



Climate Action Office: House Transportation

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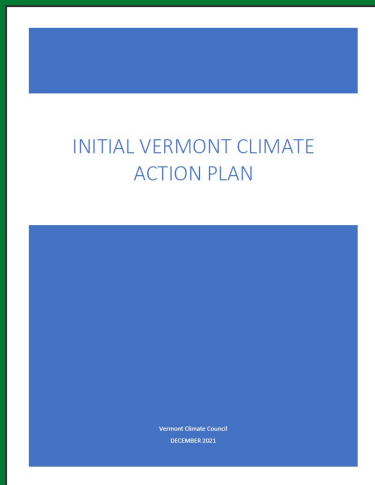
Outline

- Climate Action Office Overview
- Climate Action Plan Timeline
- Transportation Addendums
- Status of Transportation Emissions
- Substantive Progress on Transportation
 - ACCII and ACT Implementation
 - Climate Pollution Reduction Grant

Climate Action Office

The [Vermont Climate Action Office](#) (CAO) coordinates and provides significant expertise and capacity on state-led climate initiatives, as well as the monitoring, assessment and tracking of climate adaptation, mitigation, and resilience activities necessary to evaluate progress over time in achieving the requirements of the Global Warming Solutions Act (GWSA) through implementation of the Climate Action Plan.

Climate Action Plan



- Adopted on December 1, 2021, and update due July 1, 2025
- Aims to cut climate pollution 40% below 1990 levels by 2030
- Addresses resilience and adaptation
- Prioritizes those most affected
- Contains more than 230 actions
- Informs decision-making
- Framework for measuring progress
- Ongoing community engagement
- Incomplete with respect to Transportation (and biomass)

Transportation Addendums

Two Addendums:

2022 Addendum signaled three recommendations:

- 1) Continue to advance the transportation recommendations laid out in the initial Climate Action Plan
- 2) Develop a framework for legal jurisdiction
- 3) Collect and analyze timely and accurate Vermont-specific data

Transportation Addendums

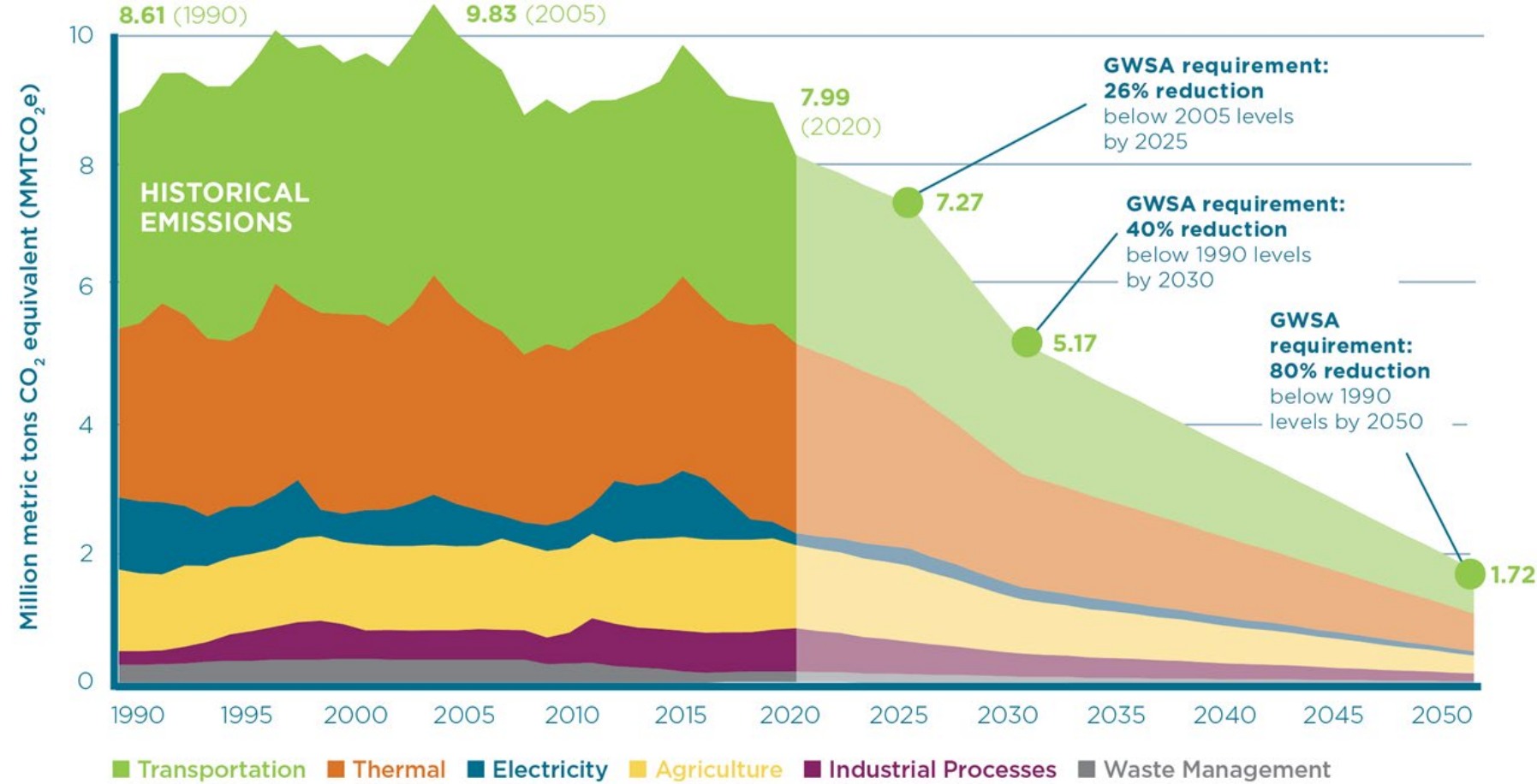
- 2024 Addendum signaled two recommendations:
- 1) An independent analysis be undertaken by an expert in comprehensive transportation policy, with a core focus on emission reductions and economic modeling to understand and compare the following options of Vermont participating in either:
 - a) The Western Climate Initiative (WCI) cap-and-invest program with Quebec, California and Washington State, or
 - b) New York's impending cap-and-invest program (NYCI)
 - 2) Vermont initiate discussions with New York State to more closely understand current program development and rulemaking processes, including relevant modeling and analysis.

