

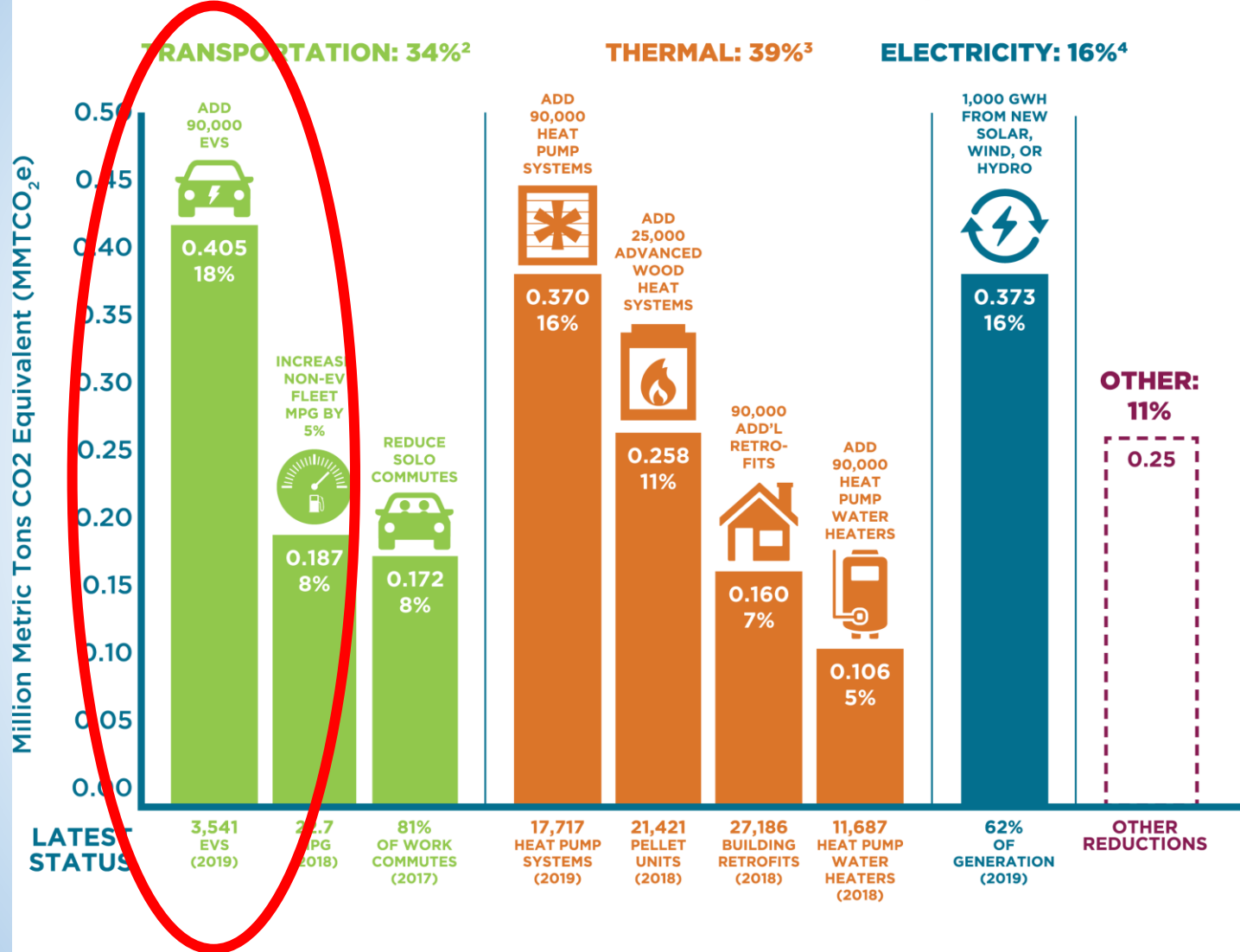
House Transportation Committee EV Rates

J. Riley Allen

Deputy Commissioner

2/17/2021

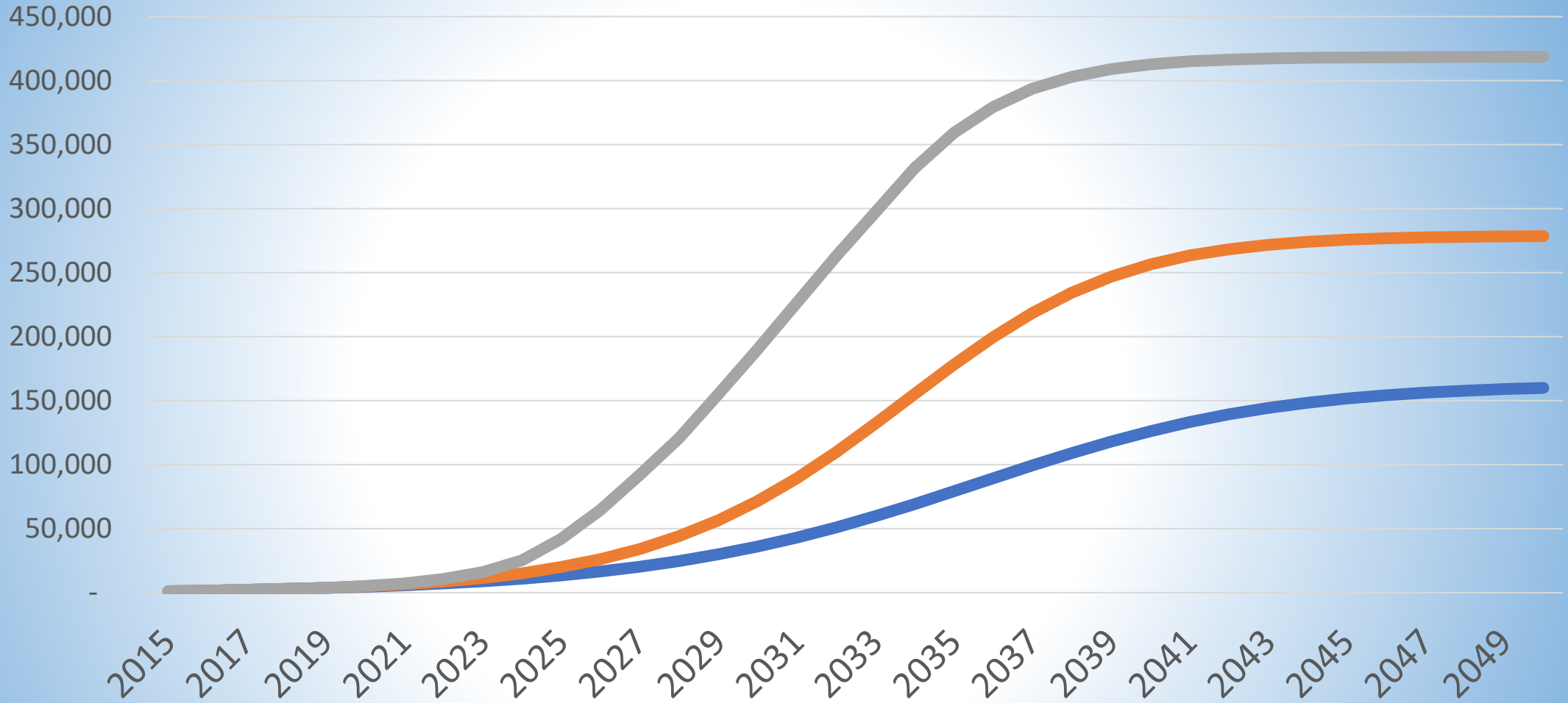
2.3 MMTCO₂e reduction by 2025 is required to meet the Paris Agreement¹



1. Vermont Agency of Natural Resources. January 2020. 2. Transportation data is the latest available from the Energy Information Administration (EIA) (2019), Vermont Agency of Transportation/UVM Transportation Research Center (2019), and Drive Electric Vermont (Oct 2019). 3. Thermal data from EIA (2019), Efficiency Vermont (2019), Department of Public Service (2019), Biomass Energy Research Center (2019), Department of Forests, Parks & Recreation (2019). 4. Electric data from the Department of Public Service (2019) and ePUC (Certificates of Public Good: September 2019).

