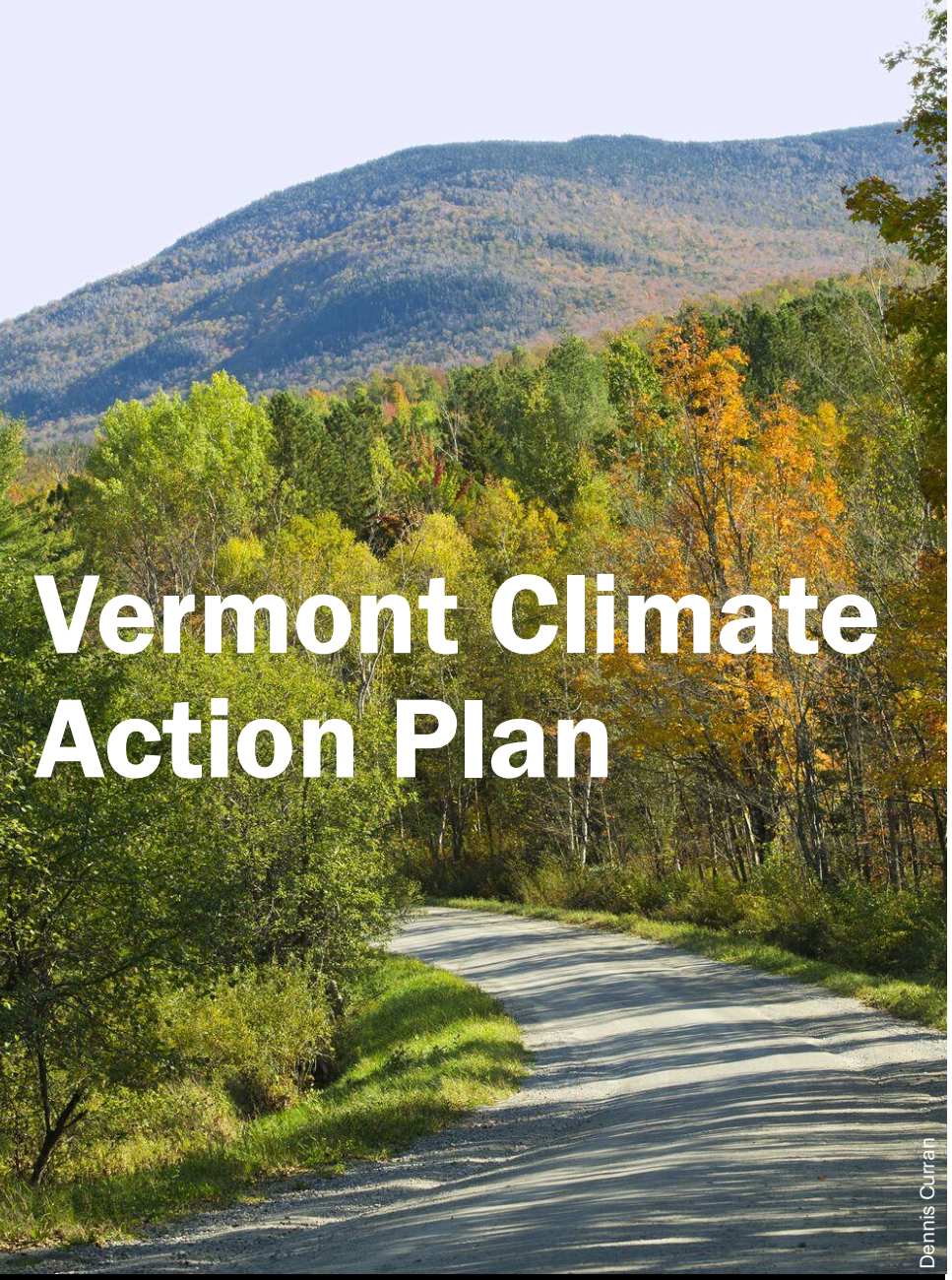
Vermont Climate Council 2025 Update to Vermont's Climate Action Plan

