

Climate Action Office: Transportation and the Climate Action Plan

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Climate Action Office
House Transportation, January 13, 2023



Climate Action Plan Timeline

**First meeting of
the Vermont
Climate Council**
November 20, 2020

**Initial Climate
Action Plan Adopted
by the Vermont
Climate Council**
December 1, 2021

**Global Warming
Solutions Act
Enacted**
September 23, 2020

**Subcommittees
begin meeting**
February 2021

**Implementation of
Climate Action Plan**
Ongoing
**Future Iterations of the
Climate Action Plan**
Every four years

Climate Action Office - Vision

- ❖ The policies, programs and tools needed to implement climate mitigation, adaptation, and resilience strategies will require a long-term intergovernmental structure to coordinate and manage this statewide effort.
- ❖ Will coordinate and provide significant expertise and capacity on state-led climate initiatives, as well as the monitoring, assessment and tracking of climate adaptation, mitigation, and resilience activities.
- ❖ Work closely within the Agency of Natural Resources, across state Agencies, and with state climatologist to understand the actions state government are taking to make measurable progress to meeting the requirements and goals of the Global Warming Solutions Act.
- ❖ Acknowledgment of the importance of the public's role, specifically those of frontline and impacted communities, in enabling climate action.

Supported through an Inter-Agency Advisory Board

The objectives of this group are:

1. To provide a space for proactive coordination on climate action across state government.
2. Articulating where policy and financial implications overlap around climate action to ensure resources are maximized.
3. To support the monitoring of progress over time in meeting the state's climate goals.
4. Identification and framing up of gaps where the climate action office might prioritize support.
5. Development of state positions on issues related to climate change.

It will include the following governmental agencies:

- PSD
- AOT
- ANR
- VEM
- AAFM
- BGS
- AHS (DCF and VDH)
- ACCD
- State Climatologist

The Vermont Climate Action Plan

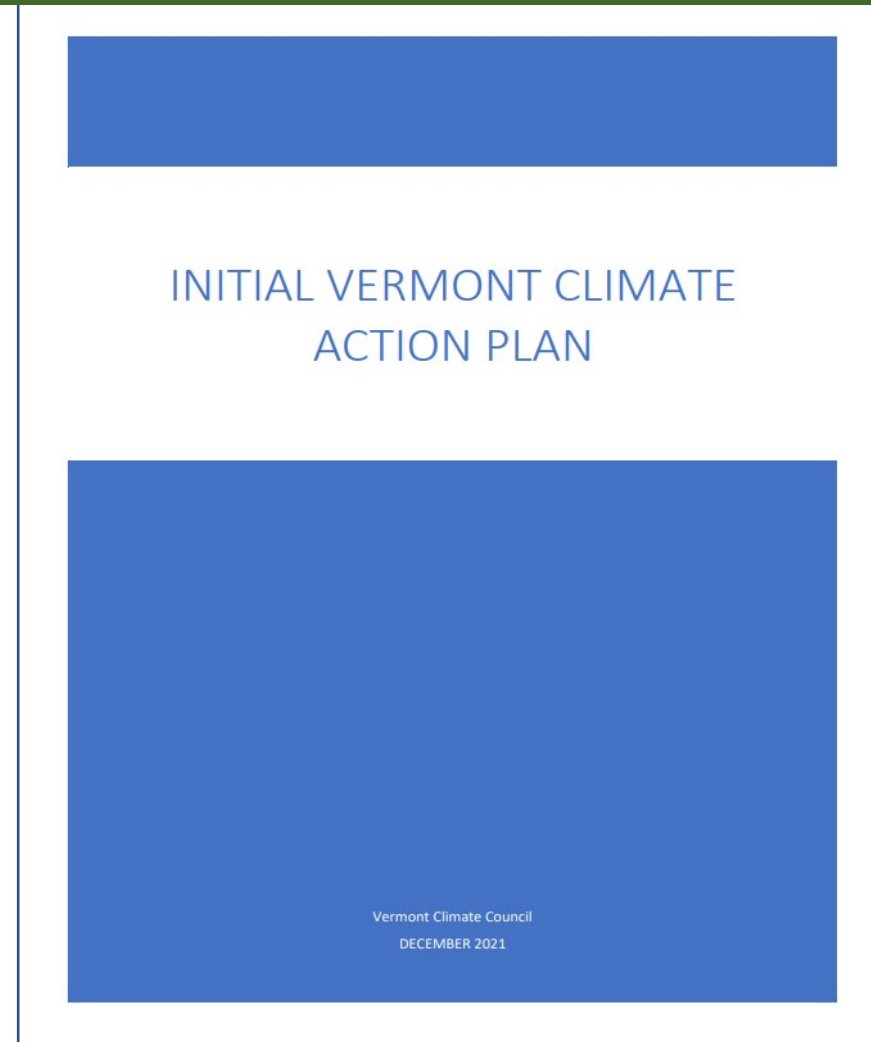
- Aims to cut climate pollution 40% below 1990 levels by 2030
 - ◆ approximately half of 2005 levels
- Prioritize those who are most affected
- Shaped by five subcommittees
 - ◆ with public input
 - ◆ in coordination with CEP
- Updated at least every 4 years
- Implementation section to inform decision-making
- Framework for measuring progress

