Vermont Climate Council

Science and Data Subcommittee
February 28, 2025, Meeting Minutes
1:00pm-2:30pm

Virtual Meeting Option to Attend via Zoom: All participants (Subcommittee members and observers) use the following Zoom link: Join Zoom Meeting: https://us06web.zoom.us/j/89956333653?pwd=FW3vlpj0WkiAnVIycToCYqaTRVPEpf.1

Meeting ID: 899 5633 3653
Passcode: 043289

Subcommittee Members Present: Jared Duval, Breck Bowden, Tara Kulkarni, Alex Reese (VGS Member?), Lesley-Ann Dupigny-Giroux, David Grass, Richard Hopkins

1:00 PM: Welcome/Agenda Overview

1:05 PM: Approval of Minutes

- Minutes approved

1:10 PM: Presentation from Stockholm Environment Institute - Business as Usual

- Brian Woods from Climate Action Office introduced Stockholm Environmental Institute
- Taylor from Stockholm Environment Institute provided overview on Updated Baseline Scenario:
    - Model and Model Platform
        - Leap Platform: Scenario based modeling too for energy planning for energy planning and greenhouse gas mitigation assessment
        - VT Leap Model:
            - GHG Emissions model for VT, developed using LEAP
            - Models energy consumption and production in all sectors, associated with GHGs, non-energy GHGs, cost of one scenario vs. Another
            - Foremost for energy system (and energy related GHG) modeling
            - Use scenarios to explore logical outcomes and changes

- Scenarios share common starting point and alternative scenarios require us to answer the question 'alternative to what?'
- Applications:
    - 2021: Initial development of VT LEAP in 2021 for VT Comprehensive Energy Plan and VT Climate Action Plan for Central Mitigation Scenario
    - 2022/2023: Public Service Department led work for Regional Planning Commission
    - 2022/2023: Marginal abatement cost analysis of individual actions with Central Mitigation Scenario
    - 2023: Analysis of thermal sector policies

- Goals of Planned Work
    - Baseline Scenario
        - Update current or recently available historical data that feed into Baseline Scenario
        - Align current/historical GHG emissions from all sectors with latest GHG Inventory
            - Including non-energy GHGs from AFOLU, waste, IPPU
            - Incorporate new trends or other forecasts
            - Make structural changes to improve transparency, general ease of use, ability to incorporate subsequent data updates, and ease of reporting
    - Mitigation Scenario Updates
        - Updated mitigation measures and scenarios for next Climate Action Plan
        - Questions from Subcommittee Members:
            - Jared Duval: Can you explain how the LEAP model is aligning with the inventory?
            - Richard Hopkins: Does this modeling make assumptions about near-future availability and use of federal grants, subsidies, tax breaks, etc.?
            - Breck Bowden: Stating Jared's question differently: Does the LEAP model contain exactly the same components as the VT inventory and only those components?
- Sector-by-sector overview of planned updates and input needs
    - Residential Sector

- Model historically represented household energy consumption, emissions and had categories for each one of those
    - Eliminate existing detail that is not helpful to make model more efficient and add in add in detail to disaggregate households by income level to better understand the extend that energy inequality is embedded in household energy use.
    - This opens up new types of analysis we can address in this model.
- Updates to road transport data
- Updates to residential building
- Updates to commercial buildings data
- Updates to electricity consumption data
- Updates to non-energy Data

- Timeline, next steps
    - ASAP: SEI and ANR to finalize data and assumption needs, continue collecting input and identify items not yet collected/ no source identified
    - March 21 2025 Residential and Transport Sector Updates
    - April 4 2025: Commercial, Industrial, Non-Energy, Electricity GHG Updates
    - Mid-April: Update and review with Science and Data
    - May 2: Updated model with final base scenario

2:15 PM: Public Comment

- Adam Aguirre from Conservation Law Foundation: thanks for the work you are doing

2:20 PM: Discuss upcoming Science & Data Subcommittee meeting agenda and dates

- Chapter Drafts due March 1 – can submit on March 3
- GHG & SEI Meeting for two-hour meeting on April 11
- Cancel March 11 meeting to fully prepare agenda items for April 11
- Checking in with Rural Resilience on potential contribution migration and wildfire smoke that was not included in Health and Climate and Climate Change Chapters

2:35 PM: Adjourn