



April 13, 2026

Subject: Gasoline vs. Electric Vehicle Cost Comparisons

Dear Chair Westman and members of the Senate Transportation Committee,

During my Drive Electric Vermont testimony in your committee last week you requested more information comparing the operating and ownership costs of gasoline versus electric vehicles (EVs). Below is a summary of those comparisons, with supporting calculations attached.

Fuel and Energy Costs

I offered during my testimony that a Vermont EV driver could have saved approximately \$5,400 over the past 5 years compared to a gasoline vehicle. Using consistent assumptions (1,000 miles driven per month, a 25 MPG gasoline vehicle, and an EV efficiency of 3.19 miles per kWh), the attached calculations compare gasoline fueling costs with EV charging costs over the past five years. Charging an EV off-peak on Green Mountain Power's time-of-use EV rate offered substantially lower monthly energy costs than gasoline, roughly \$70–\$115 savings per month compared to fueling a gasoline vehicle. Cumulatively, this resulted in an estimated \$5,388 in fuel savings over the past five years for a typical Vermont driver charging off-peak instead of purchasing gasoline.

It is important to note some Vermonters are unable to access off-peak charging rates for various reasons, or the programs offered by their electric utilities are not as advantageous. So, while the savings estimate is based on reasonable assumptions, actual savings will vary by household.

Total Cost of Ownership: Chevrolet Equinox Comparison

We also discussed going beyond the fuel savings to consider the total cost of ownership (TCO) for an apple-to-apples gasoline versus EV comparison. TCO typically covers several cost categories associated with vehicle ownership, including depreciation, insurance, maintenance, fuel, financing, and taxes.

AAA offers an online tool with state-specific assumptions for TCO estimates. I used this tool to compare a new gasoline 2026 Chevrolet Equinox with a 2026 Chevrolet Equinox EV. The results are attached below.

AAA estimated the five-year total cost of ownership (TCO) for a gasoline Equinox at approximately \$44,100. The Equinox EV was approximately \$43,200 when charged off-peak

(\$900 lower than gas) or \$44,300 using average Vermont residential electric rates (\$200 higher than gas).

The EV had higher up front/depreciation costs, but these were largely offset by significantly lower fuel and maintenance costs.

The AAA tool does not account for potential purchase incentives offered by most Vermont electric utilities or home charging installation costs which can vary widely. Drivers with higher annual mileage could see significantly greater savings, especially at current gasoline prices.

Used EV ownership further improves affordability by avoiding much of the initial depreciation. JD Power reports current average pricing for a used 2024 Equinox EV at \$24,900 compared to \$23,500 for a similarly configured gasoline model. That \$1,400 difference is a much smaller premium than the roughly \$6,500 between the same 2026 model year vehicles.

Thank you for your consideration, and please feel free to reach out if additional detail or clarification would be helpful as the Committee continues its work.

Sincerely,
David Roberts

Estimated Gasoline vs off-peak EV energy costs over the past 5 years

Assumptions: 1,000 miles per month; 25 MPG gasoline vehicle; 3.19 miles per kWh EV

