

The State of Solar in Vermont

2025 VECAN Conference

November 1, 2025

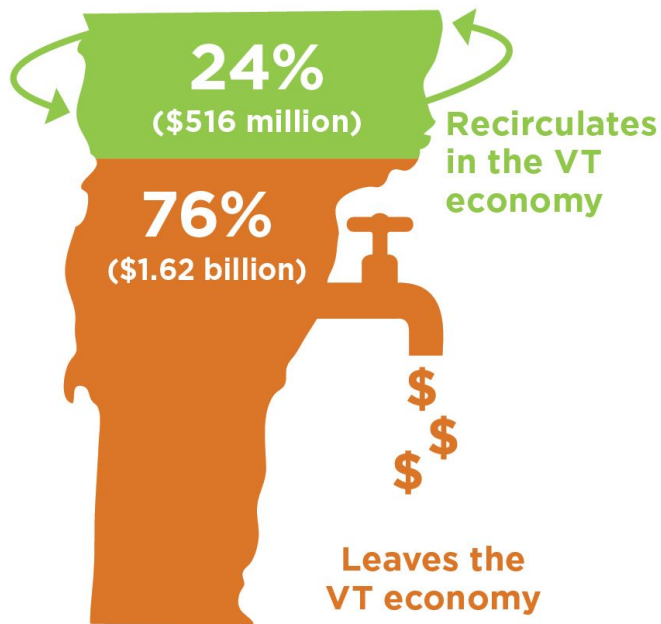
Presenters:

Senator Anne Watson, *Chair - Senate Natural Resources & Energy Committee*

Ben Edgerly Walsh, *VPIRG*

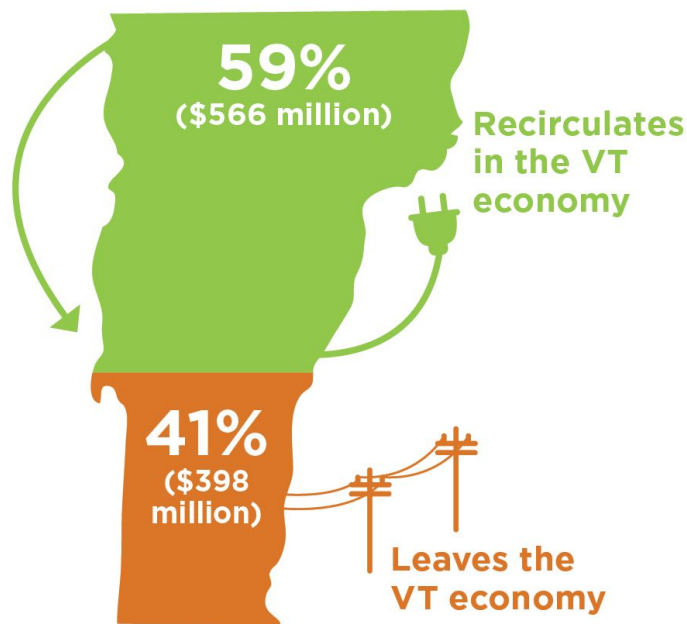
Troy McBride, *Norwich Technologies*

VT average annual fossil fuel spending



Sources: Fossil fuel spending: VT Department of Taxes, 2025; VGS, 2025; EIA, 2025; Dollar recirculation share: Ken Jones, EAN Senior Fellow for Economic Analysis, 2025. **Note:** Data shown are an average of 2021-2024. This graph includes spending on thermal and transportation fuels only.

