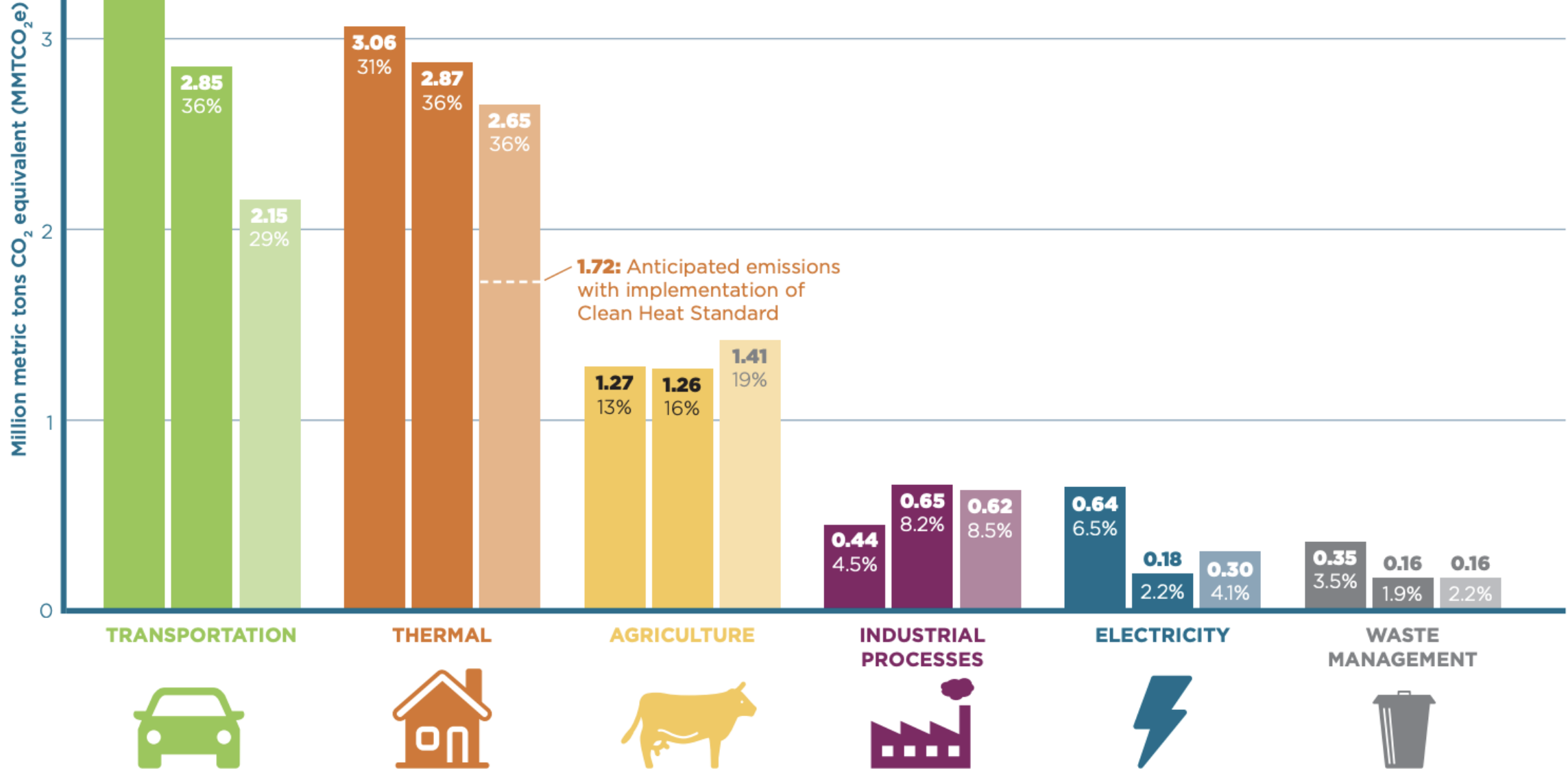

Johanna Miller, *Energy + Climate Program Director*
– Vermont Natural Resources Council
- jmiller@vnrc.org