GHG Inventory

- Inventory of anthropogenic (human caused) greenhouse gas (GHG) emissions for Vermont
 - Transportation, Residential/Commercial/Industrial (RCI) fuel use, Electricity generation (consumption based), Industrial Processes, Agriculture, Waste and Wastewater
 - Does not include biogenic CO₂ in gross totals per IPCC inventory guidelines (estimated separately for several sectors)
- Uses available activity data (e.g. fuel sales), emission factors, and various process assumptions to estimate GHG emissions
- Inventory relies on several federal datasets and EPA tools and therefore lags several years behind the calendar year when the emissions occurred
- Newest released inventory (1990 – 2020) was published in March of 2023
- GHG Inventory is identified in the Global Warming Solutions Act as being the metric for determining whether the Act's GHG emissions requirements have been achieved.

GHG Inventory

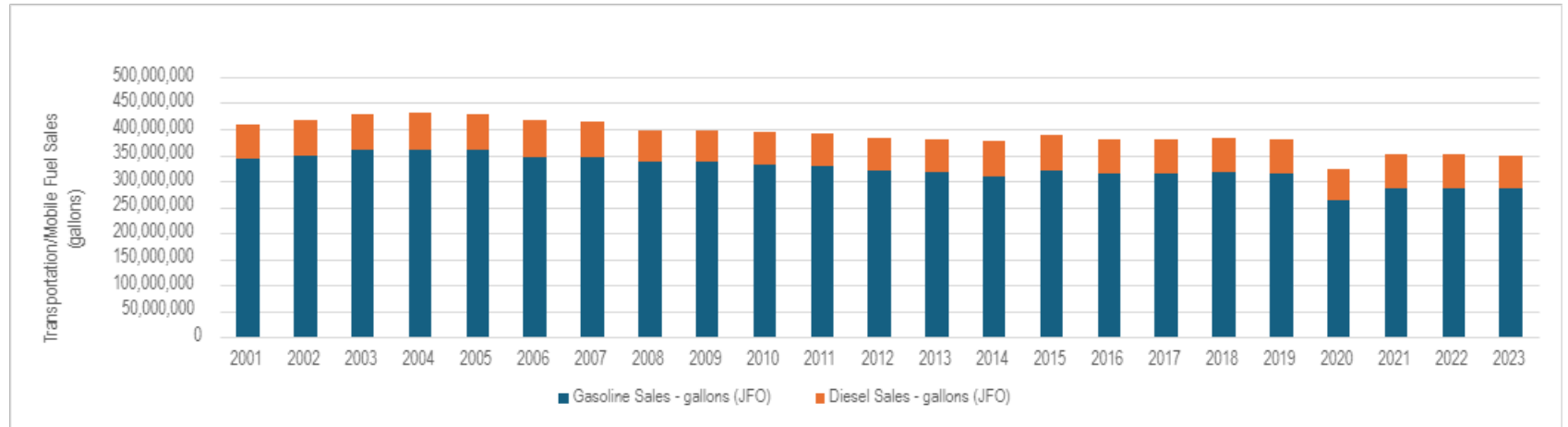
Vermont's historical GHG emissions and future requirements



