

Transportation in the Climate Action Plan

Presentation to the House Transportation Committee

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*F*inal Report and Recommendations
of the
Governor's Commission
on Climate Change

Presented to
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VERMONT CLIMATE ACTION COMMISSION

EXECUTIVE ORDER NO. 12-17

REPORT TO THE GOVERNOR

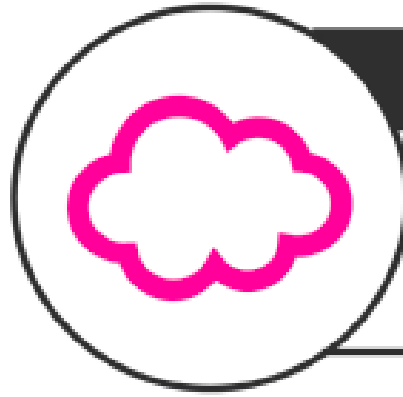
JULY 31, 2018

INITIAL VERMONT CLIMATE
ACTION PLAN

Vermont Climate Council
DECEMBER 2021

- To avoid the worst impacts of a destabilized climate, the Intergovernmental Panel on Climate Change (IPCC) tells us we have **less than a decade to cut our greenhouse gas pollution by 1/2.**
- Vermont first passed GHG emissions reduction “goals” in 2006. We have dramatically fallen short, with little progress and few policies beyond efficiency and the electricity sectors, especially in our **two most polluting and high-cost energy sectors: transportation & heating**
- The December 1, 2021 Climate Action Plan is Vermont’s first statutorily required plan with serious policy solutions for our most polluting sectors to **advance an equitable transition to save Vermonters money, strengthen our economy, and help prepare communities for extreme weather and other other climate impacts.**

The Vermont Climate Action Plan is organized into five impact areas:



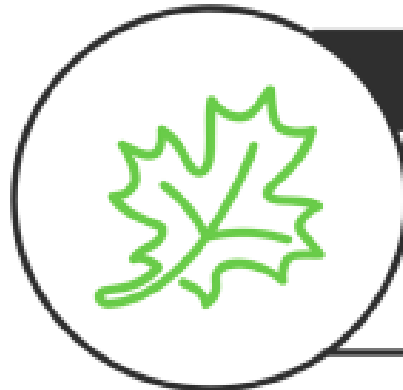
Cutting Climate Pollution

Reducing emissions from transportation, buildings, energy and products.



Capturing Carbon

Removing carbon from the air and storing it in soil or plants.



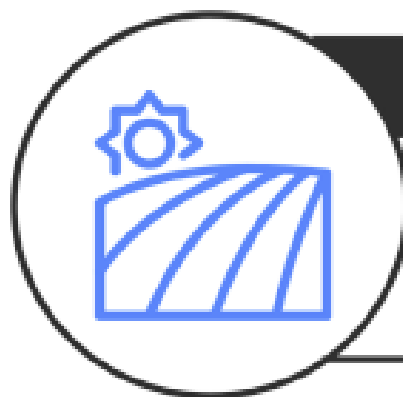
Resilient Working and Natural Lands

Preparing farms, forests and ecosystems for climate change.



Cross-Cutting Solutions

Investing in communities and workforce development.



Vital Communities

Protecting people and infrastructure from climate impacts.

Vermonters must be part of determining and implementing solutions to climate change. The Just Transitions subcommittee created *Guiding Principles for a Just Transition* to provide a framework for the Council and subcommittees to evaluate, adjust and prioritize recommendations based on how they will impact Vermont's impacted and frontline communities including those who are highly exposed to climate risks; experience oppression and racism, are excluded from opportunities or have less resources to adapt to climate and economic change; bear the brunt of pollution and negative effects from fossil fuels and extractive economies and are more likely to experience a job transition as Vermont addresses climate change.