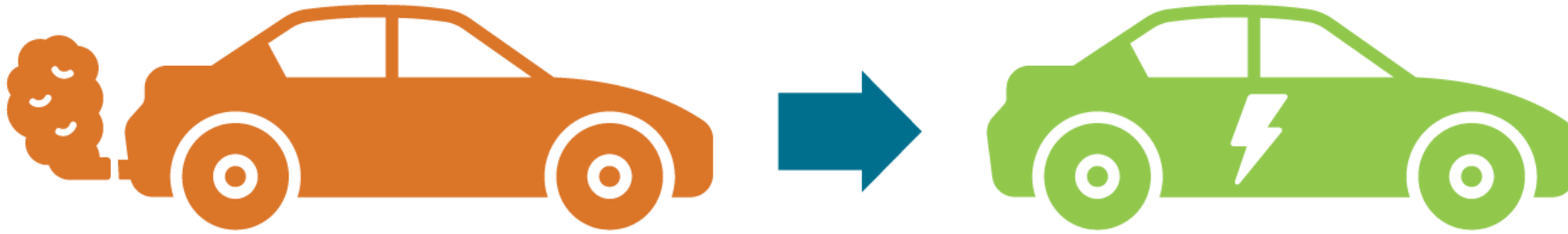
**Member of the Vermont Climate Council –
Co-lead Transportation Task Group**

TOTAL GHG EMISSIONS
 2005 = 9.83 MMTCO₂e (actual)
 2020 = 7.99 MMTCO₂e (actual)
 2030 = 7.32 MMTCO₂e (ANR projection)



Source: Vermont Agency of Natural Resources, Vermont GHG Emissions Inventory and Forecast: 1990-2020, 2023. **Note:** There is a small amount of emissions from the “fossil fuel industry” category (i.e. fugitive emissions from fossil gas pipelines in VT), accounting for 0.3% of Vermont’s overall emissions in 2020, that does not show up on this graph. Values/percentages for 2030 are based on the VT Agency of Natural Resources’ projections in the 1990-2020 GHG emissions inventory, published in 2023, and reflect a

Lifetime cost savings of switching to an electric vehicle



Estimated savings on fuel and maintenance: ~ \$9,500

+

Avoided social costs from reduced fuel-related GHG emissions over the life of the vehicle: ~ \$7,000

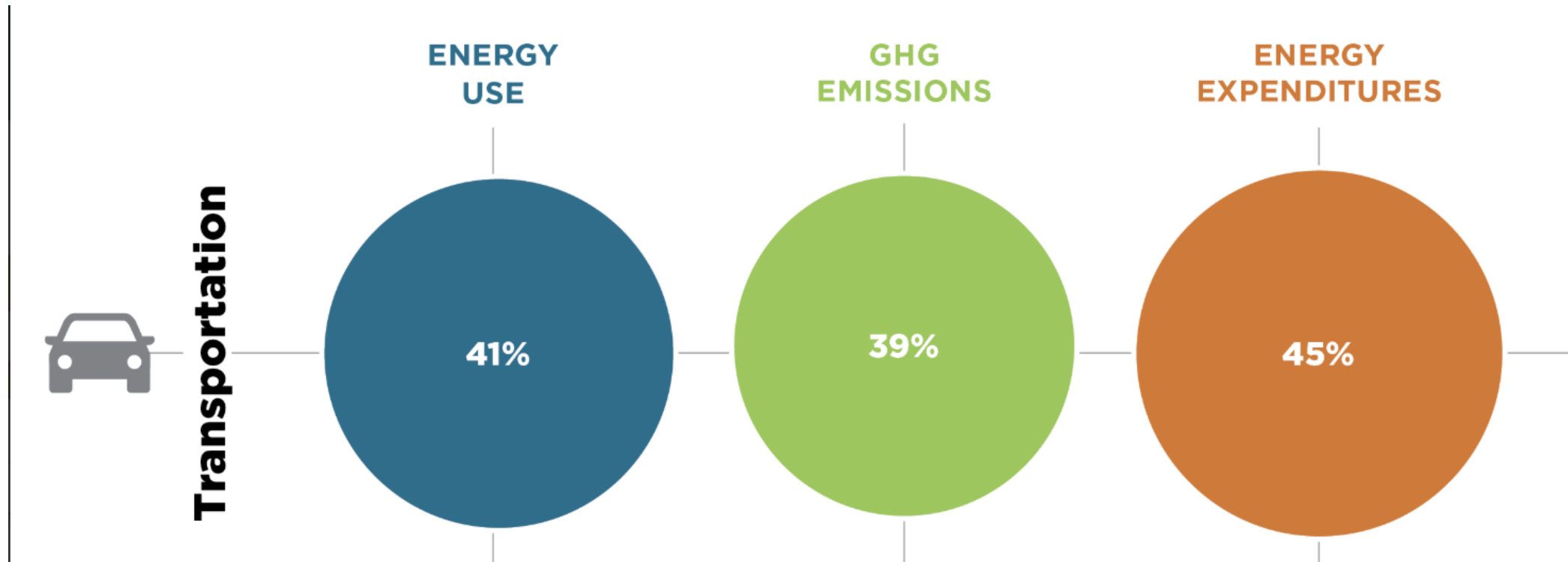
Electric vehicles are more cost-effective, far cheaper than ICE vehicles over time and far better for public health.