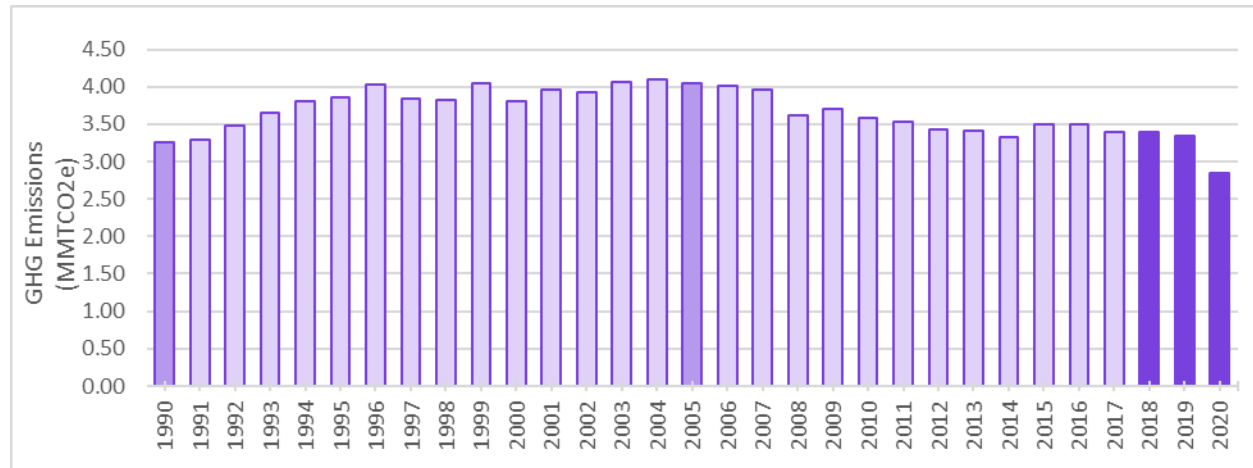
Source: Vermont Agency of Natural Resources, Vermont GHG Emissions Inventory and Forecast: 1990-2020, 2023. **Notes:** There is a small amount of emissions from the "fossil fuel industry" category (i.e. fugitive emissions from fossil gas pipelines in VT), accounting for 0.3% of Vermont's overall emissions in 2020, that does not show up on this graph. The ANR projections for 2025 and 2030 are from Vermont's 1990-2020 GHG inventory, published in 2023, and reflect a business-as-usual scenario, including the impact of ACCII.