VT average annual electricity spending

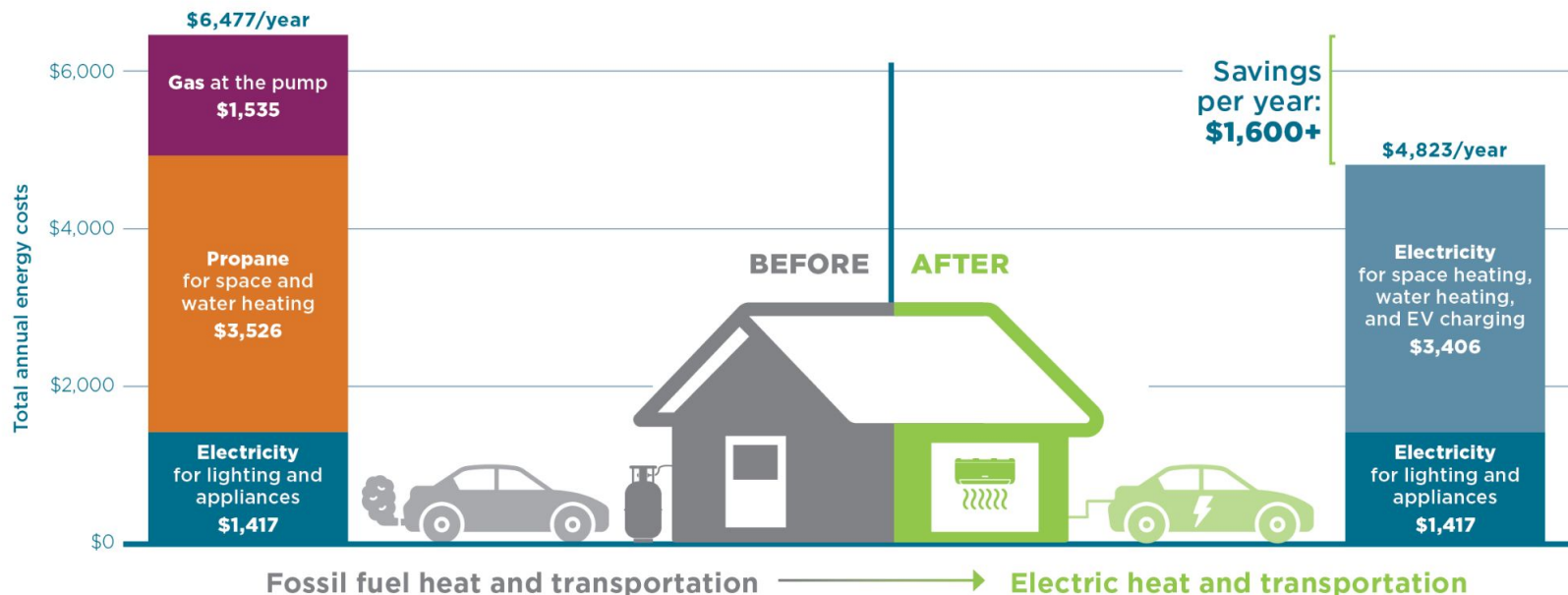


Sources: Electricity spending: Vermont Department of Public Service and VT electric utilities. Dollar recirculation share: Ken Jones, EAN Senior Fellow for Economic Analysis, 2025. **Note:** Data shown are an average of 2021-2024. The methodology for the dollar recirculation share was updated in January 2025 to account for out-of-state transmission costs.



Electrification can bring down overall energy costs, even as electricity bills increase

Estimated annual costs for a sample VT single-family household



Sources: Energy bill savings calculated based on the average monthly prices for propane, gasoline, and electricity in 2024, from the Vermont Department of Public Service and EIA. Electricity costs for lighting and appliances reflect statewide average annual household electricity expenditures (Efficiency Vermont, 2023 "Vermont Energy Burden Report"). Annual transportation fuel costs calculated using average fuel efficiency of 23.4 MPG for vehicles registered in VT from "Vermont Transportation Energy Profile 2021" and VT average annual vehicle miles traveled (VMT) of 11,084 miles/year in 2022 from the Federal Highway Administration. **Note:** Actual energy cost savings will depend on a number of factors, including a household's electricity rate. The 76% of Vermont households that are in GMP and BED territories have access to lower electric rates for managed EV charging, which can reduce costs further. Upfront equipment/vehicle costs vary based on model and incentive eligibility; because of this variance, upfront costs are not quantified here. Energy cost savings estimates are for a one car household. Estimated savings would be higher for households replacing multiple gas vehicles with electric vehicles.



