



Vermont Climate Council

Building the Climate Action Plan

Initial Suite of Actions

Cross-Sector Mitigation Subcommittee - Electricity

October 5, 2021

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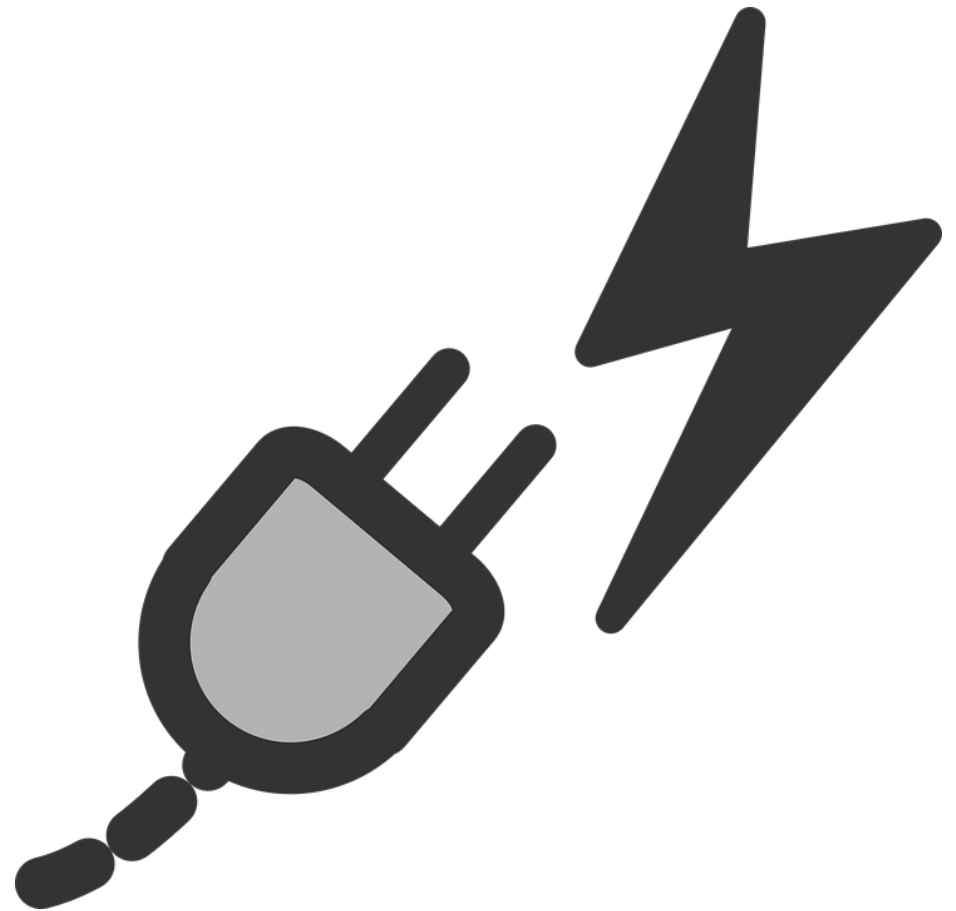
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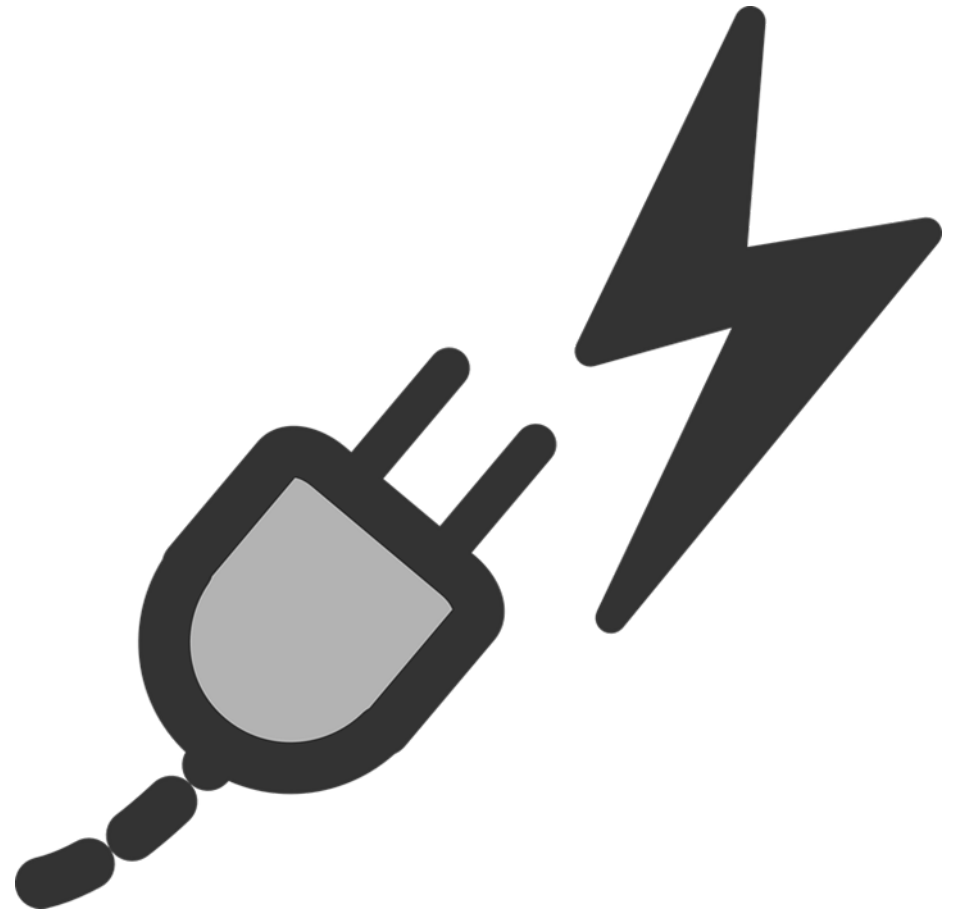
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Process to Date