Transport Emissions



Fuel sales in Vermont 2001-2023



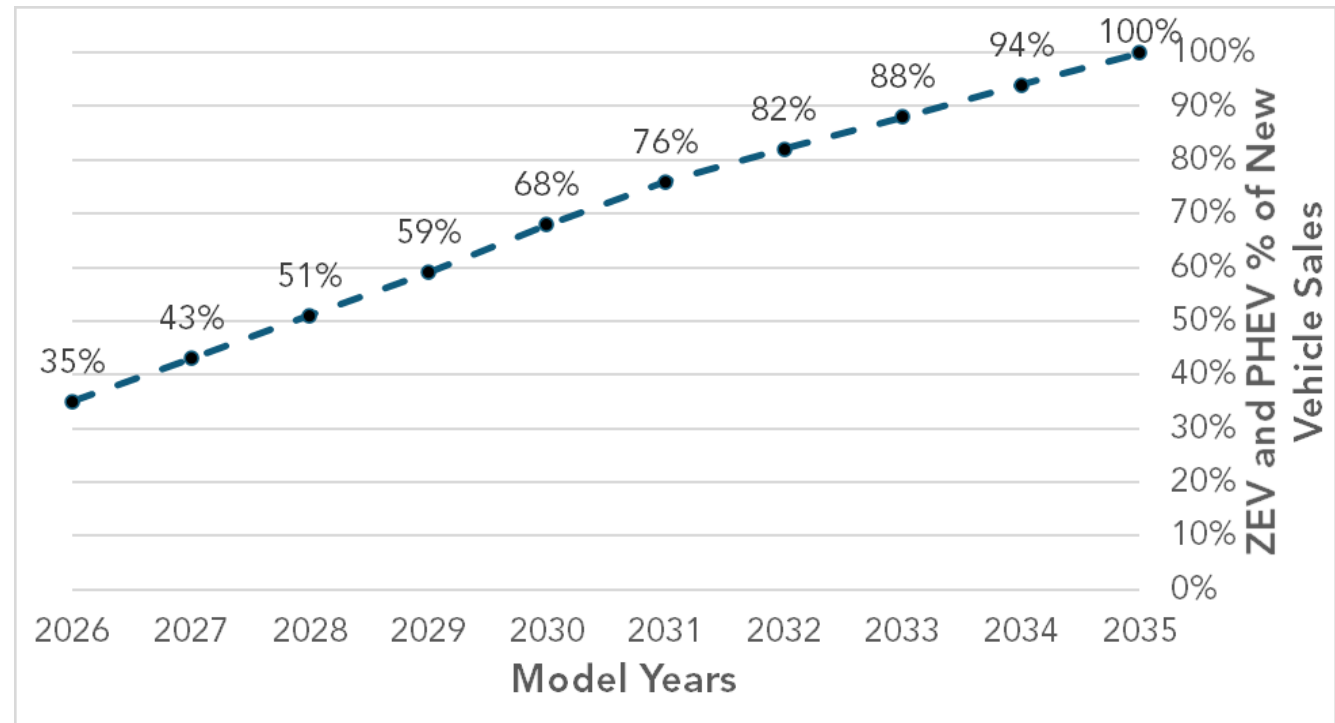
Inventoried transportation/mobile source emissions in VT 1990-2020

Advanced Clean Car and Truck Rule Updates

Updates Vermont's Low and Zero Emission Vehicle Rules to require automakers to deliver more electric and cleaner emitting cars and trucks

Amended rules are in effect starting with 2026 Model Year

To date, 13 states have adopted these rules, making up over 40% of market share nation-wide



New passenger and light-duty truck delivery requirements 2026-2035

Medium- and Heavy-duty Truck Sales Requirements 2026-2035

| Model Year | Class 2b-3 | Class 4-8 | Class 7-8 Tractors |
|------------|------------|-----------|--------------------|
| 2026 | 10% | 13% | 10% |
| 2027 | 15% | 20% | 15% |
| 2028 | 20% | 30% | 20% |
| 2029 | 25% | 40% | 25% |
| 2030 | 30% | 50% | 30% |
| 2031 | 35% | 55% | 35% |
| 2032 | 40% | 60% | 40% |
| 2033 | 45% | 65% | 40% |
| 2034 | 50% | 70% | 40% |
| 2035+ | 55% | 75% | 40% |

What will this look like in 2035?

