

Notes from April 26 meeting of Science and Data Subcommittee of the Vermont Climate Council, taken by Richard Hopkins

In attendance via Zoom –

Members:

Jared Duval
Collin Smythe
Adam Jacobs
Lilly Terry
Claire Mcilvenie
Tara Kulkami
Catherine Lowther
Ken Jones
Elizabeth Palchak

Meeting co-chaired by Jared Duval and Collin Smythe

No other persons in attendance at beginning of meeting.

Meeting called to order at 1 pm.

Quorum of members was present.

1. Main order of business was a report by Collin Smythe, Agency for Natural Resources, on newly issued Vermont Greenhouse Gas Inventory, updated to data for the year 2020. Posted April 25, 2023..

Smythe started with a high-level view. The document covers data from 1990 to 2020. Older data remains part of the report partly because some of the Global Warming Solutions Act's requirements use greenhouse gas (GHG) emissions in 1990 or 2005 as a baseline. Methods have to be as consistent as possible over time.

Slide presentation overview

- Overall patterns are similar to those of previous years.
- Transportation GHG down in 2020 because of pandemic
- No corresponding increase in home heating emissions

Claire McIlvenie: how do you keep sectors clearly distinguished when heating and transport is increasingly done using electricity? Collin – good point but decisions not made yet. Avoid double-counting in any case. Jared – we can make some estimates by subtraction.

Elizabeth Palchak – do we capture info about refrigerants? Collin – yes, we use methods developed in California.

Smythe – New format for this report separates methods detail into a separate document. It can be updated separately from the main data document.

ANR will be setting annual schedule for future GHG inventory updates, dates not set yet

ANR is proposing to use this subcommittee to advise ANR on changes in methodology. Jared – this would be a good thing.

Richard Hopkins – methods used for state don't necessarily work at county or town level; state could collect locally useable data about motor fuels and heating fuels, but does not. Please advocate for these with other agencies. Claire McIlvenie – I agree and we (Department of Public Service) continue to raise these issues with other agencies.

Elisabeth Palchak – does inventory account for embedded energy? Collin -- No. Lifecycle analysis contract in place will provide some such information.

Smythe again – Our GHG inventory relates to GWSA – it's the way we measure progress under GWSA and its dated goals.

Jared Duval – observation -- pages 9 and 10 – national comparisons – some important changes, with electricity sector falling below both transportation and building heat for the first time nationally in recent years – it already does in Vermont.

Smythe – wastewater calculations use federal guidance and parameters

Richard Hopkins – why the big increase 2012 to 2017 electricity GHG releases? Smythe and others – likely due to closure of VT Yankee nuclear-powered generating station and subsequent larger purchases of New England grid electricity, which has a higher CO2 content.

Richard Hopkins – WWTP GHG emissions are heavily design-dependent. Anaerobic digesters can lead to NEW methane, which is different from situation where manure on dairy farms is already releasing methane before anaerobic digester is installed.

Elisabeth Palchak – how much labor to make report? Smythe -- Less than at first.

Elisabeth Palchak – How confident in data? Smythe – maintain comparability while getting best data – inherent uncertainty in some of the best data sources. Not satisfied with some current data. E.g. how much of fuel sold for VT vehicles is burned in VT?

Richard – does North Dakota include adventitious releases in its inventory? This is implied by VT not counting estimated methane releases in production and transport of natural gas used in

Vermont in Vermont's inventory. Smythe – Don't know. There are of course significant boundary issues. EPA has issued an inventory for every state, so we could look to see how they handled this issue.

2. New Topic: Contract reports.

Measuring progress – Collin Smythe. There will be a contract to build tool, including a public-facing dashboard.

First step: logic model drives choice of indicators or metrics. Working that through now. RFP being developed and not yet released. Jared Duval asks for SDSC to be shown RFP when it is ready to go.

Claire McIlvenie – Will there be equity-related metrics? I believe this is intended, so other subcommittees need to be heard, beyond SDSC.

Life cycle analysis contract.

Smythe -- ERG is contractor – energy pathways, existing and emerging. GREET model is to be used as framework. There has been a delay in the timeline – outreach is ongoing re: traditional ecological knowledge (TEK) that can be applied to life cycle analysis. It is proving hard to find an expert to fill this role. End of July end date will slip. Product will address dozens of pathways. Finding VT-specific data sources will be a challenge.

Jared Duval -- Task group meetings re lifecycle contract have been so far only one, maybe two? Need to provide more opportunities for public and subcommittee input. Collin says there will be one soon. If the contractor has questions about data sources, task group members could perhaps be helpful.

Jared Duval reported on action by VCC on biomass task group recommendations – not accepted, in hands of steering committee for further work.

Elizabeth Palchak – are there technical solutions to reducing emissions from biomass power plants? -- Question is mostly about pollutants other than CO2. Richard Hopkins clarified that the biomass task group questioned whether the McNeil plant produces health harms even when operating within its permit requirements. Biomass task group was, however, mostly trying to understand whether the plant is truly carbon neutral.

3. Opportunity for public comment or questions at 2:45 pm. No one requested to speak.

Next meeting: Friday, May 26 at 1 pm.

Adjourned 2:58 pm.