GWSA Charge to the Climate Council

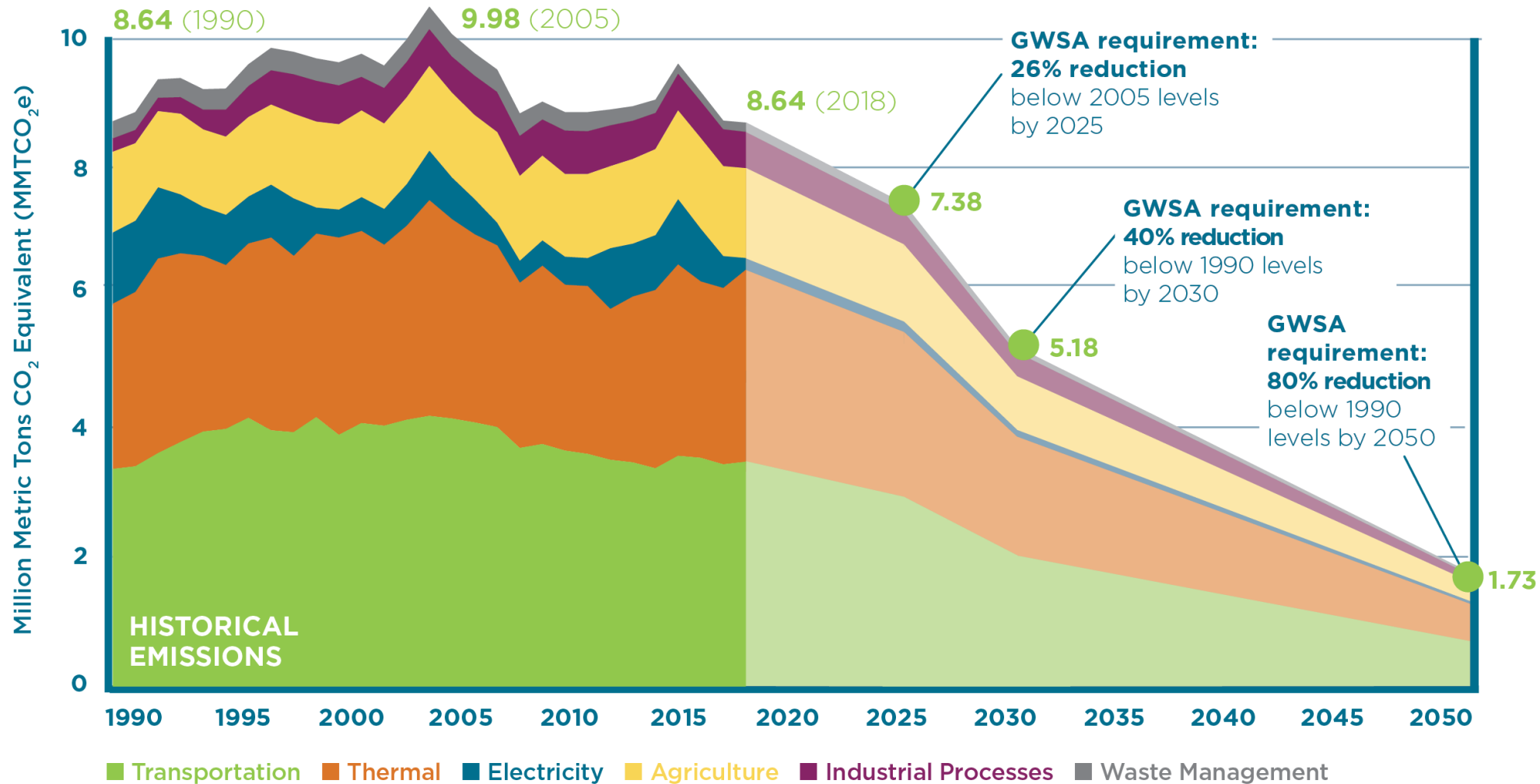
1. **Reduce greenhouse gas emissions** from the transportation, building, regulated utility, industrial, commercial, and agricultural sectors;
2. Encourage smart growth and related strategies;
3. **Achieve long-term sequestration and storage of carbon** and promote best management practices to achieve climate mitigation, adaptation, and resilience on natural [and] working lands;
4. **Achieve net zero emissions by 2050 across all sectors;**
5. Reduce energy burdens for rural and marginalized communities;
6. Limit the use of chemicals, substances, or products that contribute to climate change; and
7. **Build and encourage climate adaptation and resilience** of Vermont communities and natural systems.

