

Jared Duval, Vermont Climate Council Member

- Council member appointed by the Senate Committee on Committees to represent a Vermont based organization with expertise in energy and data analysis
- Co-Chair, Science & Data subcommittee
- Member, Cross-Sector Mitigation subcommittee
- Member, Council Steering Committee

Comparing Relative Costs or **Savings** of Carbon Reduction Measures (PSD)

Measure Cost Type	Measure	Lifetime Net Resource Cost	Lifetime Avoided CO ₂ (Tons)	Net Cost per Ton of CO ₂ Saved (\$/ton)
Mixed	Electric Efficiency Portfolio	(\$61)	0.04	(\$1,429)
Incremental	Plug-in Hybrid Electric Vehicle	(\$3,761)	25	(\$148)
Incremental	Heat Pump Water Heater	(\$1,125)	8	(\$145)
Incremental	All-Electric Vehicle	(\$692)	42	(\$17)
Full	Residential Weatherization	\$453	28	\$16
Full	Wood Pellet Stove	\$3,366	82	\$41
Full	Heat Pump (Multizone)	\$1,427	18	\$80
Full	Heat Pump (Single Zone)	\$1,182	14	\$88
Incremental	Wood Pellet Boiler/Furnace	\$12,767	123	\$104
Incremental	Electric Transit Bus	\$236,812	711	\$333
Full	Tier II Resource - 4.9 MW	\$617,598	1,048	\$589
Incremental	Electric School Bus	\$194,388	189	\$1,028
Full	Solar Net-metering, 150 kW	\$72,633	22	\$3,234
Full	Solar Net-metering, 5 kW	\$6,980	0.75	\$9,325

Thank You For Moving Forward Many Important CAP Recommendations

Addressing the biggest barriers to greater EV adoption by:

- Expanding charging infrastructure (EVSE), especially DC fast charging in underserved areas and Level 2 charging in multi-family buildings (16% of VT housing).
- EV Incentives for Low- and Moderate-Income Vermonters, including the State Incentive program and Replace Your Ride
- Incentives for EVs and/or more fuel-efficient used vehicles via Mileage Smart

Incentivizing Clean & Efficient Vehicles, Disincentivizing Inefficient New Vehicles, and Reflecting the True Cost of Pollution:

- Vehicle Efficiency Price Adjustment (aka True Cost Pricing for new vehicles) (Pathway 1, Strategy 2c)
- Unpaid social cost of avg. fossil vehicle > \$5,000

Recommendation: Compare CAP to T-Bill and TIA, not just vice versa

Possible Major Gap:

1) Make clear Vermont's ability to join and receive revenue from a regional cap and invest program, including outlining a process for making investments in clean and equitable transportation (Pathway 1, Strategy 4; Pathway 2, Strategy 3; Pathway 4, Strategy 1).

- ARPA funds need to be appropriated by 2024 and expended by 2026. Meanwhile, VT's emissions reduction requirements for 2030 are nearly 3x larger than for 2025 – we can't afford to have investments falling off a cliff at the exact time we need to be ramping up effort.

Recommendation: Invest Wisely Now, Prepare for Major Policy and Regulatory Focus Next Year

- Unlike the electricity sector (Renewable Energy Standard (RES)) and, hopefully soon, the thermal sector (Clean Heat Standard (CHS)), Vermont's transportation sector—our most polluting sector—lacks a primary policy or regulatory framework to ensure emissions reduction requirements are met and met equitably.
- TCI-P was going to be this framework, until it fell apart days before the Climate Action Plan was finalized.
- The Climate Council is currently assessing alternate options, including a Clean Transportation Standard and the Western Climate Initiative. For the CAP to add up and the GWSA targets to be met, our forthcoming recommendation will almost certainly have to be taken up, considered, and acted on next session.