| Month- Year | US EIA New | VT | | Gas Monthly Cost | EV monthly cost | GMP off-peak EV time of use rate | Monthly Off- Peak EV Savings |
|----------------|---|--|---|------------------------|-----------------------|--|------------------------------------|
| | England Regular Gasoline Price (Dollars per Gallon) | Residential Avg Rate (cents/kWh) | GMP off-peak EV rate 74 (cents/kWh) | | | | |
| May-21 | \$ 2.89 | 19.57 | 12.831 | \$ 115.64 | \$ 61.25 | \$ 40.16 | \$ 75.48 |
| Jun-21 | \$ 2.96 | 19.34 | 12.831 | \$ 118.56 | \$ 60.53 | \$ 40.16 | \$ 78.40 |
| Jul-21 | \$ 3.04 | 18.97 | 12.831 | \$ 121.60 | \$ 59.38 | \$ 40.16 | \$ 81.44 |
| Aug-21 | \$ 3.05 | 19.1 | 12.831 | \$ 121.92 | \$ 59.78 | \$ 40.16 | \$ 81.76 |
| Sep-21 | \$ 3.09 | 19.54 | 12.831 | \$ 123.68 | \$ 61.16 | \$ 40.16 | \$ 83.52 |
| Oct-21 | \$ 3.25 | 20.55 | 13.433 | \$ 129.84 | \$ 64.32 | \$ 42.05 | \$ 87.79 |
| Nov-21 | \$ 3.42 | 20.13 | 13.433 | \$ 136.64 | \$ 63.01 | \$ 42.05 | \$ 94.59 |
| Dec-21 | \$ 3.38 | 19.58 | 13.433 | \$ 135.28 | \$ 61.29 | \$ 42.05 | \$ 93.23 |
| Jan-22 | \$ 3.35 | 19.17 | 13.433 | \$ 133.88 | \$ 60.00 | \$ 42.05 | \$ 91.83 |
| Feb-22 | \$ 3.51 | 19 | 13.433 | \$ 140.20 | \$ 59.47 | \$ 42.05 | \$ 98.15 |
| Mar-22 | \$ 4.23 | 19.61 | 13.433 | \$ 169.16 | \$ 61.38 | \$ 42.05 | \$ 127.11 |
| Apr-22 | \$ 4.04 | 20.02 | 13.433 | \$ 161.56 | \$ 62.66 | \$ 42.05 | \$ 119.51 |
| May-22 | \$ 4.51 | 20.25 | 13.433 | \$ 180.36 | \$ 63.38 | \$ 42.05 | \$ 138.31 |
| Jun-22 | \$ 4.95 | 20.16 | 13.433 | \$ 197.92 | \$ 63.10 | \$ 42.05 | \$ 155.87 |
| Jul-22 | \$ 4.63 | 19.89 | 13.433 | \$ 185.32 | \$ 62.26 | \$ 42.05 | \$ 143.27 |
| Aug-22 | \$ 4.19 | 19.85 | 13.433 | \$ 167.40 | \$ 62.13 | \$ 42.05 | \$ 125.35 |
| Sep-22 | \$ 3.62 | 20.42 | 13.433 | \$ 144.88 | \$ 63.91 | \$ 42.05 | \$ 102.83 |
| Oct-22 | \$ 3.55 | 20.91 | 13.726 | \$ 141.96 | \$ 65.45 | \$ 42.96 | \$ 99.00 |
| Nov-22 | \$ 3.78 | 20.74 | 13.726 | \$ 151.16 | \$ 64.92 | \$ 42.96 | \$ 108.20 |
| Dec-22 | \$ 3.42 | 19.94 | 13.726 | \$ 136.80 | \$ 62.41 | \$ 42.96 | \$ 93.84 |
| Jan-23 | \$ 3.32 | 19.96 | 13.726 | \$ 132.68 | \$ 62.47 | \$ 42.96 | \$ 89.72 |
| Feb-23 | \$ 3.33 | 20.28 | 13.726 | \$ 133.16 | \$ 63.48 | \$ 42.96 | \$ 90.20 |
| Mar-23 | \$ 3.25 | 20.38 | 13.726 | \$ 130.08 | \$ 63.79 | \$ 42.96 | \$ 87.12 |
| Apr-23 | \$ 3.37 | 20.75 | 13.726 | \$ 134.64 | \$ 64.95 | \$ 42.96 | \$ 91.68 |
| May-23 | \$ 3.45 | 21.03 | 13.726 | \$ 137.92 | \$ 65.82 | \$ 42.96 | \$ 94.96 |
| Jun-23 | \$ 3.52 | 21 | 13.726 | \$ 140.88 | \$ 65.73 | \$ 42.96 | \$ 97.92 |
| Jul-23 | \$ 3.56 | 20.45 | 13.726 | \$ 142.28 | \$ 64.01 | \$ 42.96 | \$ 99.32 |
| Aug-23 | \$ 3.75 | 20.47 | 13.726 | \$ 150.08 | \$ 64.07 | \$ 42.96 | \$ 107.12 |
| Sep-23 | \$ 3.75 | 21.21 | 13.726 | \$ 150.00 | \$ 66.39 | \$ 42.96 | \$ 107.04 |
| Oct-23 | \$ 3.61 | 22.11 | 14.452 | \$ 144.36 | \$ 69.20 | \$ 45.23 | \$ 99.13 |
| Nov-23 | \$ 3.38 | 21.57 | 14.452 | \$ 135.28 | \$ 67.51 | \$ 45.23 | \$ 90.05 |
| Dec-23 | \$ 3.21 | 21.09 | 14.452 | \$ 128.28 | \$ 66.01 | \$ 45.23 | \$ 83.05 |
| Jan-24 | \$ 3.09 | 20.8 | 14.452 | \$ 123.40 | \$ 65.10 | \$ 45.23 | \$ 78.17 |
| Feb-24 | \$ 3.13 | 21.06 | 14.452 | \$ 125.12 | \$ 65.92 | \$ 45.23 | \$ 79.89 |
| Mar-24 | \$ 3.22 | 21.56 | 14.452 | \$ 128.76 | \$ 67.48 | \$ 45.23 | \$ 83.53 |
| Apr-24 | \$ 3.44 | 21.7 | 14.452 | \$ 137.56 | \$ 67.92 | \$ 45.23 | \$ 92.33 |
| May-24 | \$ 3.56 | 22.15 | 14.452 | \$ 142.24 | \$ 69.33 | \$ 45.23 | \$ 97.01 |

