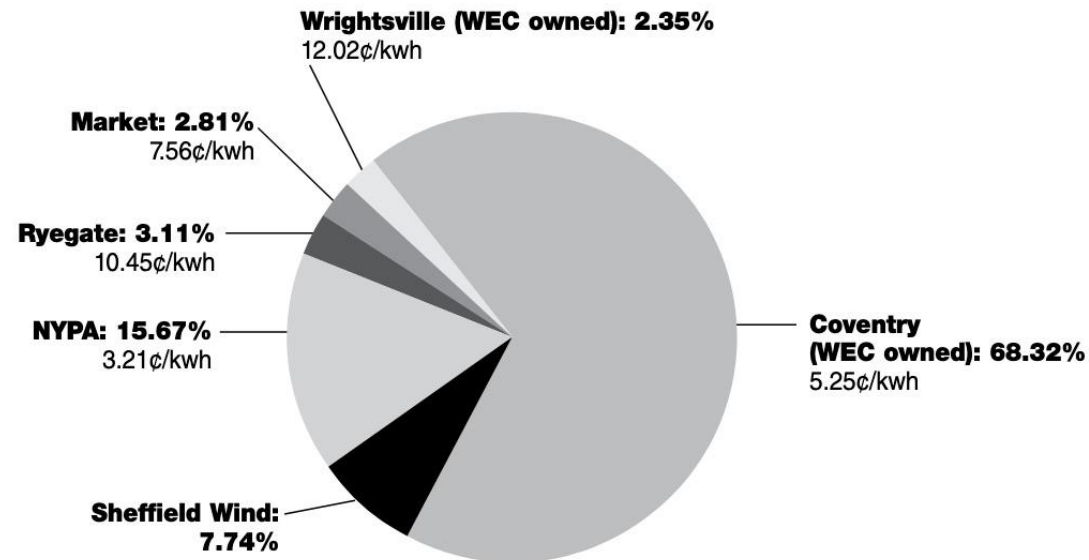


WEC power portfolio low-carbon and fully renewable

- ❖ WEC and two other Vermont utilities already 100% renewable
- ❖ Already meets goal of VT Renewable Energy Standard
- ❖ More than 70 percent of power self-generated.
- ❖ Existing and pending net-metered solar PV capacity on WEC system 48 percent of WEC peak load.
 - ❖ Est. net-metered production equivalent to approx. 8 percent of WEC annual sales.

2021 Sources and Costs of Power

(Total kWh Purchased and Generated)