- Conducted specific sector outreach meeting in collaboration with Comprehensive Energy Plan process in addition to subcommittee and individual stakeholder feedback
- Discussions with expert consultants
- Review recommendations from rural resiliency regarding electricity sector

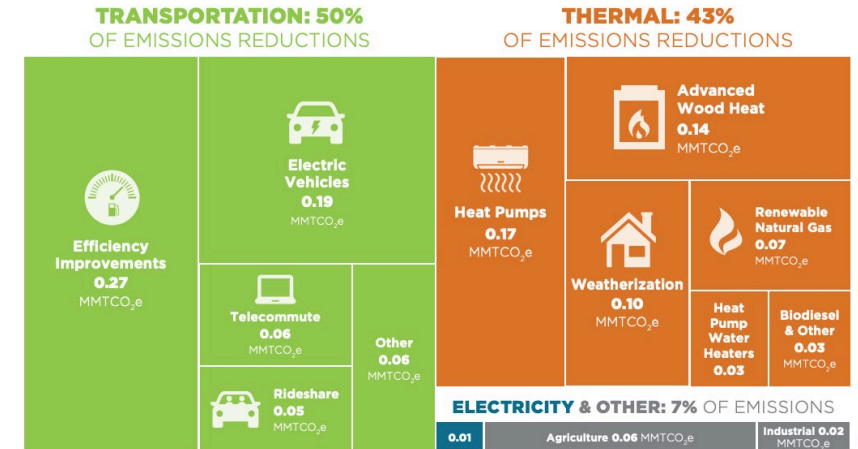


Context for Electric Sector Mitigation

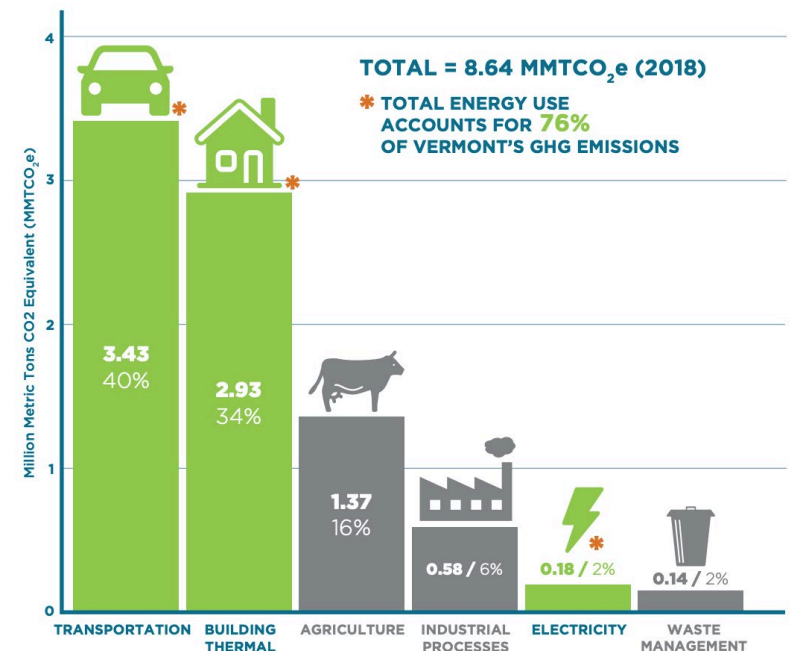
- The electric sector has made great strides in decarbonization and in efficiency programs to reduce overall electricity use and customer cost. A primary focus in upcoming years should be to use it as cost-effective backbone for the further fuel switching necessary to decarbonize the transportation and buildings/heating sector.
- Pathways, strategies and actions related to adaptation and resiliency regarding the electric sector and electric infrastructure – in further support of mitigation – are laid out very well in the other subcommittees and are not repeated here. Same is true of further study re: how to count emissions. (Thank you, colleagues!)

Modeled emission reductions for 2025

Total reductions of 1.26 MMTCO₂e to meet Vermont's statutory emissions reduction requirements



Vermont's GHG emissions by sector, 2018



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

Three Pathways for Further Electric Sector Mitigation

Decrease	Further decrease GHG emissions from electric sector purchases
Enable	Enable Vermonters to cost effectively switch to electric (and other low carbon fuels) from fossil fuels for heating and transportation
Use and generate	Use and generate electricity in ways that further reduce overall GHG emissions and help control overall costs of supporting electrification

Pathway 1: Further decrease GHG emissions from electric sector purchases

Strategy:

- Develop 100% carbon free or renewable electric portfolio standard for implementation post 2030 – Legislative action required

Action:

- Identify, review, and research as needed design parameters for a 100% carbon-free or renewable electric portfolio standard that equitably promotes electrification to inform legislative discussion
 - The questions that would need to be addressed are those presented in earlier presentations and gathered in stakeholder feedback (such as in-state v. out of state; vintage of sources; technology type, renewable v. carbon free, etc., in spreadsheet)

Pathway 2: Enable Vermonters cost-effectively switch to electric

Strategy:

- Provide financial and technical assistance for Vermonters to upgrade electric service and to purchase and install equipment.

Actions:

- Develop coordinated programs for assisting with 200 amp service upgrades
- To ensure a just transition, focus on providing financial support to those who are income qualified and rural and marginalized communities
- Put particular focus on delivery to rural communities with highest resiliency improvement needs, and multifamily and residential mobile home communities statewide.

Pathway 3: Use and generate electricity in ways that lower GHG emissions & help control overall costs

Strategy:

- Prioritize continued efficiency, along with load control and generation/load matching.

Actions:

- In addition to continued focus on efficiency programs, encourage through existing PUC oversight, IRPs, and rate cases/regulation plans utility load control programs + energy service company participation through innovative pilots and programs.
- Through same existing mechanisms, encourage utilities to explore further dynamic offerings for customers including those specifically designed to encourage generation/load matching.