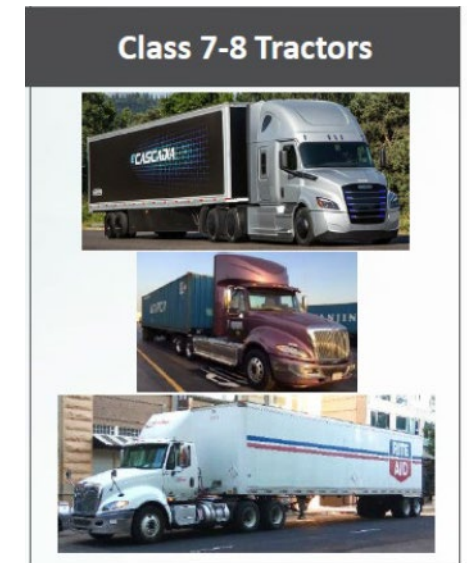
420 new vehicles sold



339 new vehicles sold

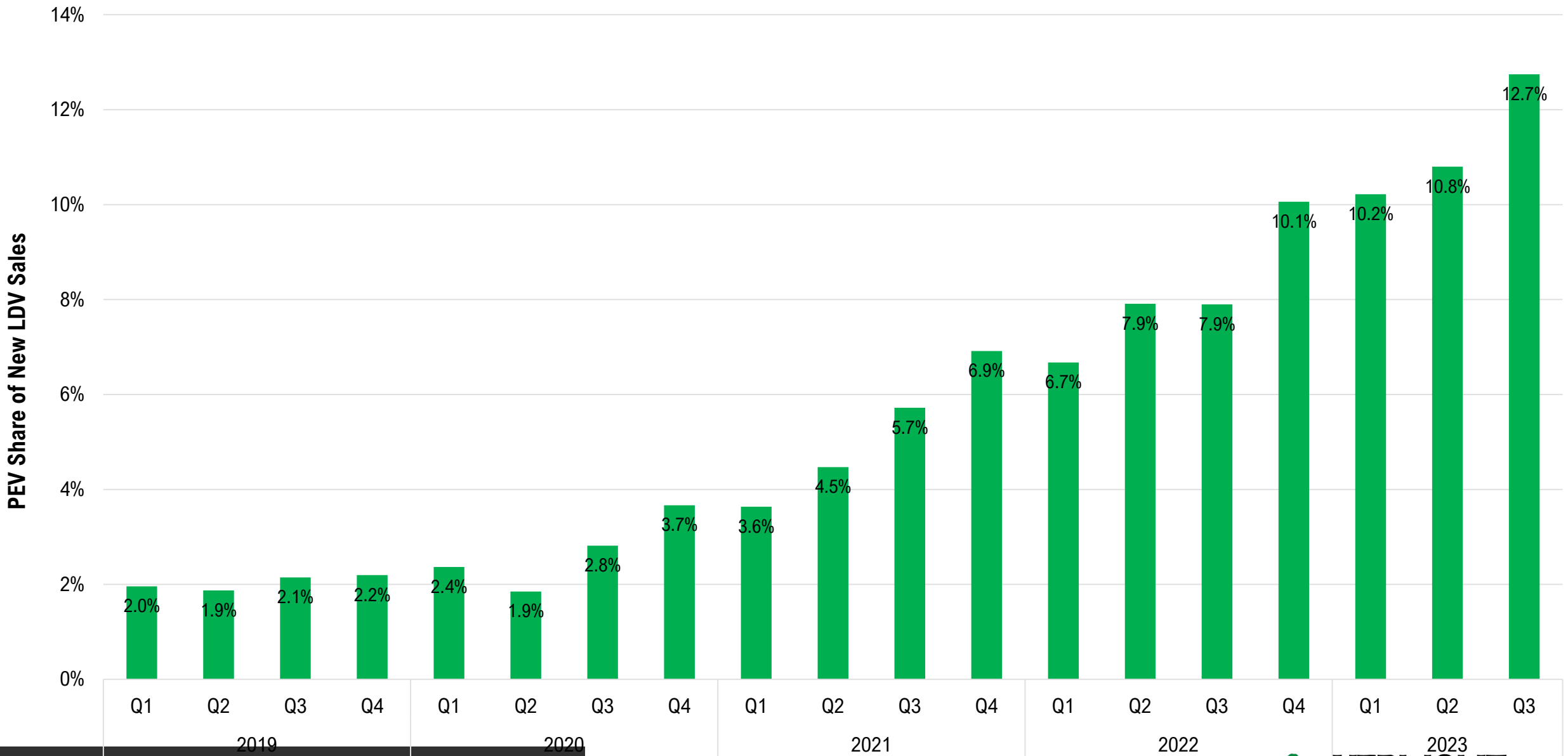


108 new vehicles sold



Advanced Clean Car and Truck Rule Updates