Sources: Annual mileage assumed to be 11,084 based on 2022 data for Vermont from Federal Highway Administration; Fuel economy assumptions from the 2021 Vermont Transportation Energy Profile; Gasoline and electricity prices are 2023 averages for Vermont from EIA; gasoline emissions factors from EIA and EPA; electricity emissions intensity assumed to decrease linearly to 100% carbon-free by 2035; Social Cost of GHG values from the EPA (2023), using a 2% discount rate. Calculation based on a vehicle lifetime of 8 years, per assumptions in the 2023 Vermont Tier III Technical Reference Manual. **Note:** Upfront vehicle costs vary based on make/model and incentive eligibility; because of this variance, upfront vehicle costs are not quantified here. All costs and savings presented in 2024 dollars.



The Role of Transportation in the CAP

Transportation climate pollution = about 40% of Vermont's greenhouse gas emissions. Cleaner, more cost effective and electric vehicles play a key role in meeting climate targets



Transportation Task Group

Comprised of:

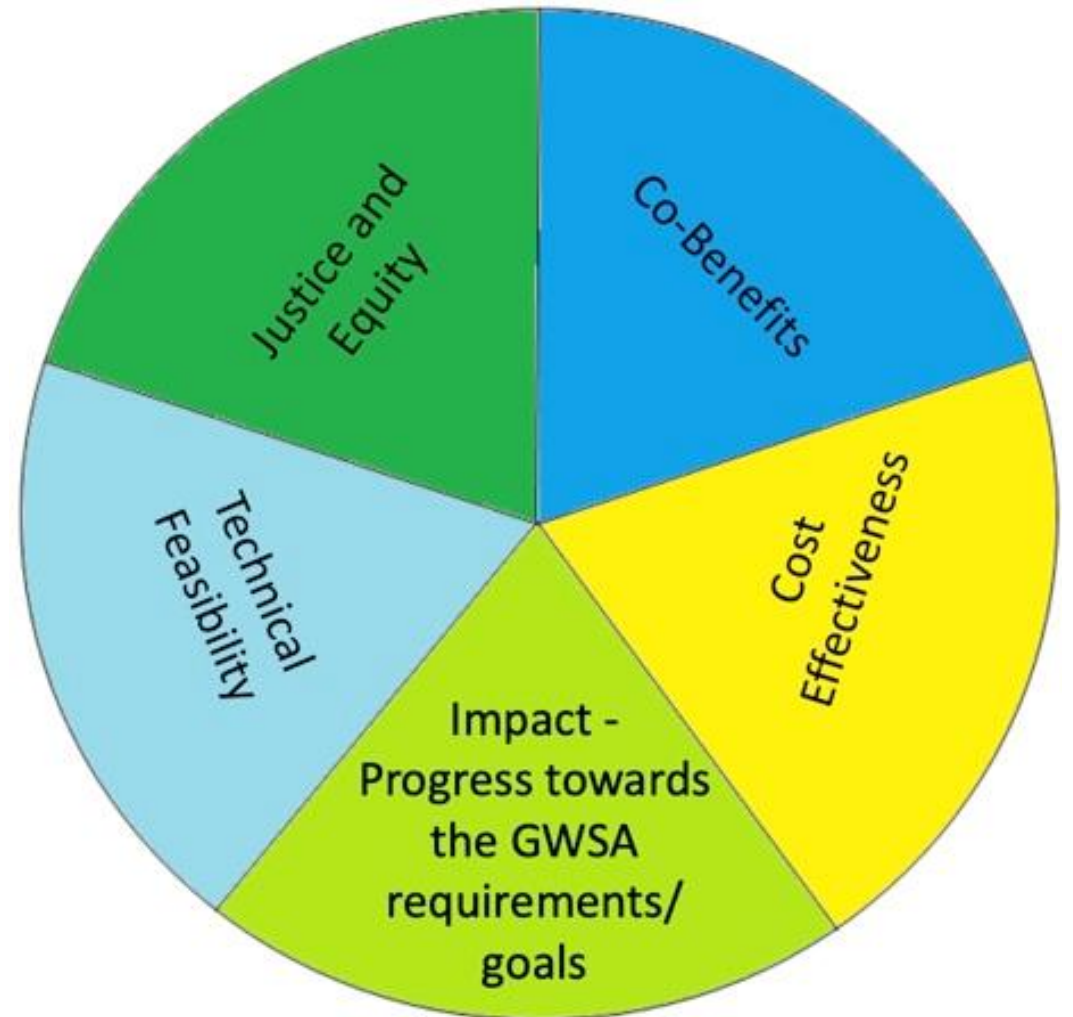
- A handful of state agency staff, business, low-income, rural, data and environmental representatives.