Incentives and Disincentives: Rates & Tax Credits

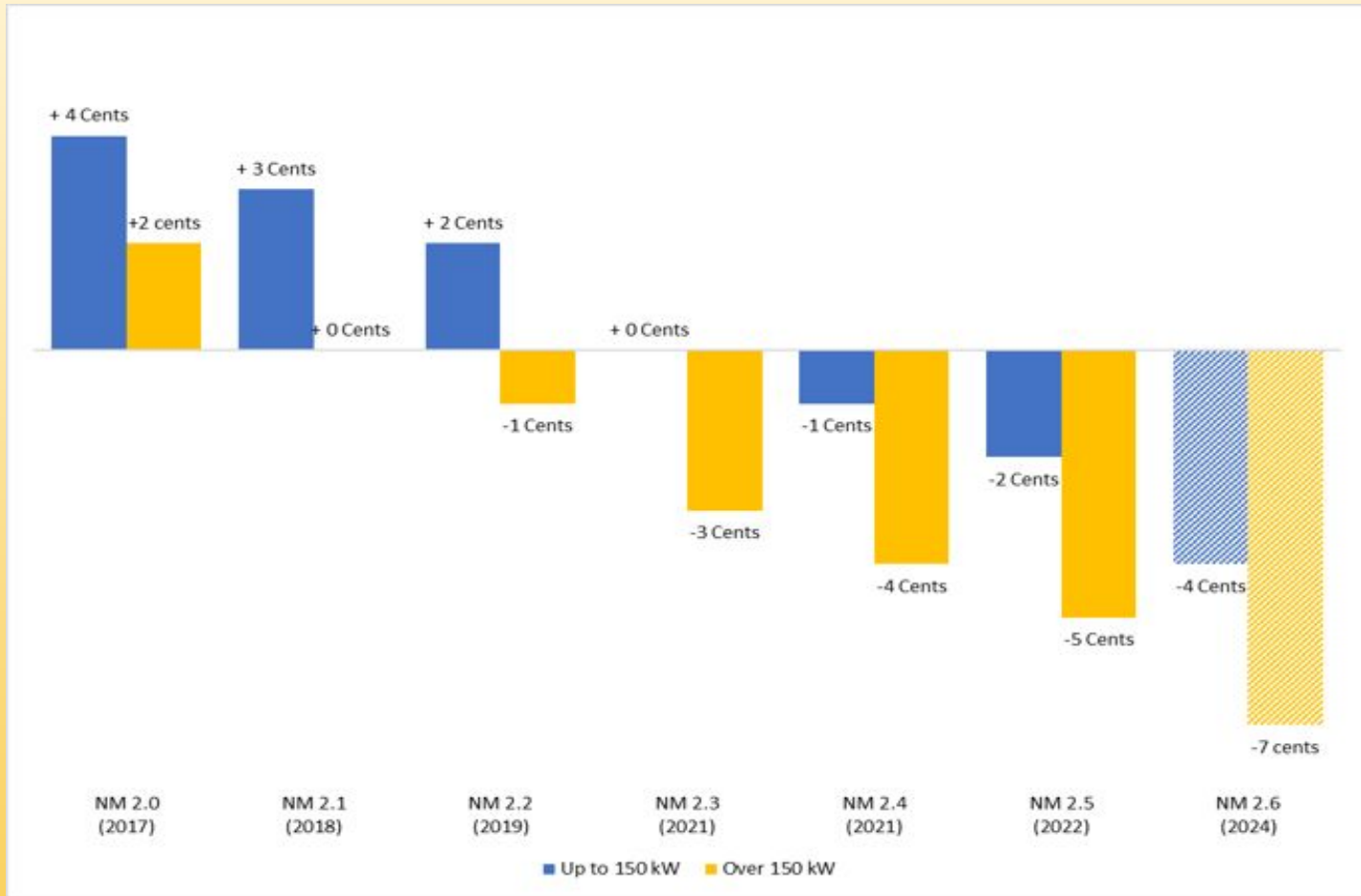
A Decade of Financial Retreat from Strong State Incentives

- Vermont has been chipping away at the value of solar per kWh for almost a decade. Once solar “adders” are now negative.
 - 2016 Value: 22 cents/kWh
 - 2018 Value: 19 cents/kWh
 - 2021 Value: 17 cents/kWh
 - 2024 Value: 14.4 cents/kWh

The current value of net-metered solar is 4 cents below retail rate.