What will you find in the Climate Action Plan?

- The GWSA established a suite of ambitious goals and requirements
- VCC developed a broad and far-reaching set of recommendations
- Initial Climate Action Plan identifies:
 - 26 pathways
 - Written broadly; high-level
 - 64 strategies
 - Statements of measurable activity
 - 234 specific action steps
 - Operational tasks

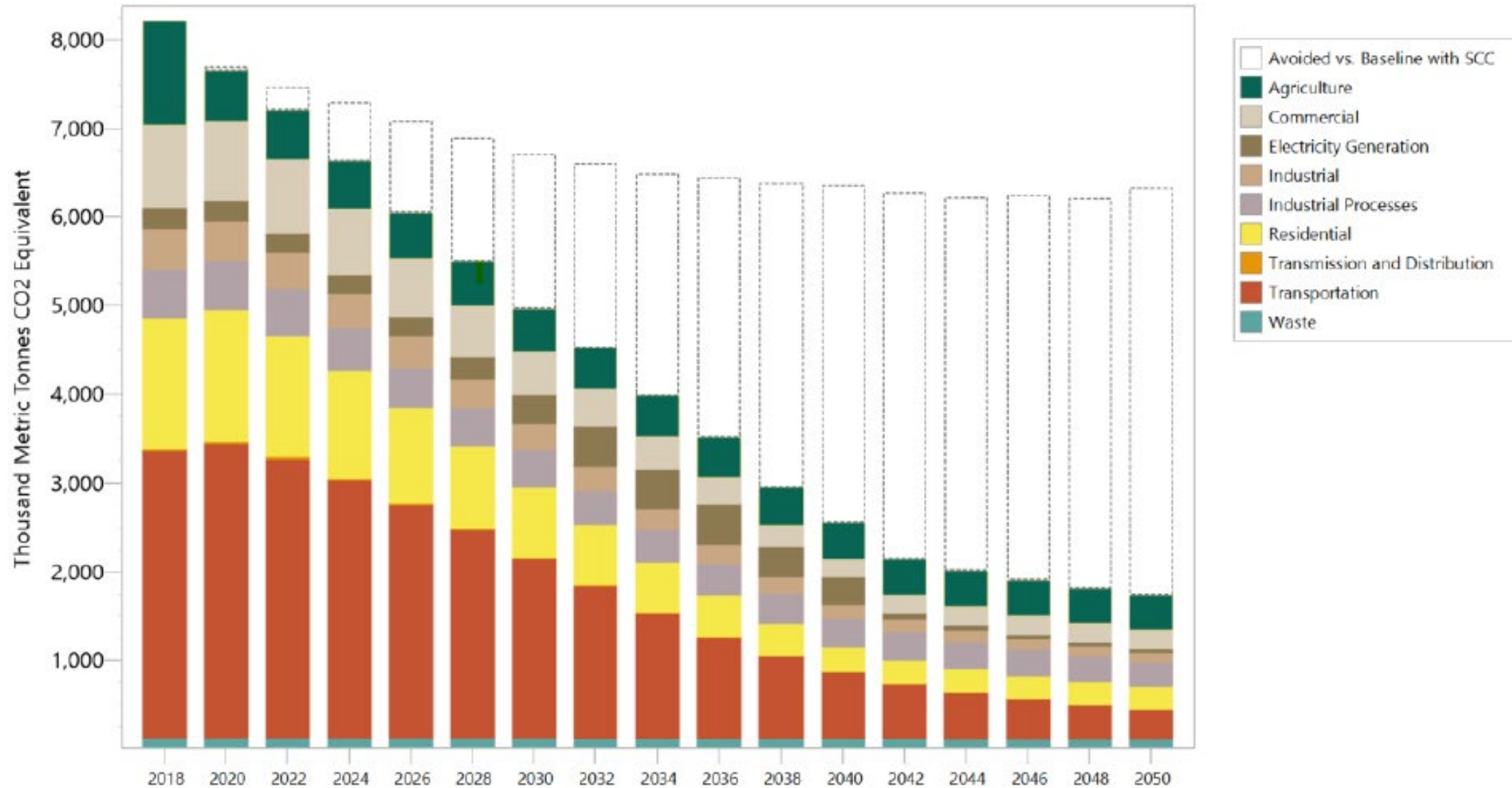


Vermont's Historical Greenhouse Gas Emissions

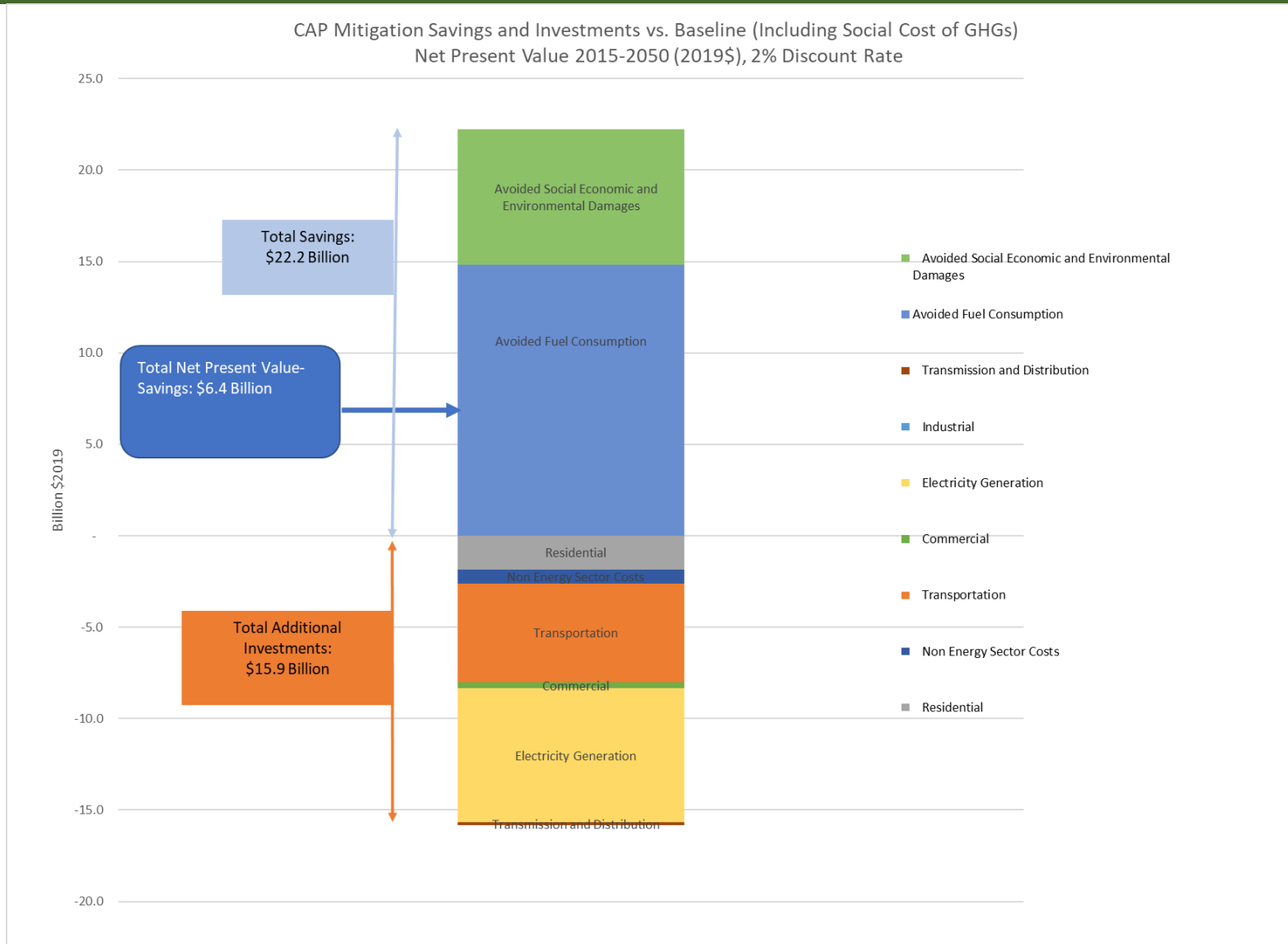


Source: Vermont Agency of Natural Resources, Vermont GHG Emissions Inventory and Forecast (1990-2017), 2021.