Cross Sector Mitigation Subcommittee

Transportation Input Session



- **2020** Global Warming Solutions Act (GWSA)
- **July 1, 2025** Climate Action Plan Update due; updated every 4 years
- Plan is a roadmap to achieve GWSA obligations (guided by climate science)
- **The Update focuses on:**
  - **Cutting Climate Pollution (a.k.a. emissions reductions) - legal target**
  - **Adaptation & Resilience in Built and Natural Environment**
  - **Natural and Working Lands Solutions**
  - **Public Health and Housing**

Vermont Climate Action Plan Update

Vermont Climate Council & Subcommittees

Spring and Summer 2024

Council orients update and subcommittees begin work

Fall 2024

Task Groups draft updates to Pathways, Strategies, and Actions.

Subcommittees submit recommendations to Council in **December**

- **Winter 2025**
- Council compiles a draft updated plan

Spring 2025

Council revises and finalizes plan based on public input.

Plan delivered by July 1, 2025

Engagement and Outreach

Public kick-off meetings

We are here!

- Eight input sessions: Cross-Sector Mitigation, Rural Resilience, Agriculture & Ecosystems, Municipalities

- Public consultation on draft plan

Community engagement throughout!

Meeting Vermonters where they are; partnering with community-based orgs; focus groups, etc.

Cross Sector Mitigation Subcommittee focuses on:

Identifying the most scientifically and technologically feasible strategies and programs that will result in the largest possible greenhouse gas emissions reductions in the most cost-effective manner.

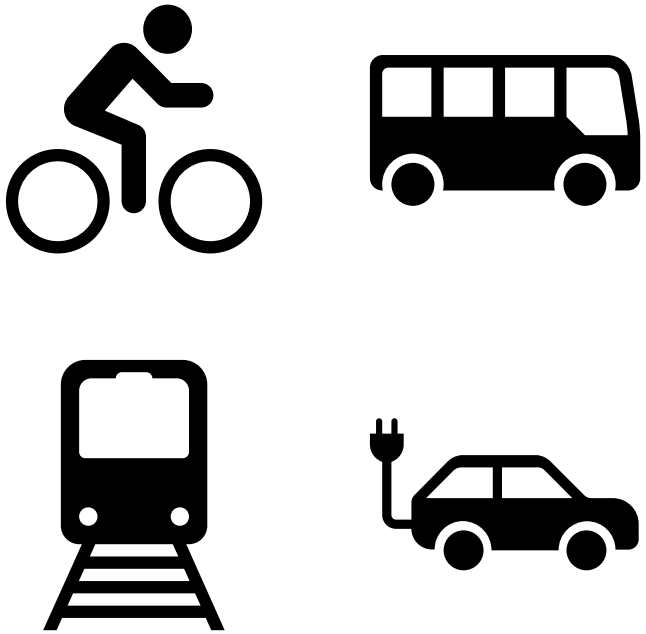
2025 Climate Action Plan mitigation focus areas:

- Transportation
- Buildings and Thermal
- Electricity
- Non-Energy (Industrial processes+)

Transportation Task Group Members

- Johanna Miller, Climate Councilor, Environmental Rep*
- Gina Campoli, Volunteer
- Jared Duval, Climate Councilor, Data and Analysis Rep*
- Bram Kleppner, Climate Councilor, Manufacturer Rep*
- Erik Schultz, NEKCA, Just Transitions Liaison
- Deirdra Ritzer, ANR DEC
- Andrea Wright, VTrans