Guiding Principles for a Just Transition

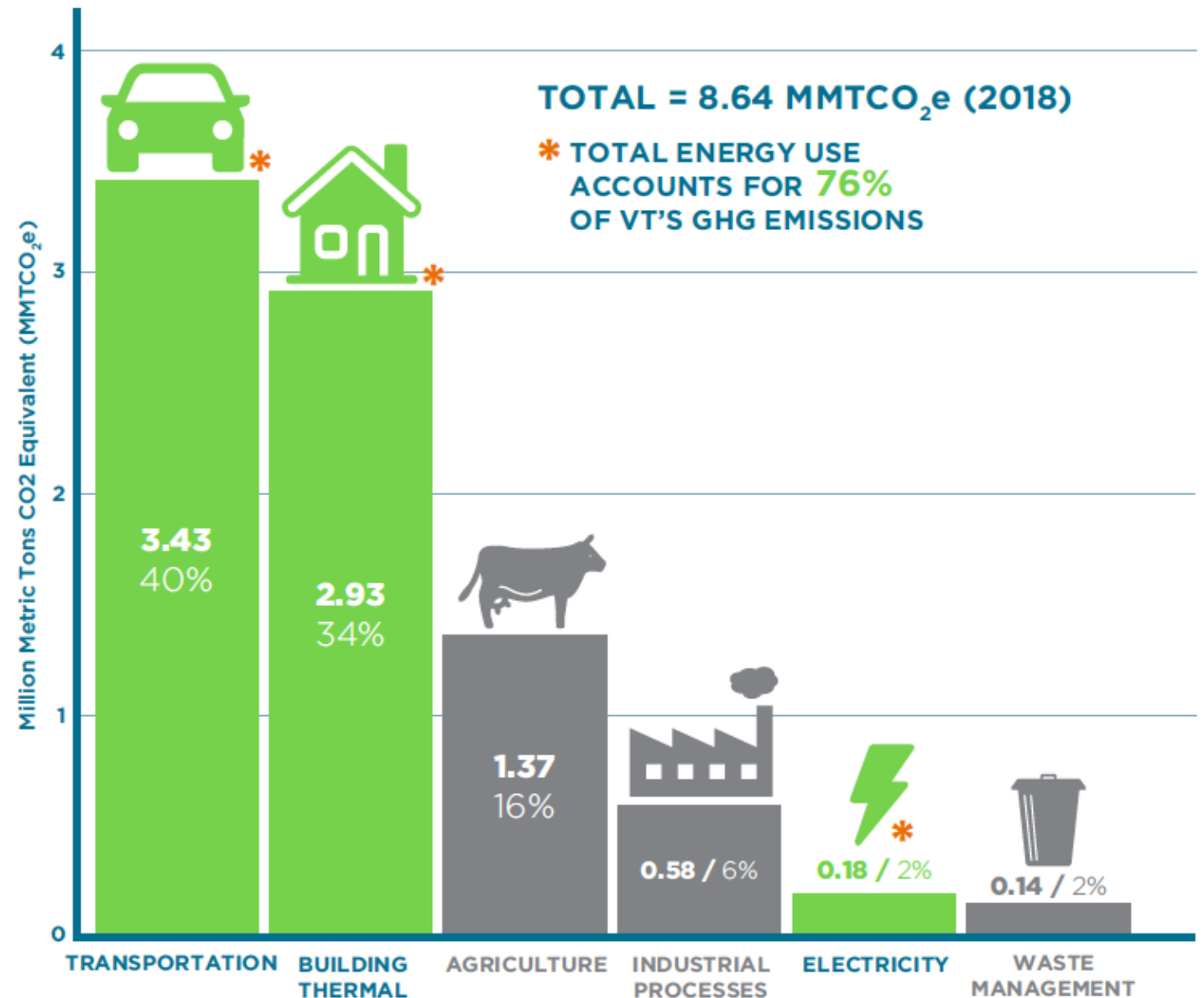


- Ensuring **inclusive, transparent, and innovative engagement** in the development of the plan and associated policies and program.
- Creating **accountable and restorative** recommendations that recognize inequality and seek to resolve them using clearly identified strategies.
- Moving at **the speed of trust** to provide adequate time to incorporate people's voices and prepare Vermonters for the transition to a sustainable climate future.
- Incorporating **solidarity** to create inclusionary spaces for all traditions and cultures, particularly for Indigenous communities, recognizing them as integral to a healthy and vibrant Vermont.
- Prioritizing the **most impacted first** through recommendations that address the needs of impacted and frontline communities first, providing the greatest benefits of transitions to these communities.
- Developing **supports for workers, families, and communities** that consider and plan for potential impacts on workers, families and their communities based on the implementation of Vermont's Climate Action Plan.

The Role of Transportation in the CAP

To reduce transportation climate pollution – ~40% of Vermont’s greenhouse gas emissions – a significant, ramped and equitable transformation is required and will rely on substantial, annual investments and policy innovation.

Vermont’s GHG emissions by sector, 2018



Transportation Task Group: Process and Stakeholder Engagement

- *Previous Vermont climate and energy plans and numerous other state and multi-state energy/transportation plans, funding programs, and policies were reviewed. Key actions involve scaling up existing state and multi-state programs & initiatives.*
- *Cadmus/EFG's modeling analysis and EAN's pathways report provided concrete guidance & data to inform the recommendations.*
- ***Significant stakeholder engagement:** Small, consistent task group engaged throughout; engaged planners, transportation experts, Capstone, T4VT, DEC staff and many others, including participants in a joint PSD/Comprehensive Energy Plan daylong workshop in August and input from statewide public engagement sessions. Ongoing, deeper engagement is essential.*
- ***Equity has been a critical consideration** throughout. Recommendations improved and refined by the application of the Just Transition principles/rubric and public input. Ongoing equity analysis and commitment is required.*
