

## Data and Science Subcommittee Meeting of the Vermont Climate Council

April 5<sup>th</sup>, 2024

---

Subcommittee members present: Jared Duval, Breck Bowden, Lesley-Ann Dupigny-Giroux, Claire Mcilvennie, David Grass, Catherine Lowther, Ken Jones, Jay Schafer, Maddison Shropshire, Collin Smythe

Members of other subcommittees present: Andrea Wright, Melissa Bailey, Richard Cowart

State staff present: Megan O'Toole, Sophi Veltrop, Rachel Stevens

Others present: Sarah Cashman, Ben Young, Andrew Beck, Lena Stier, Spencer Dole, Steve Crowley

### Meeting Minutes:

- Approval of October 25, 2023, meeting minutes
- Introduction of new subcommittee members
  - o Maddison Shropshire: Energy planner at Addison County Regional Planning Commission
  - o Breck Bowden: Retired from UVM in 2022 from Rubenstein School of Natural Resources
  - o David Grass: Department of Health (taking over from Jared Ulmer)
  
- Brief pause to allow for subcommittee members to read through the [Guidance Document for Subcommittees](#).
  
- Walkthrough of the Guidance Document for Subcommittees with the group and discussion. Process and timeline for different subcommittees. Science and Data and Just Transition subcommittees work more in service to other subcommittees rather than providing actual content for the Climate Action Plan (CAP) process.
  - o Ken J: What is the status of the Progress Report? Sophi V.: working on getting more information from staff. Outreach ongoing.
  - o Ken J: What is the status of the Measuring and Assessing progress tool? It is critical to the next CAP process.
  - o Collin S: Jane Lazorchak has put the contract together and we are in the process of finalizing that with the business office and the contractor.
  - o Lesley-Ann: Tiered system of subcommittees perpetuates how we have been doing things. Two more overarching subcommittees of Science and Data and Just Transitions should focus on doing no harm and utilizing the most current and best science possible. There needs to be more focus on the crosscutting nature of this work. Nice to reverse the sequence of the process to make things a little bit less intense and time intensive.
  - o Claire M: Other additional specific technical studies? Is there a workplan being drafted?
    - Jared D: Timelines flow from the existing contracted work and work that is planned. CAO could provide either now or at a future meeting.
    - Collin S: Not a whole lot of detail on the up and coming analyses. Lifecycle study is getting close to wrapping up (presentation today) and the Agricultural study has wrapped up, but no final deliverables yet. Up and coming ones are still under consideration, will be some updates to LEAP modeling, and list of potential additional studies.

- Breck B: Someone who could put together a list of documents to get an understanding of background?
  - Jared D: Try to do that for each meeting beforehand, but apologies that they weren't available prior to this meeting.
  
- Presentation from Eastern Research Group on Vermont Energy Sector Life Cycle Assessment Project. Provided an overview of:
  - Project status
  - Review of project scope
  - Review of approach for calculating upstream emissions
  - Energy sector results
  - Related efforts and discussion
  
- Upstream emissions and emission factors to supplement in-state Vermont GHG Inventory
  - Provided report and workbooks for transparency of calculations
    - Upstream emission factors
    - Upstream emissions estimates by pathway
  - Review of a number of sources to determine energy pathways in Vermont
  - GREET is the major model used for this exercise
    - Walkthrough of example of pathway stages in GREET
  - Description of how emission factors are combined with activity data in GHG Inventory to estimate upstream emissions by pathway corresponding to the GHG Inventory energy sectors.
  
  - Breck B: Are pathways direct emissions or how far upstream?
    - Ben Y: Large part of exercise is to determine where to draw system boundary lines and what components will be consequential in emissions totals and what not.
  
  - Richard C: Do upstream emission factors fluctuate through time? Are there important ones to flag where that is particularly true?
    - Ben Y: These are upstream and not lifecycle. Want to be able to append to the VT GHG Inventory. Example of one is natural gas emission factor has fluctuated through time, whereas petroleum supply chain hasn't changed that much as it is a fairly mature industry.
  
  - Pubic Comment: Steve Crowley: Anticipate there will be a meaningful opportunity for members of the public to provide comments that may be incorporated?
    - Collin S: Not expecting a specific comment period on the final draft, but have had several subcommittee meeting presentations that have been public meetings that had public comment. There will be opportunities going forward as ANR has an obligation to do this lifecycle analysis on an annual basis.