* Vermont Climate Council Members



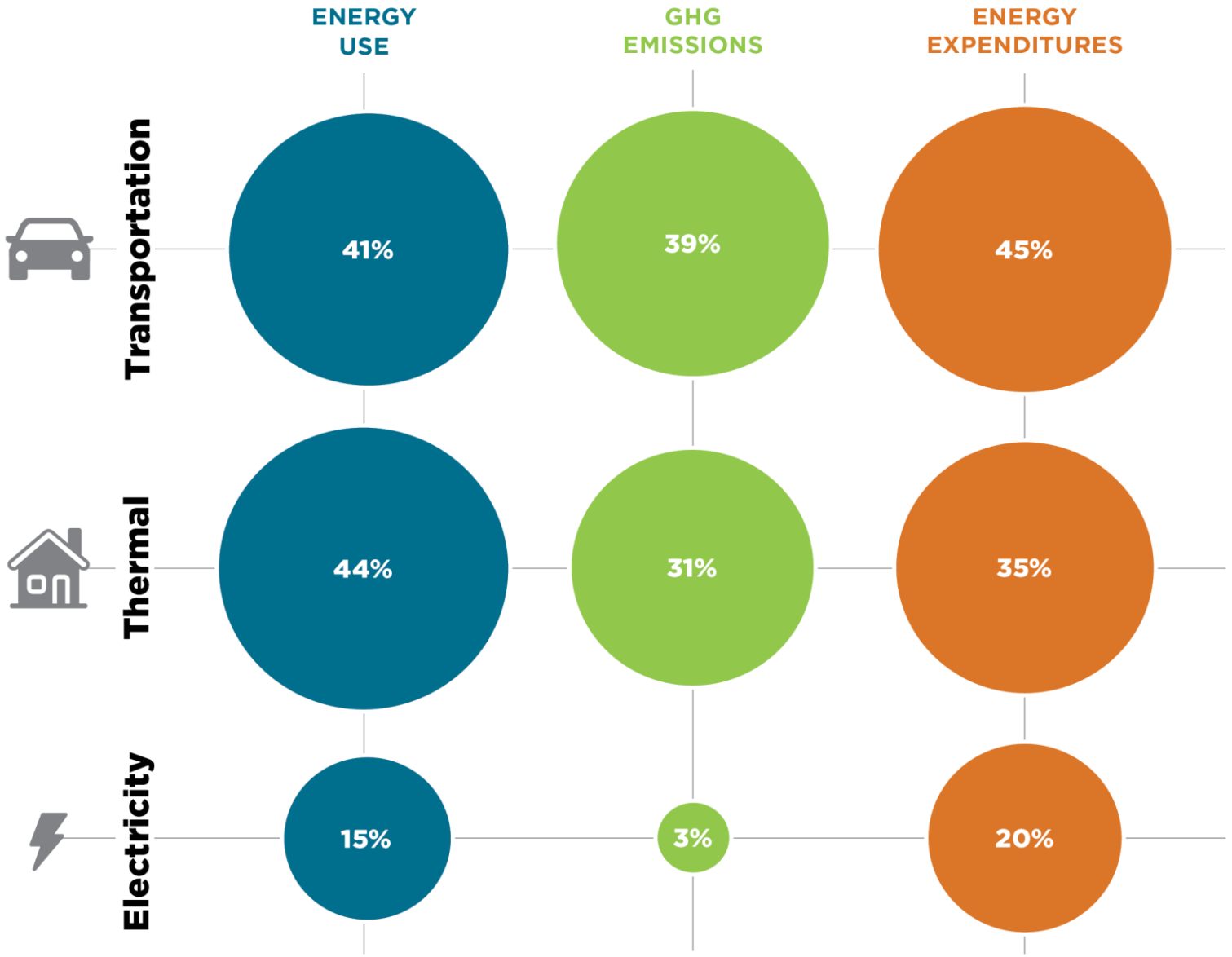
Today, we are focusing in on reducing transportation emissions – equitably, swiftly and affordably – in Vermont.

2021 CAP included actions on:

- **Replacing carbon intensive fuels** (gas and diesel) with zero emission or low carbon fuels
- Making both the **vehicles and the transportation system more efficient** and accessible

Statewide total energy and emissions context

The largest share of Vermonters' energy expenditures is for fossil fuels for transportation (mostly gasoline), followed by heating (mostly fuel oil and propane).