Source: Energy Action Network

Electric Vehicle Futures



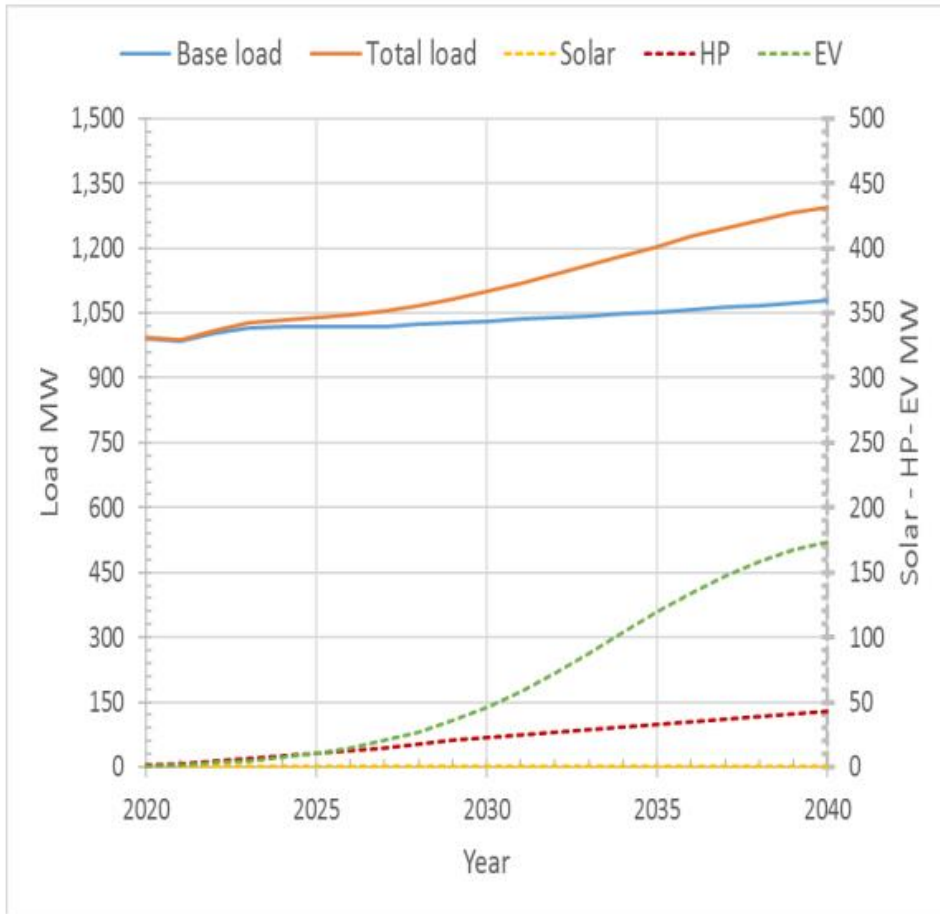
Year	Low	Medium	High
2020	4,624	4,941	5,189
2025	13,476	20,007	41,969
2030	36,080	71,624	190,125
2035	79,179	178,162	359,077
2040	126,184	256,417	412,689
2045	151,678	275,702	418,038
2050	159,931	278,561	418,464

— Low — Medium — High

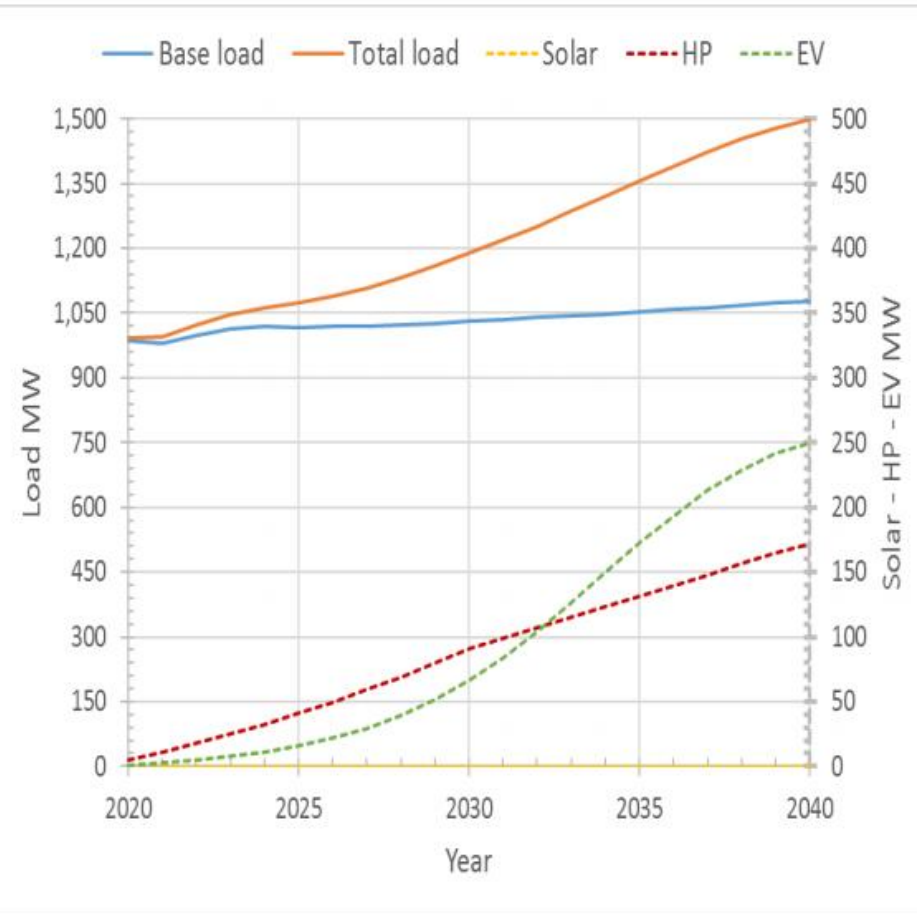
Vermont System Planning Committee, June 2020

