

Science and Data Subcommittee of the Vermont Climate Council

1:30 PM October 13, 2021

Meeting Notes

Location: Agency of Natural Resources, One National Life Drive, Montpelier, VT 05602
in National Life Catamount Room; meeting was recorded and posted online [here](#).

S&D Subcommittee Members Present: TJ Poor, Jared Duval, Secretary Julie Moore, Richard Hopkins, Lou Cercere

State Agency Staff Present: Jane Lazorchak, ANR; Marian Wolz, ANR; Claire McIlvenie, PSD; Brian Woods, VT DEC; Megan O'Toole (partial), VT DEC; Collin Smythe (partial)

1:30 Welcome/ Agenda Overview (S&D Co-Chair(s))

TJ Poor opened the meeting of the Subcommittee with an overview of the agenda. and previous meeting minutes were approved. Jared Duval brought up for the Miscellaneous category a discussion that happened on the CSM subcommittee related to the TCI-P and the calculation and assessment of benefits.

1:35 Discussion of Carbon Budget Draft Report (Subcommittee Discussion); update

Jane provided an update on the Carbon Budget process. Council meeting next week was going to discuss Carbon Budget, but not sure if that will happen or not. Carbon budget has not been sent to full council yet for review, but will be discussion of RFI, land use, and future carbon sequestration scenarios. Jane clarified that it may be the case that the agricultural questions may be more at the level of an RFP instead of a second RFI. Julie flagged the fact that we don't have resources for this is available right now, but that she believes this is a recommendation that further study and analysis is needed in these spaces and not clear that there was consensus on the next steps. Need a "holding place" for additional areas of research needed for Climate Action Plan and related mitigation strategies. Megan O'Toole commented that the GWSA directs the Council to identify the means to accurately measure GHG emissions but doesn't give the Council authority to tell ANR to spend funds at this point in time, but squarely within their role to recommend that going forward.

Jared flagged text in the Carbon Budget report regarding data issues, specifically related to agriculture, forestry, and other land use. He believes there are two buckets from recommendations 1) updates for gross emissions tracking in terms of data accuracy and flexibility 2) How to address data gaps and data quality issues identified in the Carbon budget. Julie and Jared both agreed that GHG Task group and Ag and Ecosystems should both be involved if RFP process goes forward.

Richard discussed the potential crosswalk between estimates in the carbon budget and the GHG inventory and is hoping for a refinement of data out of the Carbon Budget to more closely match values

estimated in the GHG inventory. He also reiterated that CO₂ from wood burning should have an emissions value associated with it. Lou agreed with Richard's point that CO₂ from wood combustion should have a value. Richard, TJ, and Lou discussed the importance of this when evaluating mitigation strategies, especially if heating with wood is advanced as a significant climate mitigation strategy. Discussion continued on the complexity of the issue and the need for additional analyses. The GHG Task Group to review the materials on GWP_{bio} that Richard has provided and reach out to Ali Kosiba to inform a recommendation. Potential to include a recommended CO₂ from wood combustion value as a sensitivity in upcoming LEAP runs.

2:00 Draft Sections of the CAP from SDSC (TJ Poor & Jared Duval)

The Subcommittee spent time reviewing the [DRAFT Social Cost of Carbon document](#) and providing edits in real time. Subcommittee approved the document with incorporation of minor modifications, including changes to a footnote and information on the discount rate.

The Subcommittee walked through the [DRAFT Greenhouse Gas Inventory Review document](#) and provided comments and edits in real time. TJ commented that explanations of terms would be helpful to make the document easier to understand. There was additional discussion on the need to out specific areas that require additional resources for future analyses for the administration and legislature. Jared to update the document with changes and resend to subcommittee.

2:45 Monitoring and Assessment Task Group update/next steps. (Task Group)

Jane provided an overview of the Monitoring and Assessment Task group meeting. Tool was originally supposed to be done by the middle of November, but with all other work going on, agreement that it could wait a little while and be completed after December 1st. The meeting was a high-level discussion on existing data sources and tools and the potential interactions between them, as well as the tool framework. Jared noted that there is a lag in the GHG inventory and that we will likely not know if we have met the 2025 targets until 2027 or 2028, but that this tool is important to give us a good indication of whether we are making necessary progress prior to the official inventory release. Julie recommended that we take some lessons learned from the Clean Water monitoring and assessment framework (and staff from that program) develop the tool as early as possible.

3:00 Proportional Reductions in Emissions – Statutory Clarity – follow up from Sept 29 meeting

TJ provided an update on the follow-up discussion from the September 29th meeting. Language was discussed to forward to the Council on how proportionality is considered and the interpretation of GWSA. The committee discussed proportionality and the prioritization relative to other criteria and Jared will work on a recommendation with several others on this, as well as a recommendation on using 2018 as a reference year for proportionality. Jared raised the point that there are eight objectives listed and that they should be considered as objectives to be furthered, not elevated one above another. When a mitigation option isn't technically feasible or cost effective within a source category he feels we

should allow for some flexibility as proportionality is one of the eight objectives. Subcommittee supports this idea that proportionality shouldn't take precedence over other objectives.

3:20 Miscellaneous Items

Review of sensitivity modeling being performed by contractor. Currently working on Social Cost of Carbon, emissions related to Hydro Quebec (HQ), and population growth (to come later). TJ raise biomass as an important sensitivity to consider and there was some discussion on the differences and complexities associated with biomass combustion accounting. Jared reiterated the importance of understanding what many members of the public have raised regarding lifecycle emissions from electricity generation, specifically HQ, Nuclear, and natural gas generation sources. He flagged that some peer reviewed research has shown that the lifecycle emissions associated with HQ and nuclear still come in far below the ISO New England grid mix average per MWh value, but that there needs to be more transparency and clarity around this issue. Richard and TJ reiterated the importance that all resources are evaluated in the same way. Subcommittee agreed to put forward to EFG a request that biomass be the top sensitivity, but acknowledging that all the sensitivities are important.

Jared provided a review of some information he put together on TCI and how the emissions reductions could or would be modeled or quantified. Brian Woods discussed some nuances of the program regarding the CAP versus actual emissions levels and the state allowance budgets while also reiterating that the investments enabled through participation in TCI are important and could certainly rank TCI as a high priority action. Discussion continued related to how to account for emissions reductions from actions funded through TCI and how and where these would be seen in the GHG inventory. TCI discussion will continue tomorrow during the Cross Sector Mitigation call and TJ suggested that TCI should be called out and discussed by the Climate Council.

3:30 Public Comment

George Gross offered data and recommendations on emissions from Hydro Quebec in terms of sensitivity analysis, as well as on natural gas generation.

Matt Voss flagged that Ag and Ecosystems subcommittee had a tense discussion on the accounting of biomass emissions and suggested coordination between the two groups. Jane responded that Ag and Ecosystems wrote up a document related to concerns around the combustion of biomass, specifically related to electricity generation, and Jane is happy to share that.

4:00 Adjourn