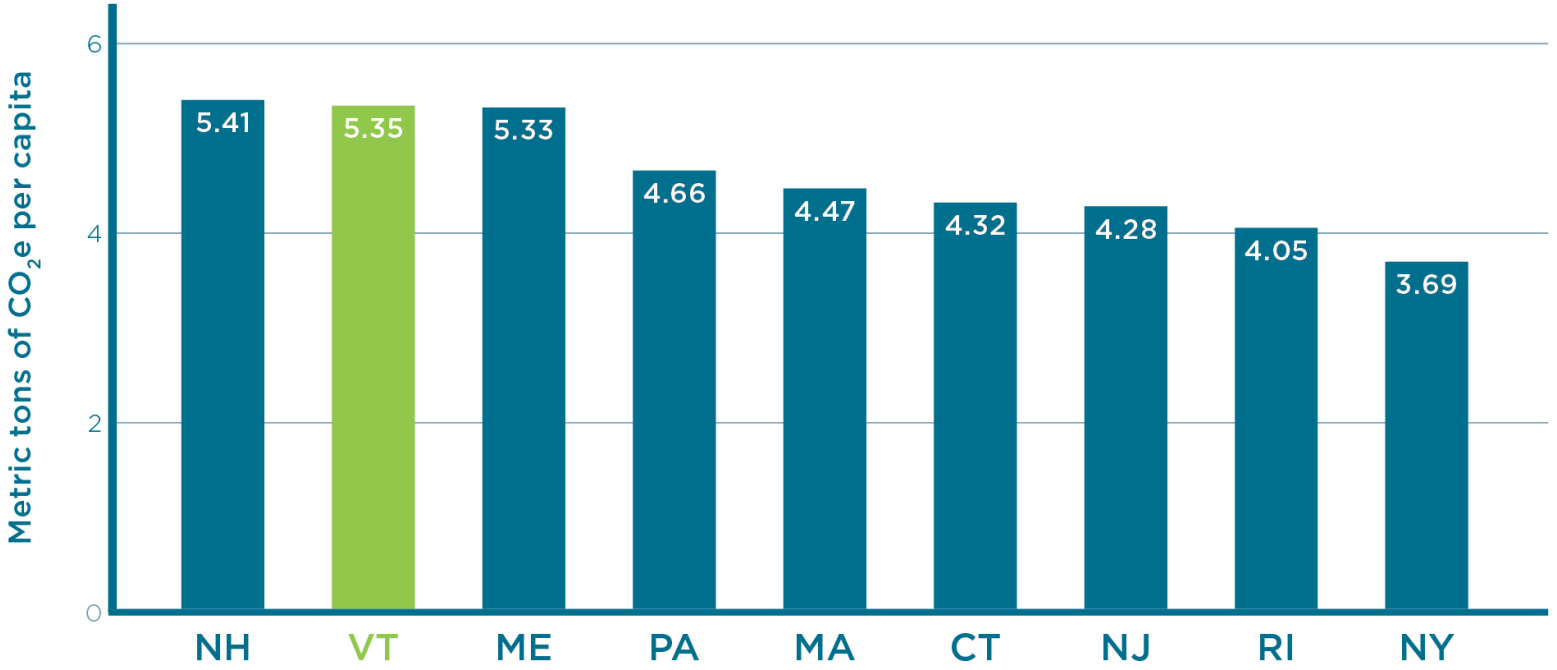
Sources: For 2022 energy use: Vermont Department of Taxes, 2024; EIA State Energy Data System (SEDS), 2024; Vermont Department of Public Service, 2022 Electric Utility Resource Survey. For 2021 GHG emissions: Vermont Agency of Natural Resources, "Vermont Greenhouse Gas Emissions Inventory and Forecast: 1990-2021," 2024. For energy expenditures: Efficiency Vermont, "2023 Vermont Energy Burden Report," 2023. **Note:** GHG emissions do not add up to 100% because only the energy sectors are shown, which are responsible for 73% of VT's total emissions (27% of GHG emissions come from non-energy sectors). Transportation represents a larger share of emissions and energy use than shown in previous years due to a change in the data inputs and methodology of VT's most recent GHG Emissions Inventory.

ENERGY ACTION NETWORK

Climate Emissions from Transportation in Rural Vermont

Rural states have greater emissions per capita.