VELCO Peak Load Forecast Components

Summer Peak Load Forecast



Winter Peak Load Forecast



Technology forecasts do not include effect of load control

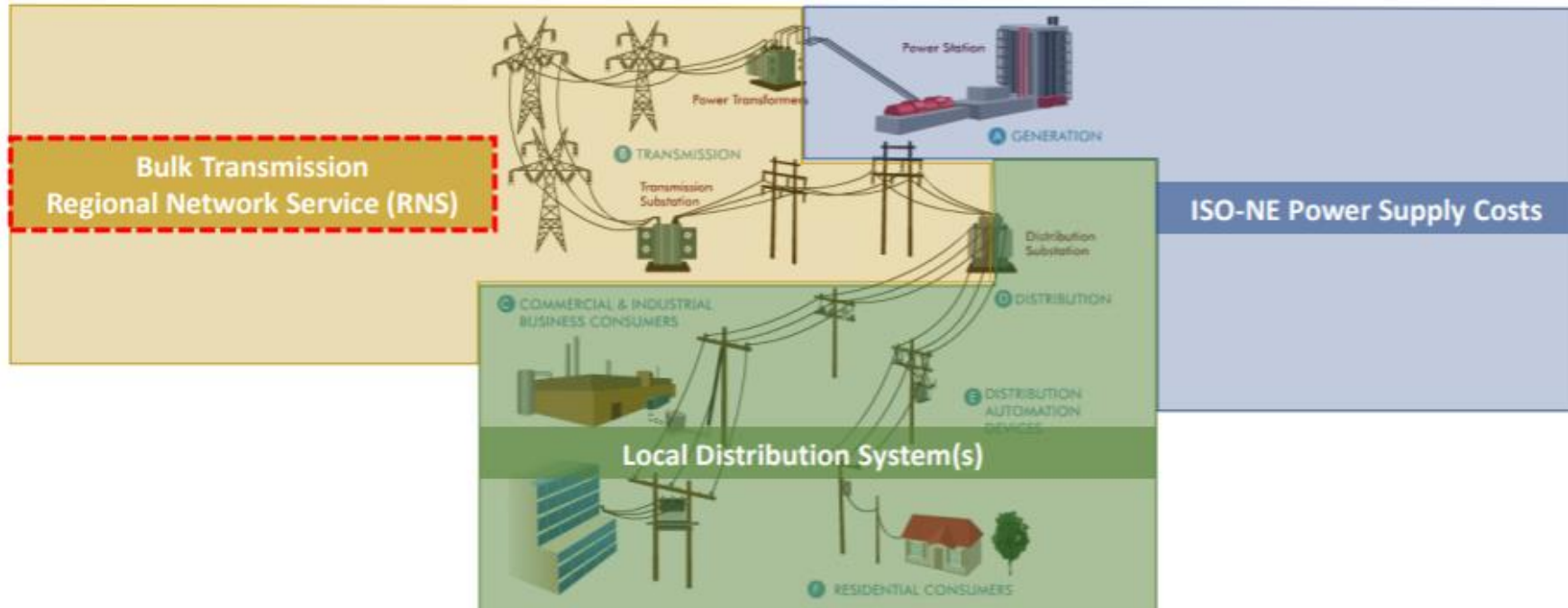


Electric Cars Are Coming, and Fast. Is the Nation's Grid Up to It?