PEV Sales by Quarter in the Section 177 ZEV States Since 2019



January 17, 2024 | 12

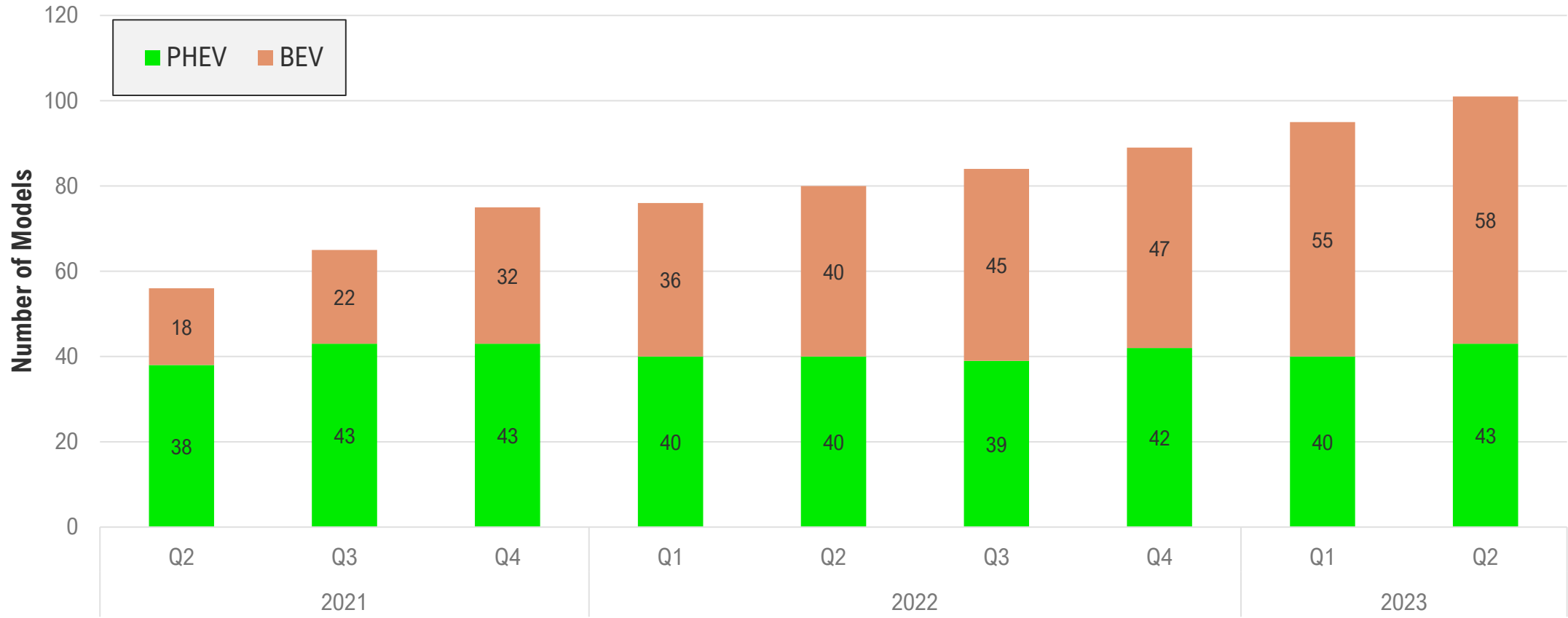
Section 177 ZEV States include: CO, CT, MA, MD, ME, MN, NJ, NM, NV, NY, OR, RI, VA, VT, WA