Pathways Analysis for the Climate Action Plan

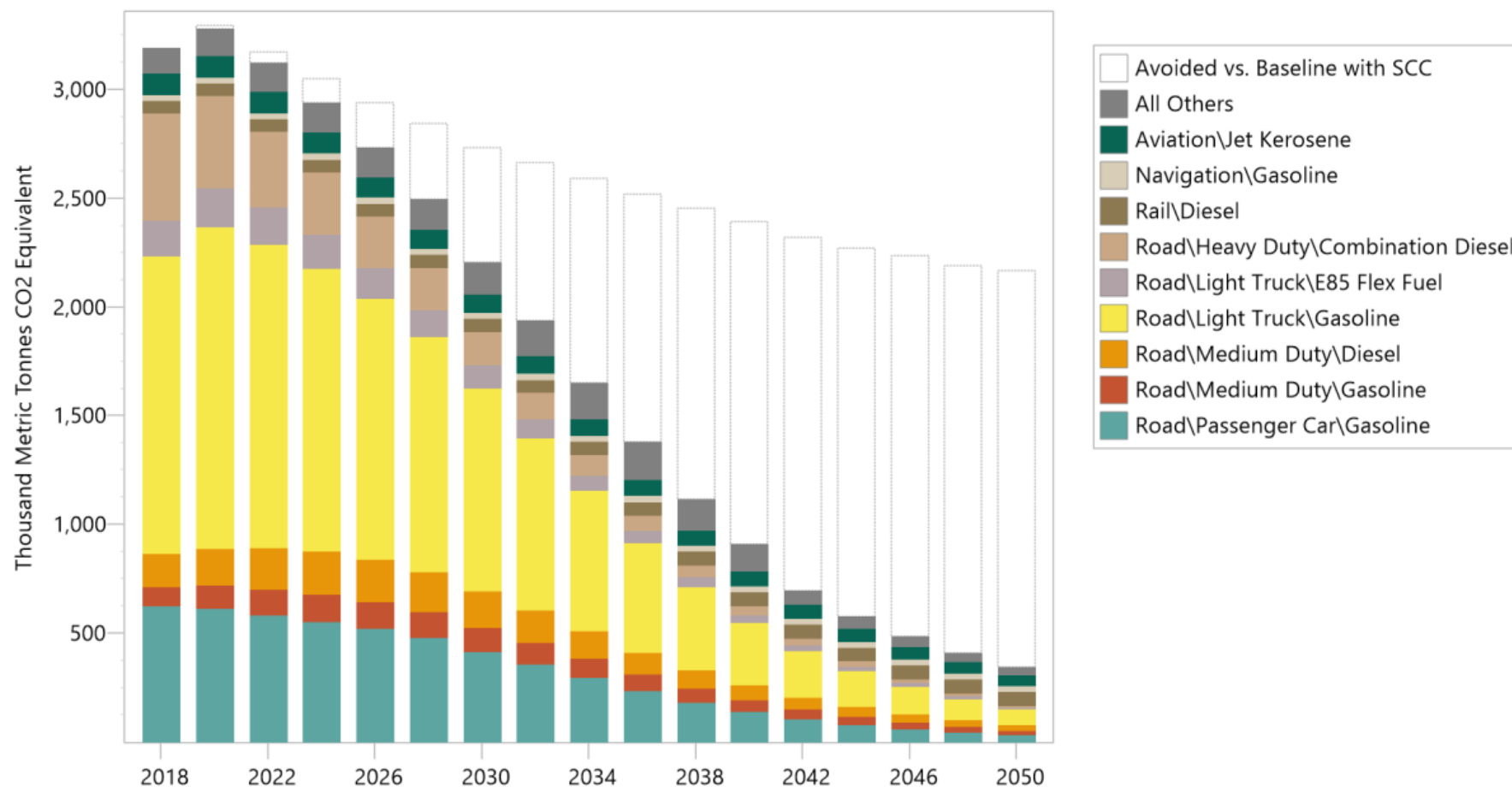


Pathways Analysis for the Climate Action Plan



Transportation Analysis for the Climate Action Plan

Transportation Emissions Mitigation Scenario Avoided vs. Baseline
100 Yr GPW, Point of Emissions and Indirect Allocated to Demand



Efficient Transit and Low- and Zero-Emission Vehicles (ZEVs)

Transportation	2025	2030
Number of EVs	27,000	126,000
EV Share of Sales	17%	68%
VMT Reduction from Baseline	1.9%	3.5%
EV share of VMTs	5%	23%
EV Managed Charging	27%	50%

Of the nearly 433,000 vehicles registered in Vermont (328,000 cars; 105,000 light-duty trucks), currently about 1.7% are ZEVs (Latest EV count is 7,491 plug-in passenger vehicles and light-duty trucks registered in Vermont. This includes 3,620 plug-in hybrids and 3,871 all electric vehicles.)

Efficient Transit and Electric Vehicles

- Provide incentives to help Vermonters purchase electric vehicles
- Build more charging stations for electric vehicles
- Join the Transportation and Climate Initiative Program (TCI-P) when regional market viability exists**
 - TCI-P would cap emissions from transportation fuel in the region and invest funds from the sale of carbon allowances to reduce emissions
- Adopt California's Advanced Clean Car and Clean Truck Rules
- Electrify medium and heavy-duty vehicle auxiliary systems (i.e., bucket trucks and electric transport refrigeration units)
- Create infrastructure that supports more walking, biking, public transit options
- Educate drivers on benefits of electrification and other transportation options to reduce vehicle miles traveled (VMT)

** *non-consensus item*

Implementation and Next Steps



Made significant progress over the last year in this space.

....And there is more to do!

