

**Cross-Sector Mitigation Subcommittee of the Vermont Climate Council**  
**12:00 PM March 16, 2023**  
**Minutes**

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Location: Meeting was recorded via Zoom  
Subcommittee Members Present: TJ Poor, Bram Kleppner, Johanna Miller, Rich Cowart, Megan O'Toole, Adam Sherman, Jared Duval, Gina Campoli, Andrea Wright  
State Agency Staff Present: Marian Wolz, Jane Lazorchak, Brian Woods, Collin Smythe  
Minutes by: Joey Miller

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12:02 – Rich Cowart - Welcome, Agenda Review

12:07: Minutes from 2/16/2023 Meeting -- approved 12:09

Update on Status/Process of VTrans' work with Cambridge Systematics on the Carbon Reduction Strategy (Andrea Wright, VTrans; Ben Eskin, Cambridge Systematics)

- Two primary goals – support GHG req'ts – especially for transportation sector to deliver 40% GHG requirements
- Support req'ts of federal -- (\$32 million )FY 22-FY 26) – develop a strategy consistent with guidance to reduce traffic congestion, reduction of SOV, fleet electrification and EVSE, construction materials with lower CO2
  - Went beyond guidance with broader read of req'ts to look beyond VTRANS capital programs to look at policies/programs
  - Develop a methodology – informed by others – to develop unique VT tool for VTRANS to use over time
  - Based on that, and based on gap analysis, to support cost effective GHG reductions looking at other strategies (policy or regulatory approaches) the state could use to achieve GHG requirements
  
- Andrea provided an overview of the process to date – technical committee (has met several times 2) advisory committee (met once thus far; will reconvene after stakeholder and public outreach meetings happening currently)
- Draft report anticipate to deliver around October
- TJ Poor: Role of CSM?
- Andrea: Inform you now, we will hear from others and then synthesize to inform our final recs. After the next Advisory Committee, the CSM will likely be tapped to review and provide feedback on that direction then – Likely end of April.
- Gina C: How is this effort leaning on CAP?
- AW: Pathways and CAP what aiming for – and intertwined.
  - Discussion ensued related to more closely tying CRS outreach to the transportation recs – including the addendum recs. JM, BK, GC recommended.
- JL: Policy options looking at for thermal include performance standard and cap and invest. Potential to look at both sectors (align).

- Ben Eskin – Outlined methodologies for the Phase I into Phase II of Carbon Reduction Strategy. **See presentation for overview.**
  - Comments and Qs invited.
  - Rich C: Q on chart on VTRANS capital program – Is this just the number of things (projects)?
  - Ben: Yes, it's just the number of projects of what's in capital program
  - MOT: What is baseline EV adoption estimate based on?
  - Ben: Pathways analysis commissioned by ANR for VCC
- Ben: Presented on Phase II of the project, including the public engagement and stakeholder outreach underway as first round of engagement.
  - Questions and discussion
    - Jared: How do we understand what the gap is? And what assumptions are we using? ACCII and ACT – difference b/t delivered to VT and placed in service. Modeling does not ensure incentives, etc to ensure placed in service and that is what will ensure (best case scenario) of GHG reductions. Additional incentives, additional charging infrastructure. Likely a policy gap that will need to be filled.
    - Ben: yes, good point. Doing OR now to ensure aligned on assumptions, numbers etc. Will have follow up discussions.
    - Jane: As part of thermal contract, working with SEI to update BAU model (comprehensively) – deliverable due yesterday but waiting on energy forecasting report. This is the modeling and BAU put together for state and we should align that work – with this effort. State meeting with Cambridge Systematics and SEI to align the work – March 30 – to pull the two projects and BAU model together to align.
    - MOT: Agreed with Jane on need to align BAU and to ensure considerations like Jared raised are embedded in that analysis.
    - Rich C: More coordination needed or wait til March 30 to see what SEI report has to offer and then have Science and Data analyze to ensure we are putting in alignment?
    - Jane: Looking for acknowledgement that we are working with SEI and BAU model as the underpinning for our analysis here too
    - Rich: That sounds great but maybe S n D could examine to see if there are any disconnects that we should discuss. Concern about agreeing to SEI report as underpinning without having seen it yet.
    - Jared: I agree with what Jane and Rich said. We don't want competing models out there. As long as we get a chance to review the assumptions behind the update. We shouldn't just assume; must have transparency around and understand the assumptions.
    - Rich: Have S n D take a look and let us know if changes are needed.

For more info:

<https://vtrans.vermont.gov/form/carbon-reduction-strategy>

Public meetings on March 23 – Info here:

<https://climatechange.vermont.gov/getinvolved/calendar/month>

12:57 – Public comment

- Annette Smith – Consider in modeling commuter rail on the western corridor? Raised before. Increasing congestion on Rte. 7. Explore rail corridor – can we at least model what a commuter rail car powered by diesel? Or powered by electricity? Would look like so that we'd have that info. Focus on things that are not just cars. Commuter rail could do a lot.

- Ben Eskin: Response. Looking at alts beyond cars – walking, biking, transit, rail. Estimating hypothetical a bit more challenging but will make effort to understand that type of strategy as much as possible.