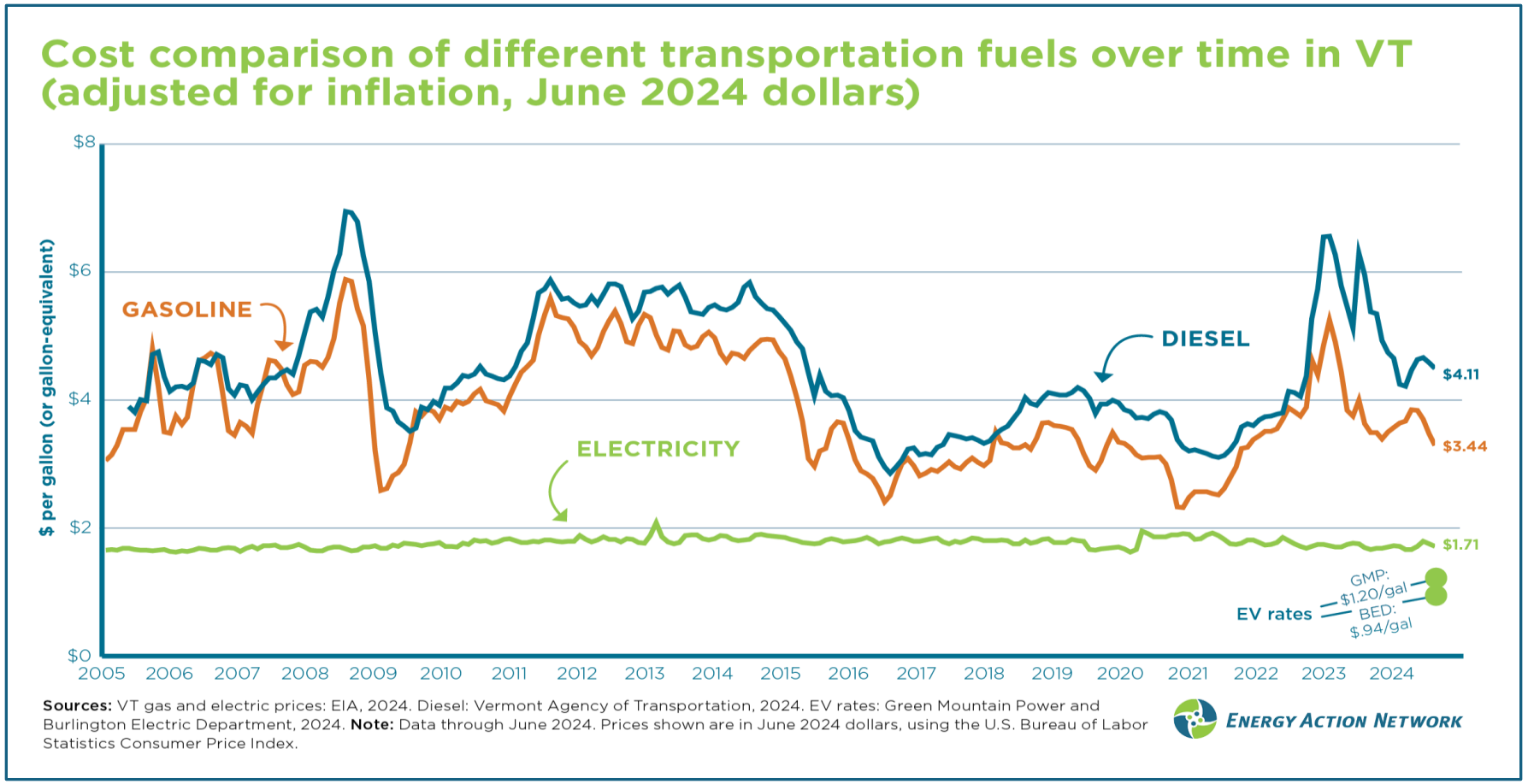
Per capita GHG emissions in the transportation sector, 2019



Sources: Vermont ANR, "Vermont Greenhouse Gas Emissions Inventory and Forecast: 1990 - 2020," 2023; Connecticut DEEP, "Connecticut Greenhouse Gas Emissions Inventory: 1990-2021", 2023; Maine DEP, "Ninth Biennial Report on Progress Toward Greenhouse Gas Reduction Goals", 2022; Massachusetts DEP, "Massachusetts Annual Greenhouse Gas Emissions Inventory: 1990-2020, with Partial 2021 & 2022 Data", 2022; OpenData NY, "Statewide Greenhouse Gas Emissions: Beginning 1990", 2023; Rhode Island DEM, "2019 Rhode Island Greenhouse Gas Emissions Inventory", 2022. Clean Energy NH, 2023; New Jersey DEP, "New Jersey Greenhouse Gas Inventory," 2022; Pennsylvania DEP, "Pennsylvania Greenhouse Gas Inventory Report," 2022; U.S. Census Bureau, "Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico", 2019.