Process:

- Leading up to the adoption of the Climate Action Plan in 2020 and 2021, the Task Group met incrementally and then more consistently. Continues to meet.

Prioritization Framework:

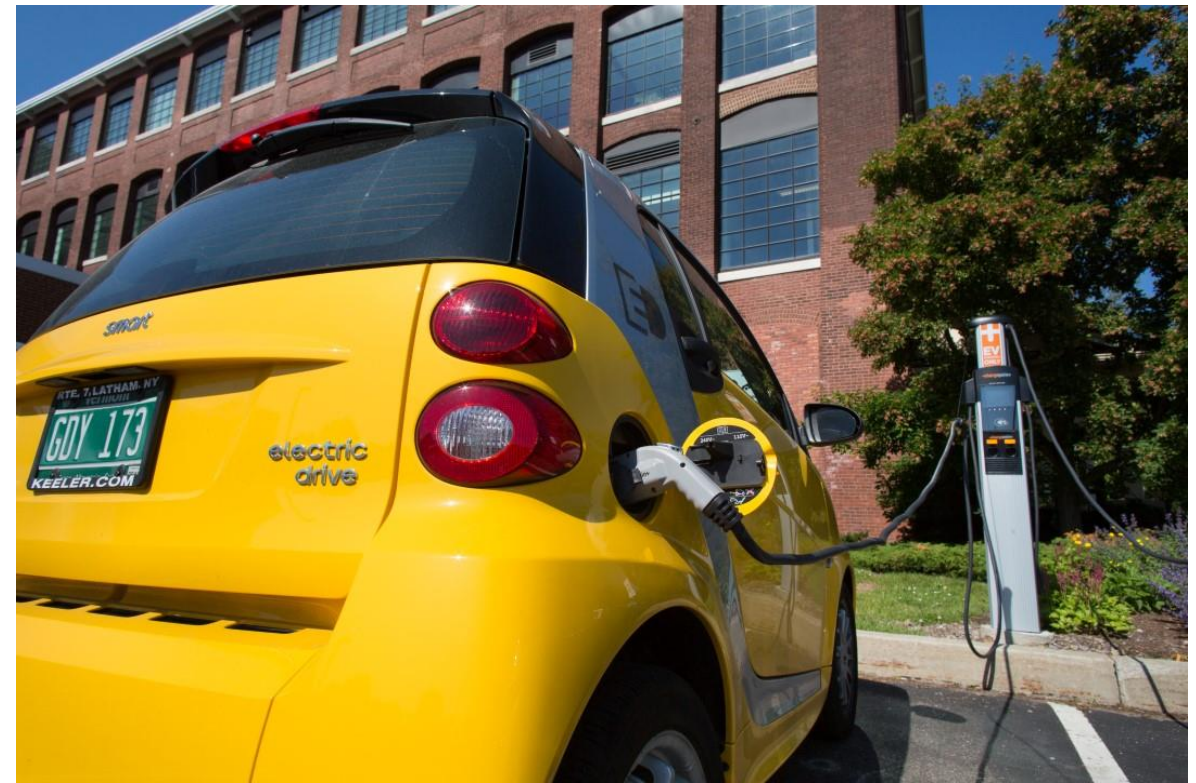
- * Impact – GHG emissions reductions achieved
- * Cost-Effectiveness
- * Co-Benefits – Jobs, Public health+
- * Equity – Just Transitions scoring rubric
- * Technical feasibility – Are the required technologies developed & reasonably available?



ACCLII: Key to Achieving Emissions Reductions in the Transportation Sector

Advanced Clean Cars II is the only high priority and high impact recommendation in the 2021 Climate Action Plan that has moved forward to date.

NOTE: High impact is defined as getting the state more than 10% of the way towards meeting VT's emission reduction targets.



TRANSPORTATION

The future of four wheels is all electric

February 16, 2024

Share 



Goldman Sachs

The Global Market Is Moving to Electric Vehicles