| | | | | | | | |
|--------|---------|-------|--------|-----------|----------|----------|-----------|
| Jun-24 | \$ 3.44 | 21.76 | 14.452 | \$ 137.76 | \$ 68.11 | \$ 45.23 | \$ 92.53 |
| Jul-24 | \$ 3.47 | 21.1 | 14.452 | \$ 138.92 | \$ 66.04 | \$ 45.23 | \$ 93.69 |
| Aug-24 | \$ 3.37 | 21.26 | 14.452 | \$ 134.64 | \$ 66.54 | \$ 45.23 | \$ 89.41 |
| Sep-24 | \$ 3.13 | 22.46 | 14.452 | \$ 125.36 | \$ 70.30 | \$ 45.23 | \$ 80.13 |
| Oct-24 | \$ 3.02 | 23.04 | 15.212 | \$ 120.68 | \$ 72.12 | \$ 47.61 | \$ 73.07 |
| Nov-24 | \$ 2.97 | 25.16 | 15.212 | \$ 118.88 | \$ 78.75 | \$ 47.61 | \$ 71.27 |
| Dec-24 | \$ 2.97 | 22.05 | 15.212 | \$ 118.96 | \$ 69.02 | \$ 47.61 | \$ 71.35 |
| Jan-25 | \$ 2.98 | 21.74 | 15.212 | \$ 119.08 | \$ 68.05 | \$ 47.61 | \$ 71.47 |
| Feb-25 | \$ 2.98 | 21.99 | 15.212 | \$ 119.32 | \$ 68.83 | \$ 47.61 | \$ 71.71 |
| Mar-25 | \$ 2.93 | 22.38 | 15.212 | \$ 117.08 | \$ 70.05 | \$ 47.61 | \$ 69.47 |
| Apr-25 | \$ 2.93 | 22.97 | 15.212 | \$ 117.00 | \$ 71.90 | \$ 47.61 | \$ 69.39 |
| May-25 | \$ 2.96 | 23.75 | 15.212 | \$ 118.52 | \$ 74.34 | \$ 47.61 | \$ 70.91 |
| Jun-25 | \$ 3.00 | 23 | 15.212 | \$ 119.96 | \$ 71.99 | \$ 47.61 | \$ 72.35 |
| Jul-25 | \$ 3.01 | 22.14 | 15.212 | \$ 120.40 | \$ 69.30 | \$ 47.61 | \$ 72.79 |
| Aug-25 | \$ 3.03 | 22.27 | 15.212 | \$ 121.36 | \$ 69.71 | \$ 47.61 | \$ 73.75 |
| Sep-25 | \$ 3.07 | 23.92 | 15.212 | \$ 122.76 | \$ 74.87 | \$ 47.61 | \$ 75.15 |
| Oct-25 | \$ 2.96 | 24.78 | 16.33 | \$ 118.28 | \$ 77.56 | \$ 51.11 | \$ 67.17 |
| Nov-25 | \$ 2.96 | 24.17 | 16.33 | \$ 118.56 | \$ 75.65 | \$ 51.11 | \$ 67.45 |
| Dec-25 | \$ 2.92 | 23.22 | 16.33 | \$ 116.84 | \$ 72.68 | \$ 51.11 | \$ 65.73 |
| Jan-26 | \$ 2.82 | 23.29 | 16.33 | \$ 112.60 | \$ 72.90 | \$ 51.11 | \$ 61.49 |
| Feb-26 | \$ 2.84 | | 16.33 | \$ 113.48 | | \$ 51.11 | \$ 62.37 |
| Mar-26 | \$ 3.36 | | 16.33 | \$ 134.44 | | \$ 51.11 | \$ 83.33 |
| Apr-26 | \$ 4.13 | | 16.33 | \$ 165.12 | | \$ 51.11 | \$ 114.01 |

