President's Commission on Carbon Neutrality

Commission Meeting, #18 3/27

27 March 2020 /1:30 PM/ Remote Meeting

ATTENDEES

Liz Barry, Andy Berki, Steve Forrest, Austin Glass, Jennifer Haverkamp, Brandon Hofmeister, Drew Horning, Greg Keoleian, Larissa Larsen, Barry Rabe, Camilo Serna, Anna Stefanopoulou, Missy Stults, Logan Vear, Lisa Wozniak.

Regrets:

Hank Baier, Valeria Bertacco, Anthony Denton, Jonathan Overpeck.

NOTES

Updates

COVID-19 Considerations

Moving forward, the Commission will be holding fully virtual meetings until it is again safe to meet in person. Per the President's Charge, the Commission still plans to submit its final report by the end of fall semester 2020. Should circumstances arise requiring an alteration of the timeline, the PCCN will deal with them as they come. For more information on the timeline and phases of work of the Commission, see here.

Student Advisory Panel (SAP)

The SAP provided the Commission with a proposed change to their scope of work. The co-chairs will be meeting with them soon to discuss this proposal and student engagement more broadly in light of the covid-19 situation.

Future Level-Setting Discussion

One of the substantive level-setting topics for an upcoming meeting is the question of carbon offsets. The agenda for that meeting will include a panel of external experts and UM faculty to explore where offsets are heading, criteria and programs to utilize offsets, and when offsets could be appropriate.

The PCCN staff is compiling pre-read and resource materials, including peer institution benchmarking data, relevant one-pagers, and FAQs on carbon offsets. PCCN Commissioners Jennifer Haverkamp, Brandon Hofmeister, Missy Stults and Lisa Wozniak will lead the Commission's consideration of offsets.

UM-Flint Visit

The co-chairs visited the UM-Flint campus on February 25, 2020 and gave a presentation on the PCCN to the campus community. The co-chairs also met with several groups of UM-Flint faculty, staff, students and city representatives to discuss carbon neutrality and sustainability on the UM-Flint campus. To view a livestream of the public event, see here.

UM Executive Officers Briefing

The PCCN co-chairs briefed UM's executive officers the week of March 16, 2020. The Commission is prioritizing briefing sessions with key UM administration decision-makers and senior officials to help ensure that when the final report is submitted at the end of fall 2020, UM leadership is well-informed and prepared to respond quickly.

City of Ann Arbor A2Zero

The City of Ann Arbor's Living Carbon Neutrality Plan went public on Monday, March 30, 2020. The living plan contains 7 strategies and 44 actions to move towards carbon neutrality by 2030:

- 1. Powering the electrical grid with 100% renewable energy.
- 2. Switching appliances and vehicles from gasoline, diesel, propane, and natural gas to electric.
- 3. Significantly improving the energy efficiency in homes, businesses, schools, places of worship, recreational sites, and government facilities.
- 4. Reducing the miles traveled in personal vehicles by at least 50%.
- 5. Changing the way materials are used, reused and disposed of.
- 6. Enhancing the resilience of people and place.
- 7. Other

The Commission plans to dedicate some time to this topic, including an upcoming session with City officials on the details of the plan.

Internal Analysis Team Discussion

The Commission met with the eight internal analysis teams (IATs) during the February 7 and February 21 Commission meetings to discuss their interim reports and progress to date. The Commission held a discussion during the March 27 meeting to reflect on the work of the IATs and provide any supplemental guidance to the teams before their report deadline of April 24.

A priority focus of the discussion was on equity and climate justice. This topic is relevant to all IATs and the broader work of the PCCN. Each team is being asked to provide a discussion of specific environmental justice implications associated more broadly with the team's subject area, as well as the specific considerations that are associated with each of the team's prioritized recommendations, and to work with the PCCN equity and climate justice subgroup for guidance.

Another topic of focus was greenhouse gas emissions accounting. Several Commissioners proposed that the IATs be directed to frame their recommendations in the broader context of the emissions contribution their topic area represents, and, where possible, to quantify that contribution and the effect of their recommendations. Others recommended that such quantification be coordinated centrally and provided to the IATs via the PCCN's carbon accounting sub group. The Commission is asking that IATs inform their proposed solutions and recommendations with the quantification of the greenhouse gas emission impacts of the topic area. The PCCN also asks that the teams provide a description of current limitations and ideas for how measurement can be improved going forward. The carbon accounting sub group will continue to assist IATs with their greenhouse gas emissions accounting to facilitate consistent methodology and metrics.

There was also a discussion on how the IATs share their work with the UM community and public. The IAT final reports and recommendations will be made publicly available along with the PCCN's final report. Along the way, the teams have been engaging and working with both internal and external stakeholders to ensure their work is not being completed in a vacuum. For more information on the UM departments and staff the teams are engaging in their work, see the team pages on the PCCN website. Furthermore, the teams have also held various engagement events across the three UM campuses. For more information on past public events, see here.

Process Considerations Through Phase Three

The Commission held a discussion on its process for operation as it moves into phase three of its work in May 2020. Topics included decision-making, final report writing, public engagement, and potential decision-making tools.

There was discussion of the model being built by the carbon accounting subgroup, which could aid decision-making during the summer retreats. The subgroup is seeking input from the broader

Commission to inform the parameters of the model, which will be presented in more detail at an upcoming Commission meeting.

Commissioners shared their individual ideas around priority areas for Commission process as the work moves into the third phase. Some ideas that were raised included:

- Using an outside facilitator to aid in productive discussions and eventual decision-making.
- Creating a decision matrix to put a quantitative value on potential recommendations based on the key elements outlined in the President's charge.
- Establishing a decision-making process with clear protocols for what constitutes a decision, as well as ways to reflect levels of support and dissenting perspectives.
- Using an outside writer to assist in writing the PCCN's final report.
- Engaging broadly with key stakeholder groups in the final phase of the process.

Utility-Scale Transition Plans with DTE and Consumers Energy

As part of the level-setting process, the Commission heard from DTE and Consumers Energy representatives about their plans to reduce emissions from the generation of electricity, and each utility's initiatives to help residential, commercial and industrial customers decarbonize their purchased electricity. Presently, Consumers has a goal to achieve net zero carbon emissions for its electricity business by 2040 and DTE has a goal to do the same by 2050.

Key areas presented included: energy efficiency incentive programs; voluntary renewable energy programs; voluntary green gas programs, energy management and waste reduction programs; and demand response and electric vehicle integration programs.

In the discussion of energy efficiency incentives, it was noted that incentives may be available to help the University offset the costs of deep energy retrofits of existing buildings.

Another topic focused on was how decarbonizing scope 2 emissions can be done in a scalable and transferable way. As heating loads shift from natural gas-fired equipment toward electric equipment throughout the state, it will pose challenges for the electrical grid with regard to capacity and reliability, which will require greater investments in transmission and distribution infrastructure. The electrification of heating would swap demand peaks from peaking in the summer to peaking in the winter, which would alter the load profiles and electricity generation needs.

There was also a discussion about the potential for scalable renewable natural gas. Existing utility programs could cover about 10% of the University's natural gas demand with renewable natural gas (e.g., from landfill methane recovery). However, renewable natural gas comes with a price premium of about 4-6 times that of the commodity cost of natural gas and there is no visible pathway for scalability, presenting significant challenges with respect to two key considerations mandated in the commission's charge (i.e., financially responsible and scalable/transferable).