- ***All final recommendations assessed, scored and lifted after application of the required Prioritization Framework.***

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?



What's In the Climate Action Plan?

Lots! For Emissions Reductions, the Two Highest Impact Recommendations:

- Implement a **Clean Heat Standard**, designed to achieve the thermal sector's share of pollution reduction (**34%** of needed total by 2030) and help fund weatherization and low-cost clean heat solutions.
- If and when regional viability exists (i.e., MA, CT come back to table or NY or other states join), join the **Transportation and Climate Initiative Program** (TCI-P), which is designed to reduce transportation sector emissions by approx. **26%** across participating jurisdictions)

Other High Impact Transportation Strategies:

- Advanced Clean Cars II and Advanced Clean Trucks:

Join CA and NY in this program, which will ensure that a minimum of **95,000 electric vehicles are provided for sale in VT between model year 2026 and 2030**. That many electric vehicles replacing fossil vehicles gets us about **10% of the way to our 2030 emissions reduction requirement**.

- **Significant expansion of and investment in existing programs – EV incentives, EVSE, RYR, Mileage Smart, TDM and more.....**

Transportation Pathways, Strategies & Actions

Pathway 1: Light Duty Fleet Electrification

- **Strategy: Market-Driving, Technology-Forcing Regulatory Programs**
 - **Action:** Adopt the CA Advanced Clean Cars II regulations for light duty vehicles
- **Strategy: Vehicle Purchase Incentives**
 - **Action:** Expand & redesign point-of-sale purchase incentives for new and used electric vehicles (EVs), high efficiency vehicles and E-bikes
 - **Action:** Implement a vehicle efficiency price adjustment policy with sensitivities for low-income and business use
 - **Action:** Continue to fund & expand Replace Your Ride and Mileage Smart programs
- **Strategy: Public Investment in EV Supply Equipment**
 - **Action:** Fund build out of charging infrastructure, prioritizing multi-family and workplace charging.
 - **Action:** Direct the Public Utility Commission (PUC) to develop beneficial EV charging rates to incentivize EV adoption
- **Strategy: Participate in Transportation Climate Initiative Program**
 - **Action:** Participate in the TCI-Program with complementary policies to ensure equity
- **Strategy: Educate drivers on benefits of electrification and other options**
 - **Action:** Fund driver education, RE: electric and high efficiency transportation, fund Drive Electric VT