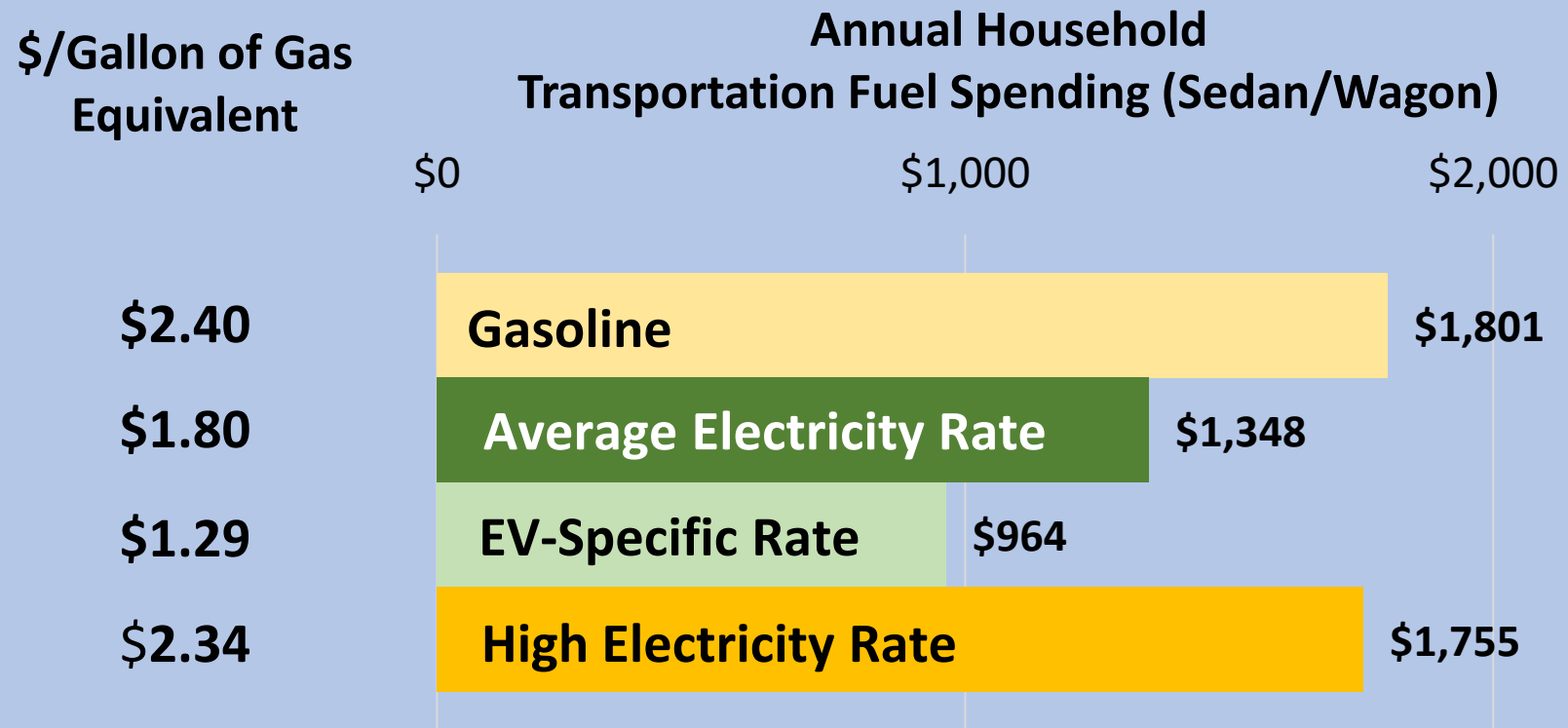
GM's decision this week to phase out gasoline vehicles is the latest in a major shift that will mean drastic new demands on electric utilities.

New York Times, January 29, 2021

OVERVIEW OF LSAM™ "UTILITY COST KPIS"



Fuel Cost Comparison



Fuel and Electricity Prices

- (1) \$2.40/gallon of regular gas is AAA reported Vermont average for 2/1/2021; (2) Average residential electricity rate of \$0.179/kWh); (3) GMP Time-of-Use Off-Peak EV Rate of \$0.128/kWh; (4) WEC marginal residential rate of \$23.292 for block over 100 kWh/month

Spending Assumptions (Sources: CNT H+T Affordability Index; EPA eGallon Calculator)

23,107 miles per year per household, 30.8 miles per gallon for gas vehicle, 0.326 kWh/mile for electric vehicle

Observations

- EV Rates/load management are important to Vermont electricity consumers and Vermont climate objectives
- PUC can be used to sensibly apply standards set in law to address individual utility circumstance
- Now is the time for policy and regulatory reform