

## Cross-Sector Mitigation Subcommittee of the Vermont Climate Council Minutes

---

Date/Time: September 23, 2021 / 2:00 PM  
Location: Meeting was recorded and [posted publicly](#)  
Members present: Richard Cowart, Peter Walke, Johanna Miller, Jared Duval, Gina Campoli, David Farnsworth, Liz Miller, Bram Kleppner, Christine Donovan, Chad Farrell (liaison from RRA)  
Members Absent: Ed McNamara  
Staff Present: Marian Wolz, Jane Lazorchak  
Consultants Present: David Hill, Liz Hanson, Catherine Morris

---

12:00 PM Welcome / Opening Remarks (Richard Cowart)

The 9/16 CSM Meeting Minutes were approved.

12:05 PM Final Pathways and Scenarios Modeling (Cadmus/EFG)

Cadmus will deliver the summary report on initial Pathways analysis presented today by Sept 30 and the draft and final Pathways report by Nov. 30. Jane Lazorchak clarified that the hope is that the LEAP model will be updated by Oct. 5 and assumptions forwarded to EFG for cost-effectiveness analysis. SEI can provide the inputs to the TLs if needed for completion of the CSM SC spreadsheets.

The initial Pathways analysis includes synthesis of CSM Pathways and Strategies and some accelerated and expanded deployment of those recommendations. Cadmus demonstrated the consistency with the GHG inventory and noted that the sectoral targets are for the most part met in this analysis. The CSM SC was invited to provide input on possible changes to policies and initiatives to the scenarios for the final Pathways analysis.

LEAP is an accounting model that does not necessarily achieve optimal, cost-effective reductions.

See Attachment 1 for brief summary of the Sector-by-Sector results and recommended refinements.

1:53 PM Material Preparation for 10/5/21 Climate Council Presentation (Co-Chairs / Jane Lazorchak)

Jane asked TLs to share spreadsheets with her by next Tues. She shared the ppt template in advance of the meeting and suggested the TLs prioritize Actions that they want VCC feedback on during the meeting on Oct. 5.

Kai Morris is contracted for equity consultations with the Subcommittees and will be working with CSM on how high-priority, high-impact, and near-term implementation actions can be evaluated through the lens of the equity screen. She will be joining the CSM meeting next week as the TLs go through their draft presentations for the Council. Next week's meeting will be extended to 3 hours if possible.

2:04 PM Public Comment  
Matt Cota provided public comment. Comments can be viewed in the meeting recording.

2:06 PM Adjourn

###

DRAFT

## Attachment 1. Summary of EFG's Initial

**Transportation** emission reductions are primarily from adoption of different classes of EVs.

*Recommendations* by consultants for changes include: 1) add elements that could reduce VMT over time (VMTs are constant in the current model); 2) input expanded charging infrastructure including some assumptions around managed charging; 3) modify the cost profile trend for EVs, which are currently conservative; and 4) investigate further biodiesel 100 viability and conversion costs.

Discussion: Confirmed that increased ICE efficiencies through adoption of CA ZEV/LEV standards are reflected in the model.

**Buildings** – 60% of GHG reductions come from residential sector and 33% from commercial through shifts primarily in space heating (heat pumps and increased efficiency in building shell)

*Recommendations:* 1) Modify the Weatherization portfolio in the model to increase apartments and mobile homes and add a scenario of weatherization at scale (120,000 units by 2030) 2) more electric heating conversion systems and costs; 3) include new construction net zero homes; 4) accelerate phase out of fossil fuel water and cooking; 5) Include cost-effective district heating using biofuels; 6) higher # of commercial ground-source heat pumps; and 8) industrial process electrification.

**Non-energy** – 80% of agriculture reductions are from soils as they become net sink. Industrial reductions are from ODS substitutes.

*Recommendations:* Ag: 1) existing 1% rate of increased soil sequestration in the model may be high, and a sensitivity case of 0% should be considered; 2) reduce the rate of adoption of enteric fermentation; 3) slower implementation of manure management practices

Industrial: 1) ODS adoption pace and costs to be validated; 2) Modify the Semi-Conductor manufacturing process emissions to assume some reductions over time.

**Electricity:** Emission reductions are achieved through phase out of gas, coal and solid waste, while generation capacity increases, primarily through growth in offshore wind and solar.

*Recommendations:* 1) integrate managing charging and compare with no managed charging; 2) Electrification implementation should consider equity, e.g., electricity for all and community solar.