- 2026 Value? To Be Determined...

NET METERING: DECREASED COMPENSATION OVER THE YEARS



Other Vermont Policies

Renewable Energy Standard

- Expanded in 2024 - new renewables requirements roughly quadrupled
- New in-state requirement doubled - ramping to 50+ MW/yr in new solar in VT
- Expected to mostly be met with larger projects

Standard Offer ended

Virtual Group Net Metering (off-site net metering) ended

Solar Tax Credits

Bipartisan Creation & Extension, Partisan End (for now)

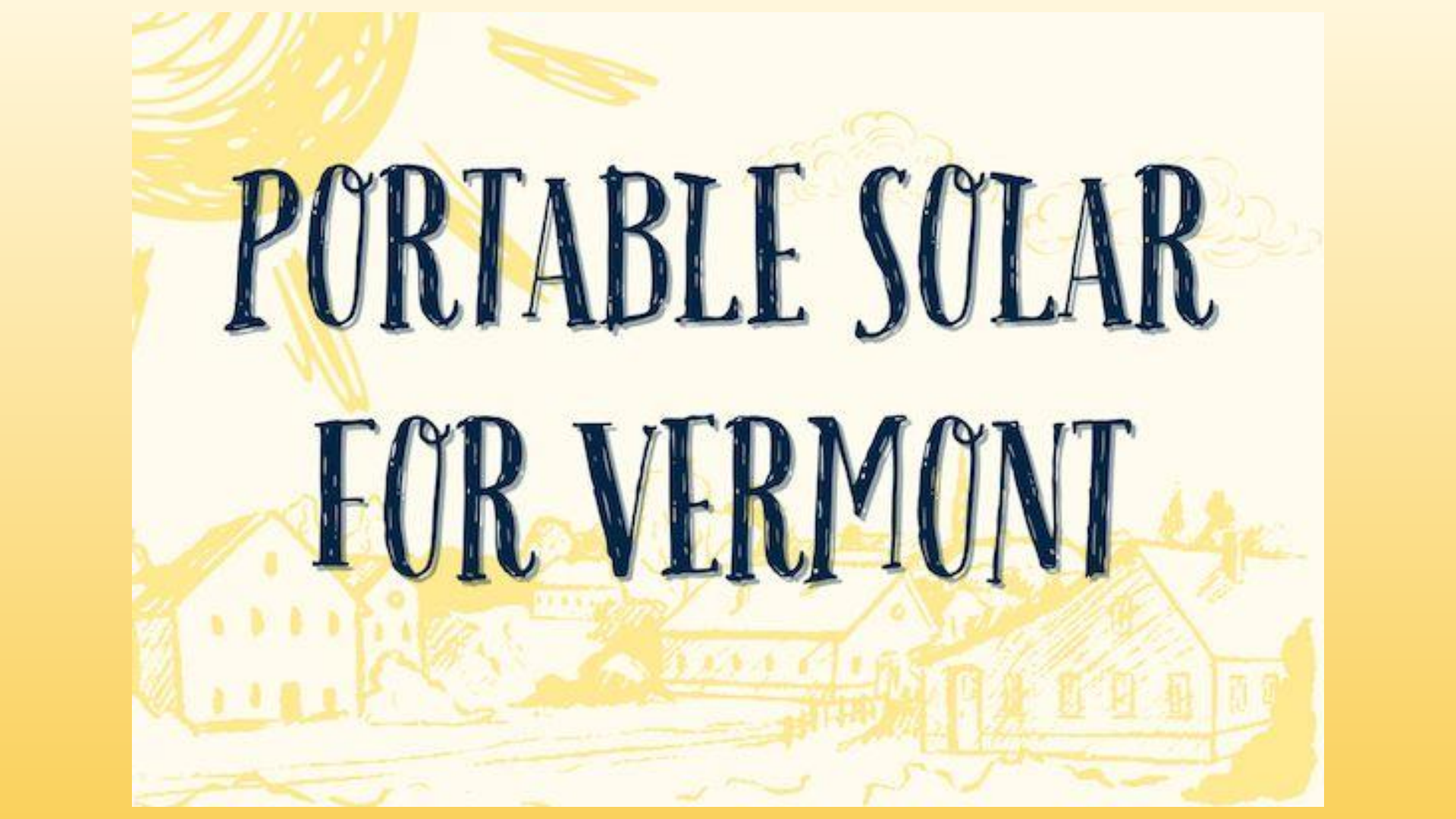
Residential solar tax credit

- Created under noted climate champion George W Bush in 2005
- Extended multiple times on a bipartisan basis
- OBBBA (Trump/GOP "reconciliation" bill) ends it Dec 31, 2025

Commercial tax credit

- OBBBA requires construction to begin by July 5, 2026 OR
- Projects to be operational by Dec 31, 2027

It's all bad, but for residential solar it's worse.

The background features a stylized, hand-drawn illustration in a golden-yellow color. At the top left, a large sun with wavy rays is partially visible. Below it, a row of various Vermont-style houses with gabled roofs and multiple windows stretches across the bottom. The overall style is rustic and artistic.

PORTABLE SOLAR FOR VERMONT

The Solar Access Problem



Rising electricity prices

+27% increase in electricity prices across the U.S. from 2019 – 2024, projected to rise another **13** – **18%** by 2026.



An energy equity crisis

1/4 of low-income households spend **15%** of income on energy bills. Overall, low-income households' median energy burden was almost **3X** the national median in 2024.



Low solar uptake

78% of U.S. adults reported being in favor of expanding solar power in 2024. However, only **7%** of U.S. homes reported having solar the same year.