#### 1:01 -- Update on S.5 – Affordable Heat Act (Rich Cowart)

- Senate voted S.5 out (19-10) – moved to House, unclear the schedule on taking it up. S.5 largely structured on H.715 (bill from 2022) with one important provision; the so-called “checkback” provision which would require PUC to develop the rules, do analysis about implementation of policy and legislature would have to review and affirmatively vote to authorize the policy to go forward.
- Other significant changes are three:
  - Strengthen equity provisions by carving out LMI households; require ½ of those measures delivered to LMI households be long-lived measures to deliver benefits long term.
  - CO2 intensity threshold req’t on biofuels – Assess on lifecycle GHG basis; over time increasingly strict and eliminate/constrict Co2 intense biofuels
  - Change in default delivery agent (DDA) included in the policy – S.5 says DDA (could be akin to the way Efficiency VT operates). DDA given responsibility to deliver programs in absence of obligated parties choosing to deliver programs themselves.

#### 1:07 -- Update on Status/Process of ANR/PSD work with Energy Futures Group on Thermal Sector Analysis - Qualitative Assessment and chosen policy set

- Brian Woods, ANR, provided an overview of work to date and underway:
  - Qualitative analysis of policy options – completed
  - Selection of five policy sets for quantitative analysis - completed
  - Update of Vermont Pathways LEAP baseline/reference case – in progress
  - Development of complementary workbooks (social cost, administrative cost, consumer cost) – in progress
  - Final analysis report – on schedule for late May/early June
- Brian: Overview of [Policy options and qualitative analysis](#)

1. Expansion of existing policies and programs + fuel surcharge
2. Sector-wide performance standard (e.g., the proposed Vermont Clean Heat Standard)
3. Cap-and-invest – buildings/thermal energy sector only
4. Cap and invest – all fuels (thermal and transportation)
5. Regulatory measures bundle
  - a. Targeted performance standards for heating appliances
  - b. Direct regulation of fuel emissions (e.g. a Clean Fuel Standard)
  - c. Fossil infrastructure moratorium
  - d. Building performance standards (new and existing buildings)
  - e. Emission limits on individual emitters

- Questions and discussion

- Five policy sets for quantitative analysis (see above) – parameterize as LEAP scenarios for this analysis to be done. For a helpful summary, see pages 25 and 26 here: [https://outside.vermont.gov/agency/anr/climatecouncil/Shared%20Documents/Task\\_2\\_Policy\\_Options\\_and\\_Qualitative\\_Assessment\\_2-20-23.pdf](https://outside.vermont.gov/agency/anr/climatecouncil/Shared%20Documents/Task_2_Policy_Options_and_Qualitative_Assessment_2-20-23.pdf)
- Rich C: Expansion of existing programs will require new revenue to be raised. It must be explicit and understood.
- Jane: Lots of ways to raise money. Critical Q is what it will cost. Charge applied to what? And how to apply federal funds (Inflation Reduction Act etc) to reduce the costs
- Christine: Not a question of *whether* new revenue, but *which* new revenue. And likely it'll require buckshot, not silver bullet – likely more than 1.
- Jane: May be significant cost difference to meet 2030 GHG reductions, vs. what costs to meet in 2035. Talking to contractor to understand difference; examine a whole different policy set to define and examine that. Take any 1 of 5 policy options and gauge tech options, costs, GHG by 2035 – instead of 2030. ANR pursuing.
- TJ: Senate added elements to S.5 modeling after EEU structure. Studying thermal reduction potential based on 1) technical achievement, 2) economic potential (at what cost, applying social cost of Co2), 3) achievable potential (not everyone will do it, workforce limitations). Valuable information and analysis to inform S.5. Timing won't align to inform this analysis.
- Jared: VCC given legal obligation and public duty to achieve legal req'ts – and do analysis in line with complying with law. Doesn't feel appropriate to do modeling that doesn't have us meeting our legal obligation (e.g. 2030). Don't see value in this type of modeling.
- TJ: Plan must look at cost effective solutions. Lots of ways to frame cost effectiveness. Transportation sector, as an example. ACCII gets part of way there, CRS gets us a bit further. Still a gap. But maybe get there by 2033 or 2034? We should look at the cost (savings?) of moving the target up 3-4 years.
- Jared: The Legislature didn't ask us to question or revise targets. The targets of the law and, as long as such, we need to work to do the analysis and comply with the obligation.
- Further discussion.

1:47 – Next meeting(s) –

- Rich: focus of next meetings? Look at what other states are doing? Do a joint meeting with Ag and Eco on mitigation opportunities in ag? Schedule info sessions and thinking around industrial? Biomass will be taken up by full Council.
- TJ: Take up topics to what end...? What is our goal and the timeline we want to hit by end of 2023, e.g.? Set and work towards that goal.
- Jane: EPA's Carbon Pollution Reduction grants. ANR, in coordination with other agencies, applying. Can present on this opportunity.
- Bram: Look at transportation sector (replacing TCI-P) and biomass. Relative to transportation, would it be helpful if transportation working group joined/merged Carbon Reduction Strategy efforts.
- Jane: Through CO2 Pollution Grant efforts there will be opportunity but likely not right now.
- Further discussion.
- Next steps: TJ work with others to put together a draft work plan for CSM – smaller working group – TJ, Rich, Bram, Jared and Megan O'Toole will work together to put a draft plan for CSM's work, working back from June 2025.
  - Jared: Consider working back from when next CAP revision due. Also, do a lot more data gathering and learning, e.g. NY looking toward economy wide cap and invest program. Invite people from other states undertaking similar endeavors to learn from,

potentially collaborate on. This is the time to ensure we know as much as possible to inform further revisions and next CAP.

2:06: Adjourn

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DRAFT