Estimated savings of an EV charged off-peak compared to gasoline vehicle over the past 5 years: \$ 5,387.61

AAA Total Cost of Ownership Comparison for Gasoline vs Electric New Chevrolet Equinox Purchase

Chevrolet Equinox Cost of Ownership Comparison

| | Gasoline | | | Electric | | |
|----------------------------|--------------------------------------|----------------------|---------------------|---|---------------------|--|
| | 2026 Chevrolet Equinox LT 4D SUV FWD | | | 2026 Chevrolet Equinox EV 2LT 4D SUV FWD | | |
| Base MSRP | \$ | 28,600.00 | | \$35,100.00 | | \$35,100.00 |
| Fuel/Energy Price | | 3.469 (\$/gal) | | <i>Avg Vermont Residential Rate</i> 0.235 (\$/kWh) | | <i>Off-Peak EV Rate</i> 0.1633 (\$/kWh) |
| Total Driving Costs | | | | | | |
| Per Year | | \$8,819.20 | | \$8,861.40 | | \$8,637.45 |
| Per Mile | | \$0.88 | | \$0.89 | | \$0.86 |
| 5-year Total | | \$44,096.00 | | \$44,307.00 | | \$ 43,187.26 |
| Costs Breakdown | | | | | | |
| | | Cost per year | 5-year Total | Cost per year | 5-year Total | Cost per year 5-year Total |
| Fuel | | \$1,406.40 | \$7,032.00 | \$734.00 | \$3,670.00 | \$510.05 2,550.26 |
| Maintenance & Repair | | \$1,514.20 | \$7,571.00 | \$1,067.40 | \$5,337.00 | \$1,067.40 \$5,337.00 |
| Depreciation | | \$3,359.60 | \$16,798.00 | \$4,464.40 | \$22,322.00 | \$4,464.40 \$22,322.00 |
| Insurance | | \$1,508.00 | \$7,540.00 | \$1,353.20 | \$6,766.00 | \$1,353.20 \$6,766.00 |
| Fees & Taxes | | \$481.00 | \$2,405.00 | \$618.80 | \$3,094.00 | \$618.80 \$3,094.00 |
| Finance Charges | | \$550.00 | \$2,750.00 | \$623.60 | \$3,118.00 | \$623.60 \$3,118.00 |

Sources

Gas <https://www.aaa.com/autorepair/drivingcosts/VT-N-2026/Chevrolet/Equinox/LT%204D%20SUV%20FWD/prime/at-10000-miles/on-55-city>

EV <https://www.aaa.com/autorepair/drivingcosts/VT-N-2026/Chevrolet/Equinox%20EV/2LT%204D%20SUV%20FWD/prime/at-10000-miles/on-55-city>