Implementation – Clean Car and Truck Rules

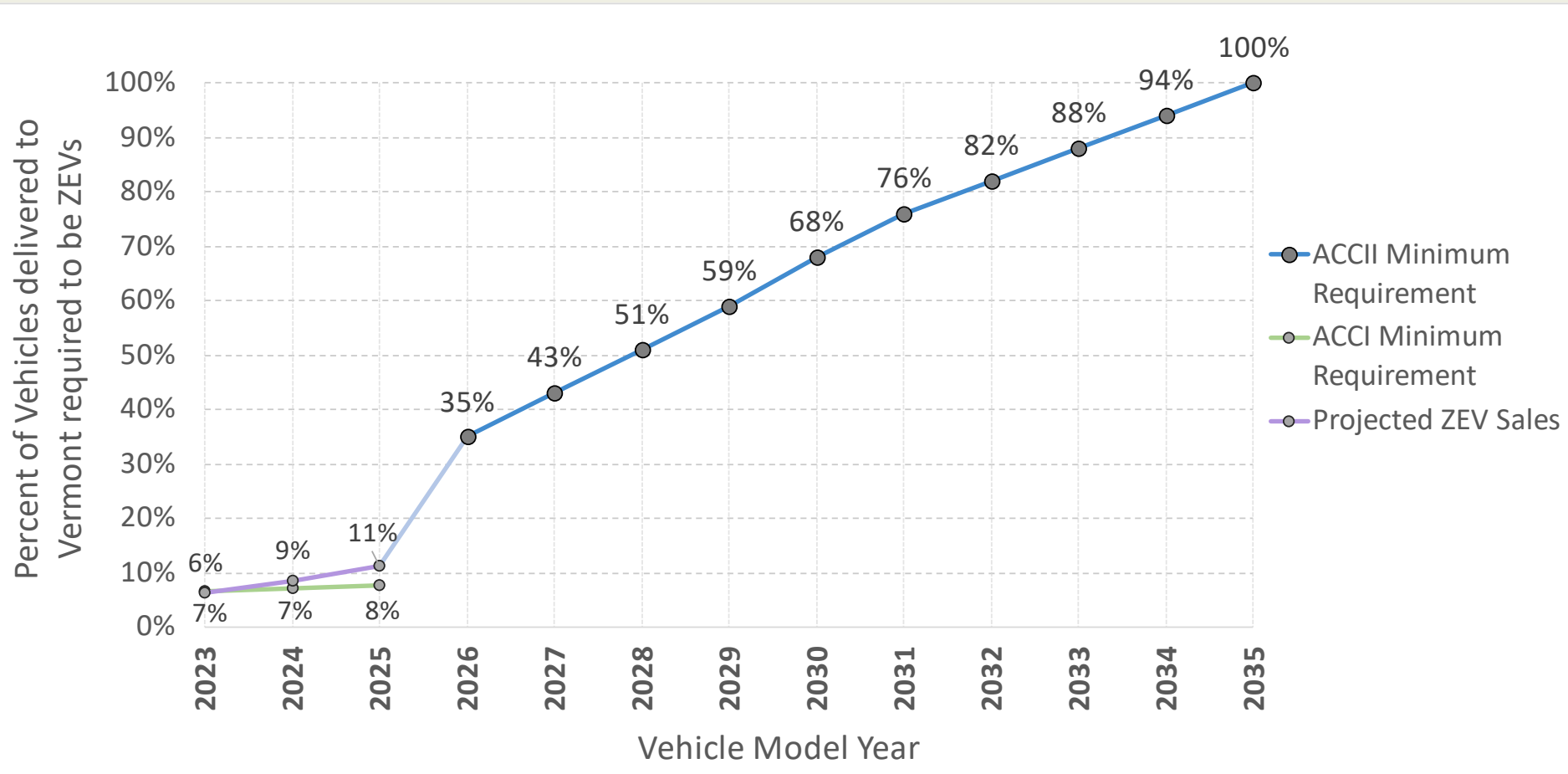
Requirements for Auto manufacturers to:

- Deliver more electric vehicles to Vermont
 - All electric cars and *some* electric trucks by 2035
- Deliver even cleaner passenger cars and trucks



NOT an electric vehicle purchase mandate

Automaker Milestones for Electric Vehicles: Passenger Cars and Light-duty Trucks



100% Zero-emission vehicles by 2035

Automaker milestones for Electric Vehicles: Medium- and Heavy-duty Trucks

Class 2b-3

- 55% of new vehicle sales by 2035
- Larger pick-ups, vans, and delivery vehicles



Class 4-8

- 75% of new vehicle sales by 2035
- Box trucks, bucket trucks, buses, dump trucks