Source: IHS Markit / Polk via Atlas Public Policy's EV Hub



Consumer Choice in BEVs Has Grown Rapidly in the Past 3 Years

PEV Model Availability by Quarter: 2021 Q1 to 2023 Q2



EV Pricing Updates

New EVs

2024 Chevy Equinox BEV (319-mile range) – \$34,995 (~ + \$5,000)

2024 Fisker Ocean BEV (231-mile range) – \$38,999 (+ \$1,500)

2024 Hyundai Ioniq 6 (240-mile range) – \$38,615 (- \$4,100)

2023 Tesla Model 3 (272-mile range) – \$38,990 (- \$1,250)

2023 Tesla Model Y (260-mile range) – \$43,990 (- \$2,000)

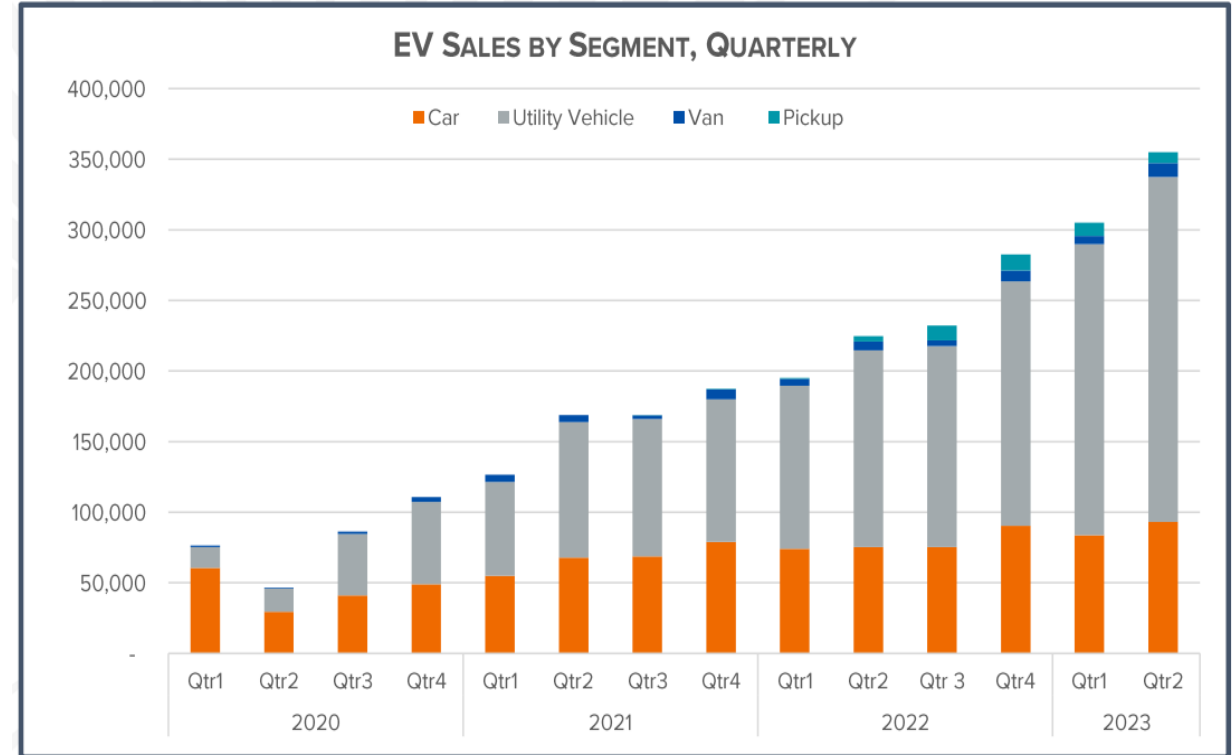
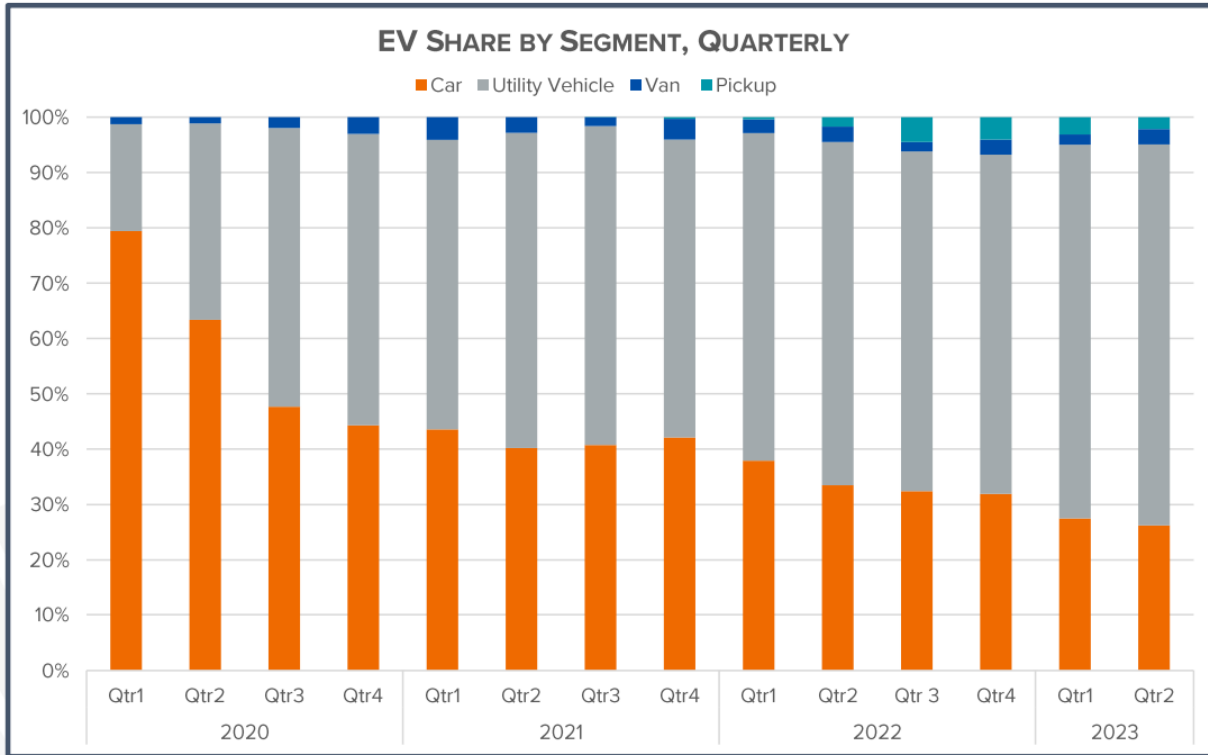
Used EV prices down 19.5% over the past 11 months