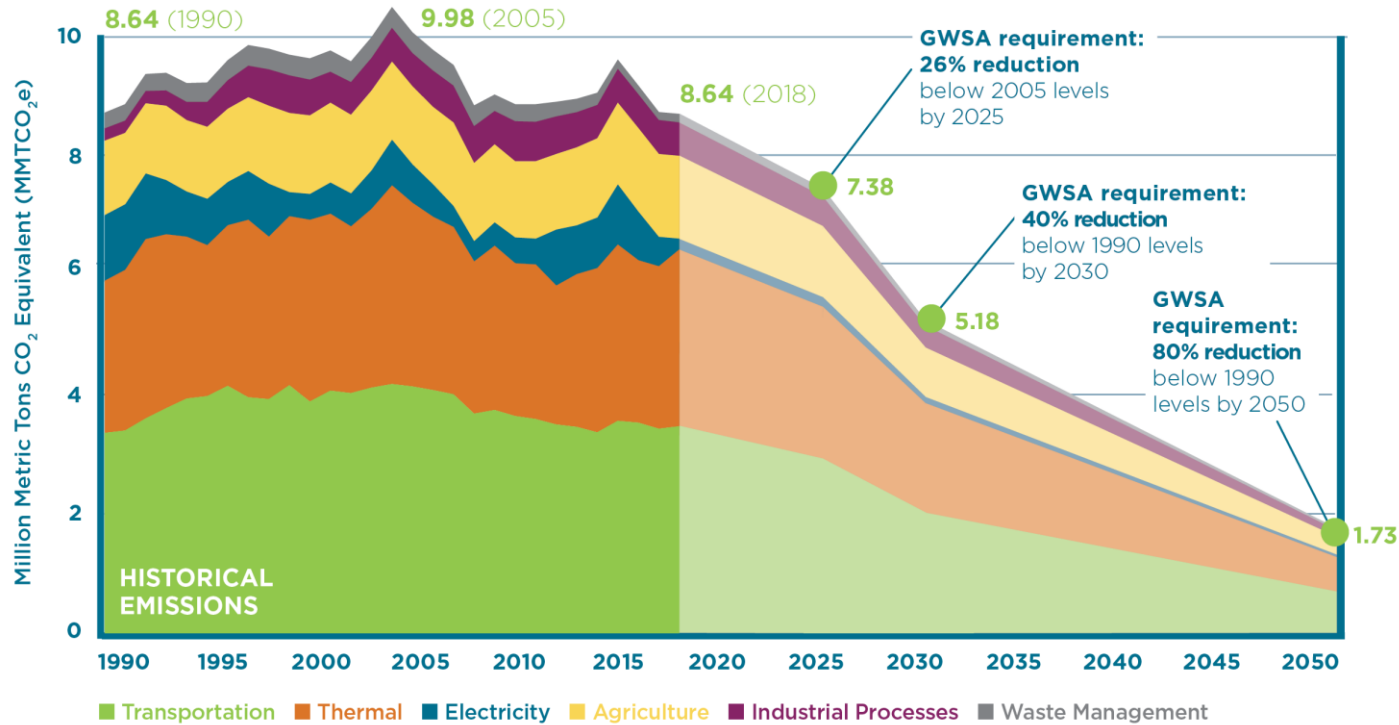


Vermont Electric Utilities' Success Story

Roughly 2% of state's GHG emission comes from electric sector

“Vermont now has the least carbon intensive electricity portfolio in the U.S.”- *EAN 2022 Progress Report*

Vermont's historical GHG emissions and future requirements

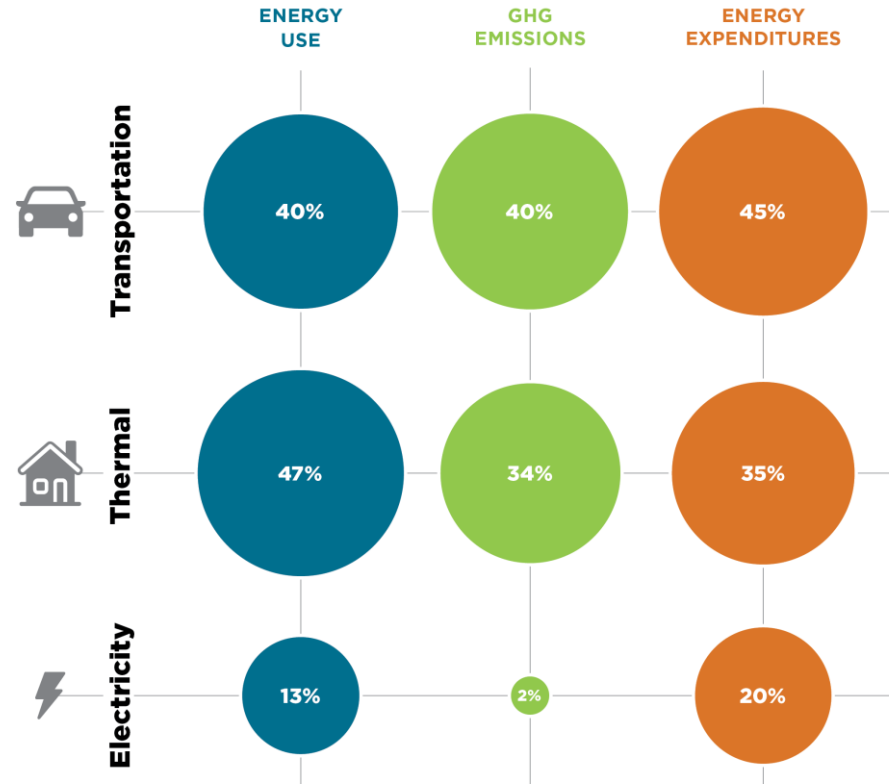


Source: Vermont Agency of Natural Resources, Vermont GHG Emissions Inventory and Forecast (1990-2017), 2021.



Considering the future

- ❖ Existing Renewable Energy Standard already doing its job in minimizing GHG emissions-
- ❖ Need of expanding low-cost, reliable renewables as electric load grows.
- ❖ Keeping rates as low as possible to encourage electrical heating and transportation.
- ❖ Investing in grid resiliency and reliability.
- ❖ Increasing expectations from members and regulators require investment in new systems and approaches.



Source for Energy Use: Thermal and transportation based on EIA 2019 site energy; electricity from PSD site energy, after accounting for RECs.
Source for Emissions: VT Agency of Natural Resources, 2021. GHG Emissions Inventory, 1990-2018.
Source for Energy Expenditures: Vermont Energy Burden Report, VEIC (October 2019).



Storm Elliott December, 2022

- ❖ Roughly 5,700 members out of power after the storm
- ❖ WEC crews were joined by nearly two dozen outside crews
- ❖ 38 broken poles, a WEC record for major storms
- ❖ Fielded more than 6,500 calls and messages from members.
- ❖ Just under \$1 million in est. restoration costs.
 - May be a qualified FEMA event.
- ❖ Complications:
 - ❖ Key operations leaders down with COVID
 - ❖ National call center (handles customer call overloads in major storm) overwhelmed by scope of storm
 - ❖ Regional extent of storm damage slowed mutual aid.



Washington Electric Co-op lineman Donnie Singleton carries part of a downed and de-energized power line, getting ready to splice it. – John Lazenby, The Bridge