Transportation Pathways, Strategies & Actions

Pathway 2: Heavy-Duty Vehicle Electrification

- **Strategy: Markey Driving, Technology-Forcing Regulatory Programs**
 - **Action:** Adopt CA Advanced Clean Trucks, Low NOx Omnibus, and Greenhouse Gas Phase II rules.
- **Strategy: Electrify medium & heavy-duty vehicle auxiliary systems**
 - **Action:** Fund incentives for electric auxiliary systems and installation of electrified parking spaces.
- **Strategy: Participate in TCI program**
 - **Action:** Participate in the TCI-Program with complementary policies to ensure equity.

Pathway 3: Reduce Vehicle Miles Traveled (VMT)

- **Strategy: Increase state, regional & local government capacity to plan for VMT reductions and sustainable transportation strategies**
 - **Action:** Require VTrans to create a State Sustainable Transportation Implementation Plan, expand investments in transportation choices and invest in Regional Planning Commissions, municipalities etc. to implement.

Transportation Pathways, Strategies & Actions

Pathway 4: Lower carbon intensity of fuels

- **Strategy and Action:** Participate in the TCI-Program with complementary policies to ensure equity.

Pathway 5: Effective administration and coordination

- **Strategy:** Increase state government and community partner capacity
 - **Action:** Create a climate director position in the executive branch to lead interagency entity that oversees CAP implementation; invest in government and community partner capacity.

Legislative Action & Rule Making

Rule Making:

- Advanced Clean Cars II, Advanced Clean Trucks, TCI-P Model Rule*

Legislative Action:

- Expand and further fund existing programs at scale (e.g. income-tiered EV incentives, EVSE, Replace Your Ride, Mileage Smart etc.)
- Enable new, needed programs – e.g. a vehicle efficiency price adjuster
- Set table for TCI-P/cap and invest revenues
- Strategically and significantly invest federal funds to accelerate the required pace and scale of investments required

A Gap In the Plan: What's Next In Transportation?

- **Without TCI-P, the Climate Action Plan simply won't add up to meeting our emissions reduction requirements.** This is both because we would have a lack of a cap on transportation sector pollution (~26% emissions benefit) and because we would not have future revenue to leverage federal dollars and invest in clean alternatives through 2030 and beyond.
- The **Council will work in early 2022 to identify commensurate alternatives to TCI-P**, in case it does not prove to be regionally viable, and to make up the gap it would create. Initial ideas to be explored include (but are not limited to):
 - A **Clean Transportation Standard** (like the low-carbon fuels standards in place in CA, OR, and WA and being considered by NY)
 - Joining Quebec and California in their cap and invest program, known as the **Western Climate Initiative (WCI)**, at least to cover transportation fuels.
 - A very strong **“true cost pricing” or “vehicle efficiency price adjustment” policy for new vehicle purchases**, providing up-front rebates for more efficient vehicles in a class (ex. F-150 Lightning) and a fee that accounts for the lifetime costs of pollution of very inefficient fossil models (ex. Ford Raptor), in a revenue neutral way.

Significant and Strategic ARPA, IIJA and Other Essential Funding Investments

- Substantial progress is required – ~40% of our climate pollution
- TCI-P leaves a huge hole; a comparable policy or program required
- TCI-P was never the panacea; other policy, regulatory and innovation essential
- Delayed, insufficient commitment is increasingly costly and consequential

THE OPPORTUNITY

- **Significant, annual investments** in equitable, pollution reducing transportation programs – **ramped at the scale and pace the transformation requires** – can put Vermont on a path to climate progress and move more Vermonters off price volatile, imported fossil fuels