Average used EV price is \$27,800

- Tesla Model 3s have dropped by \$9,000 since 2021
- Chevy Bolts have dropped by \$1,500 since 2021

Average cost of new CUV in 2023 was \$48,818

National EV Sales Shares by Vehicle Segment



Federal Funding Opportunities



What is the Climate Pollution Reduction Grant?

- One-time, competitive process for \$4.6 billion in federal Inflation Reduction Act funds
 - Vermont likely to apply for ~\$90 million
- Eligible actions must show a measurable reduction in climate pollution
- Actions solely focused on adaptation and resilience are not eligible, but many actions have co-benefits
- Prioritization for this process has focused on:
 - Demonstrating lack of funding elsewhere
 - Benefits Vermonters in an equitable way
 - Alignment with Vermont's Climate Action Plan
 - Quantifiable emissions benefits

Natural & Working Lands

- Expanded wetland restoration
- Land conservation focused on increasing natural land cover
- Giving farmers and forestland owners tools and funding to reduce and capture emissions

Transportation

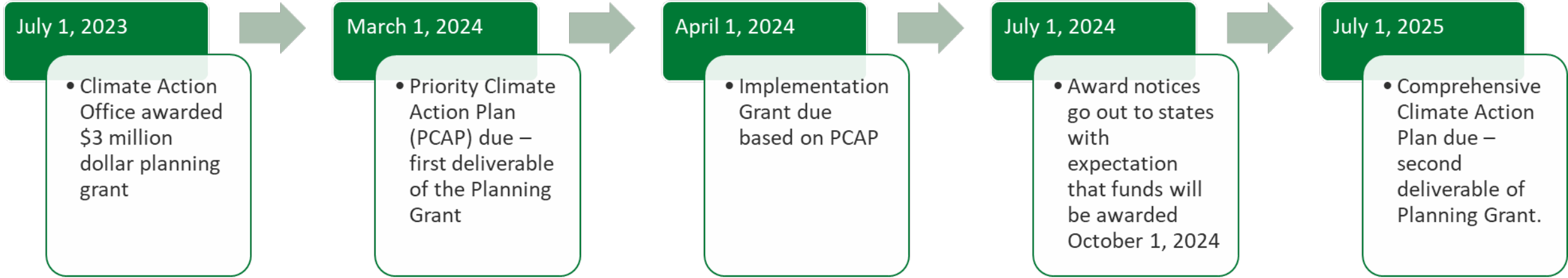
- Heavy truck purchase rebates complemented with technical assistance
- Reduce idling of trucks and fleet vehicles like police cars
- Focus on housing development that reduces travel

Buildings & Heating

- Thermal Energy Coaching
- More funding for weatherization and switching from fossil fuels to electricity
- Helping towns and cities make more upgrades to public buildings

Solid Waste

- Increase recycling and composting at schools
- Reduce high-impact emissions from systems and appliances
- Help solid waste facilities recycle more and operate more efficiently



Federal Funding Opportunities

Thank you

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For more information, please go to our
website: <https://climatechange.vermont.gov>