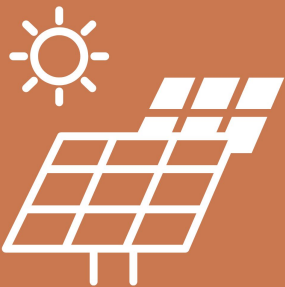


Rooftop solar often out of reach

70% of Americans can't get rooftop solar



A Solution – Plug-in Solar



What is it?



Small, safe, affordable, easy-to-use, portable plug-in solar panels.



Can be set-up on your balcony, terrace, or backyard.



Panels connect directly to a standard home outlet, allowing solar energy to flow into your home's electrical circuit and **reduce the electricity you draw from the grid.**



With prices reaching as low as USD 600, plug-in solar systems can **cost from 80-98% less** than traditional rooftop systems.



A Solution – Plug-in Solar



What does it
achieve?

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achieve?



Lowers **electrical bills**.



Builds **household resilience** and reduces household energy burdens.



Enhances **equitable access to clean energy** for all, including low- to moderate-income households.



Improves **public health**.



Relieves stress on energy grids.



Helps **lower pollution, reduce emissions**, and mitigate the impacts of **climate change**.

Portable Solar - What's the Plan?

- A Simple "Right to Plug In"
 - No interconnection
 - No net metering
 - No fees
 - No wait time
- Utility notification
- Emphasis on Safety
 - Systems would need to meet safety standards - Underwriters Laboratories (UL) or equivalent
 - Can't backfeed onto the grid during an outage

Solar Policy - Beyond Portable Solar

- Renewable Energy Standard
 - Hold the line against partisan and fossil fuel attacks
- Residential solar (net metering)
 - What can Vermont do to protect small solar?
- How Vermont defines a renewable energy “plant”
 - Removing red tape for land use benefit and ratepayer savings

Thank you!
Questions?