ENERGY ACTION NETWORK

Cleaner Transportation = Cost Savings



EV Total Cost of Ownership Savings = Fuel Savings + Maintenance Savings - Depreciation

"Typical total ownership savings over the life of most EVs ranges from $6,000 to $10,000"

- Consumer Reports -

PATHWAYS TO PROGRESS

Pathway 1 – Reduce greenhouse gas (GHG) emissions from vehicles

Pathway 2 – Reduce the carbon intensity of transportation fuels

Pathway 3 – Reduce vehicle use and increase travel mode choices

Vehicle Electrification & Efficiency

Pathway 1	Reduce greenhouse gas (GHG) emissions from vehicles
Strategy	Establish Vehicle Emissions Standards Actions: • Maintain and monitor compliance with California and Advanced Clean Cars II (ACC II) and Advanced Clean Trucks (ACT) • Explore Advanced Clean Fleets
Strategy	Support Light-, Medium-, and Heavy-Duty Vehicle Purchase Incentives Actions: • Expand and ensure long-term, consistent funding for core programs • Aim for consistent EV rates and incentives across utilities to ensure equitable access and benefits • Implement a "Vehicle Efficiency Price Adjuster" • Implement a high-mileage user incentive program
Strategy	Educate drivers on benefits of electrification

Electric Vehicle Charging

Pathway 1	Reduce greenhouse gas (GHG) emissions from vehicles
Strategy	Support sufficient investment in public charging (Exact amount TBD and informed by Pathways Analysis) Actions: • Consistent electric vehicle (EV) rates across utilities to ensure equitable access and benefits • EV charging solutions for rural communities • Solutions for people who rent or live in multi-family units, including a Right to Charge
Strategy	Establish requirements on installers to ensure timely and ongoing maintenance of charging equipment

Policy and Regulatory Solutions

Pathway 2	Lower carbon intensity of fuels
Strategy	Establish a Clean Fuels Standard (a.k.a. a Low Carbon Fuel Standard)

Public, Active, and Shared Transportation

Pathway 3	Increase transportation choices
Strategies	Support concentrated, mixed use development patterns that are not car dependent
	Increase state, regional and local capacity to undertake transportation planning, identify the needed investment in alternative modes that decrease single occupancy vehicle travel such as transit and passenger rail and raise the money to address the need
	Increase walking and biking to replace car travel
	Shift shipment of goods from truck to rail
	Increase access to broadband to support telework, telemedicine, etc. to avoid car use

Overarching Policy to Ensure Emissions Reduction and Sustainable Revenue

Across Pathway 1, 2 and 3	Identify and advance a policy and/or regulatory solution to ensure pollution reductions and raise consistent revenue, such as participating in a cap-and-invest program

Considerations for Climate Action Plan Recommendations

Core Criteria

- GHG pollution reductions
- Equity
- Cost-Effectiveness

Key Challenges

- Solutions for rural transportation electrification
- Rural transportation solutions other than single occupancy vehicles
- Solutions for multi-family units and renters

Group Discussion

After seeing the areas of focus of this Task Group:

- What resonates most?
- What might be missing?
- What are some important details that shouldn't be neglected?
- Who (else) should we hear from?

Next Steps

- **Stay involved!**

- Sign up for the Climate Action Office's newsletter (link in chat)
- Attend a subcommittee meeting or another input session: climatechange.vermont.gov/calendar
- Share your thoughts!
  - Climate Action Plan public comment form (link in chat)
  - Leave a voice message at 802-404-2729