Class 7-8

- 40% of new vehicle sales by 2035
- Truck tractors



Allows for continued sale of fossil fuel trucks beyond 2035

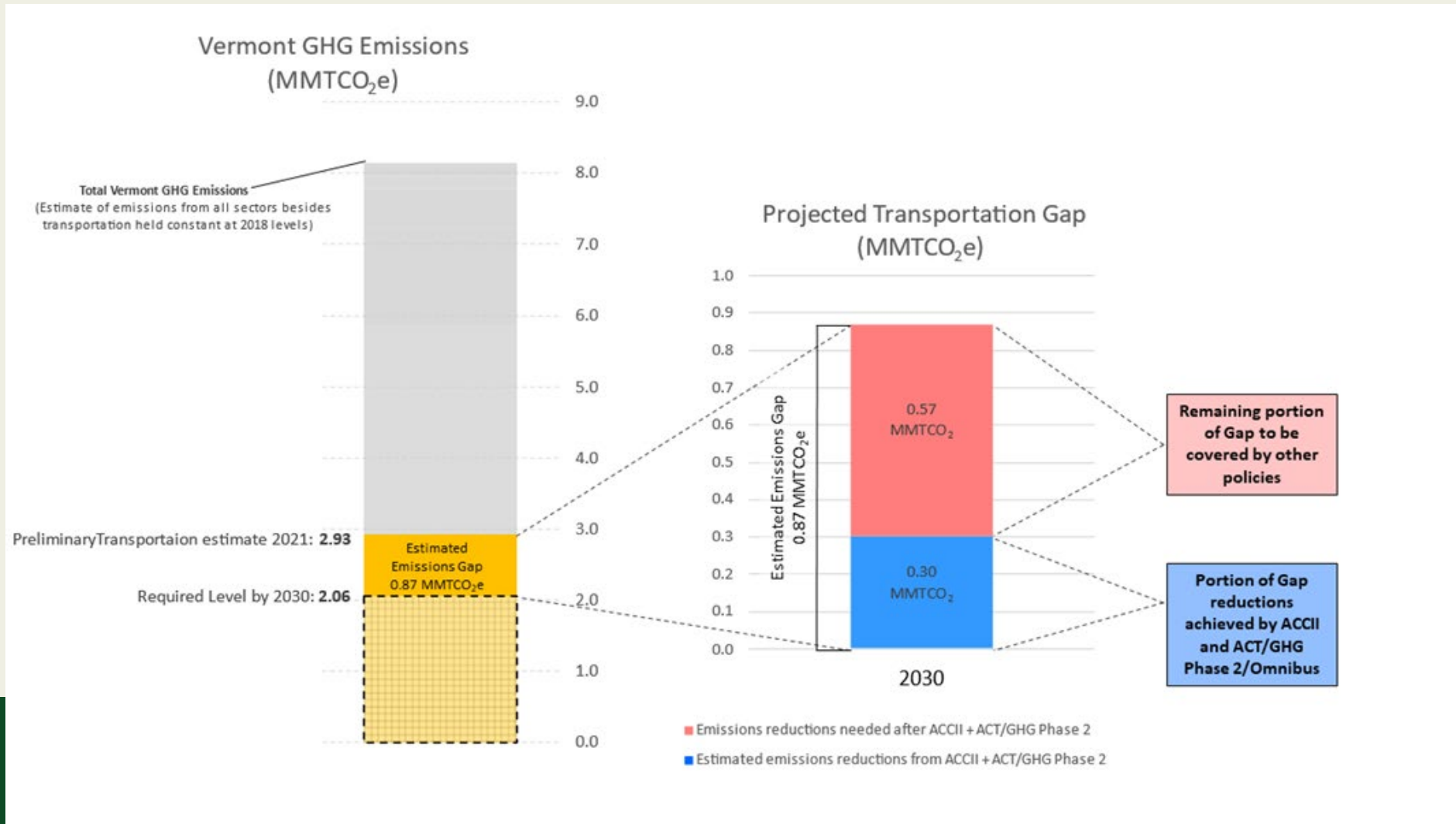
Benefits for All Vermonters

Making transportation electrification equitable

- ✓ Greater EV availability
- ✓ Purchase incentives
- ✓ Greater durability
- ✓ Longer warranties
- ✓ Automaker Investments in cleaner mobility
- ✓ Lower fuel and upkeep cost



Emissions reductions from rulemaking



ACCII and ACT are estimated to achieve 1/3 of emissions reductions needed by 2030

Rule Implementation – Next steps

- Continue work on complimentary policies that support requirements of the rule
- Automakers must begin meeting new requirements in Model Year 2026 (CY2025)
- ANR will update compliance tracking platforms with other implementing states
- Development of guidelines for Qualifying Clean Mobility Programs in 2023

Contact Us

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