President's Commission on Carbon Neutrality

Commission Meeting #17 2/20

20 February 2020 /1:30 PM/ NORTH CONFERENCE ROOM, GRAHAM

ATTENDEES

In Person:
Hank Baier, Liz Barry, Andrew Berki, Anthony Denton, Stephen Forrest, Austin Glass, Jennifer Haverkamp, Brandon Hofmeister, Andrew Horning, Greg Keoleian, Larissa Larsen, Jonathan Overpeck, Barry Rabe, Camilo Serna, Anna Stefanopoulou, Missy Stults, Logan Vear, Lisa Wozniak

Regrets:
Valeria Bertacco

NOTES

Updates

2/20/2020 Regent's Meeting

The Commission held a brief discussion on some of the key outcomes from the 2/20/2020 Regent's meeting. For more information on the outcomes see here.

New Transportation Facility

The Regents approved construction of a new 70,000 square-foot operations and maintenance building. The design will include the capability to maintain electric buses. The facility will be built in a location that is currently used as a laundry facility. Michigan Medicine has entered into a joint venture with Henry Ford Health System and Saint Joseph Mercy Health System to build and use a new, high-efficiency, state-of-the-art laundry facility in Detroit. For more information, see here.

UM Earth Day at 50

The Commission also shared information about the Earth Day at 50 events and teach-ins coming up in March. For more information on all of the festivities, see here.

DTE Energy

There was a brief discussion of the Michigan Public Service Commission's (MPSC) recent request for DTE to pursue more aggressive energy efficiency targets. MPSC would like to see DTE set its energy efficiency targets at 2% as opposed to its previously proposed 1.75% target. DTE will bring a revised proposal back to the MPSC soon to seek approval.

Summer Commission Meetings

The Commission has planned several full-day retreats over the summer months. Process planning for these retreats is underway.

Internal Analysis Team Sessions

The Commission held its second round of interim progress Q&A sessions with four internal analysis teams. Each team fielded questions from the Commission for 20 minutes.

See the meeting minutes from 2/7/2020 for a summary of the other four internal analysis team sessions with the Commission.

Bio sequestration Team

Faculty Co-leads:
Heather Dawson and Rebecca Tonietto

Student Research Assistants:
Nicole Blankertz, Hannah Mosiniak, Lara O'Brien, Caleb Short, Chenyang Su, Cyrus Van Haitsma

The bio sequestration internal analysis team has utilized ArcGIS and imagery to apply land use and land cover classification methods to UM properties, including the SEAS off-campus land holdings, the UM Biological Station, the Matthaei Botanical Gardens, and the UM-owned field station in Wyoming. The team has also analyzed above and below ground systems to estimate the carbon storage of the properties. Additionally, the team has conducted and compiled research on bio sequestration methods, including those used by comparable institutions.

The team purposefully elected to rely on published literature for carbon sequestration rates and does not plan to develop new calculation methods as part of its work. The rate of sequestration is an extremely complicated number to estimate. It requires the age and species-specific data on each tree or plant present on each of the land holdings. This data does not currently exist and is beyond the team's provided timeframe.

Drawing on published literature, the team will address potential sequestration rates of UM land holdings, and will summarize various habitat types, along with sequestration potential associated with different land use changes. This information will be necessary for the Commission to know quantitatively which recommendations would make a meaningful difference in terms of carbon emissions.

In addition to analysis of UM's large land holdings, smaller scale projects are also being considered as a potential way to bring the likely unfamiliar ideas of bio sequestration to campus in a more tangible and visible way. Through engagement with stakeholders across all three UM campuses, the team emphasized that even things such as tree plantings need to be approached with sensitivity to the city's socio-economic factors, cultural norms, and historic relationships.

The team had not yet included previous indigenous land and land origin issues in its work as an equity concern, but plans to look into this further as it develops its recommendations.

Commuting

Faculty Lead:
Jonathan Levine

Student Research Assistants:
Griffin Barron, Samuel Maves, Abas Shkembi, Gwyndolyn Sofka, James Wooldridge

The commuting internal analysis team has been researching parking policies as a potential direction of reform based on practices at other campuses; analyzing the carbon impact of the commute to the University of Michigan across all three campuses; conducting town halls and online surveys on the Dearborn, Flint and Ann Arbor campuses; and engaging with key internal and external stakeholders to inform the team's work.

The team has identified many different policies and areas of focus in its report. The team plans to prioritize these policies based on emissions reductions potentials and perhaps cost savings over time.

The team is also working closely with the City of Ann Arbor. Specifically, the team is thinking about ways to extend proposed transit options to both move individuals between campuses but also to campus from outlying areas of Ann Arbor to help UM and the City of Ann Arbor meet their goals.

A major stream of work coming out of the commuting team's analysis is potential parking pricing policies. The team is exploring a variety of parking pricing strategies through its work.

The team is also looking into on-campus low-cost housing development as a strategy to reduce the carbon intensity of the commute.

Food

Faculty Co-leads:
Lesli Hoey & Andy Jones

Student Research Assistants:
Caroline Baloga, Sarah Bellaire, Rebecca Harley, Marc Jaruzel, Nathalie Lambrecht

Activities of the food internal analysis team have included: analyzing the carbon footprint data and cost estimates of MDining's Sustainable Mondays, as compared to a typical menu day serving more meat; exploring peer institutions practices towards sustainable food; hosting town halls across all three UM campuses; outlining a UM food systems map showing dining operations, retail, catering, etc.; and collecting RFP and contract language from procurement offices at peer institutions to improve GHG-related tracking and sustainability practices of food vendors and operators.

The team has been working on a national scan of universities and institutions to inform its work. Through this effort, it has obtained some of the contract language that other institutions use to influence more sustainable food procurement, as possible examples for future UM procurement contracts.

Commissioners noted that the UM President's Advisory Committee on Labor Standards and Human Rights is tackling issues relating to labor issues in the production of UM goods (items sold with the University of Michigan's name, logos, or other symbols). This issue of supply chain

and changing vendor code is an open issue where there may be potential synergies or conflicts between food sourcing and this Committee.

The team has also been speaking with a variety of institutions and examining literature on the topics of differential pricing and social psychology. More specifically, the team has thought about choice architecture, among other strategies. The dining halls are already doing a lot of these strategies, such as, taking back the control of serving proteins, serving proteins last, rebranding of plant-based alternatives, etc.

As far as differential pricing, dining halls are the vast majority of food on campus, and trying to add in differential pricing would create an extremely complicated meal-service system versus the current unlimited swipe system.

Collecting complete data across the many different internal and external pieces of the UM food system has been a challenge. The team is exploring mechanisms to make accounting for emissions from the food system a more straightforward process in the future.

University Travel

Faculty Co-Leads:
John Williams and Ming Xu

Student Research Assistants:
Hyo Sub. Choi, William Chown, Jiangzhou Fu, Nate Hua, You Lyu, Monica Yen

The university travel internal analysis team has been working to establish methods to calculate GHG emissions for university travel and is using them to estimate emissions from over 12,000 trips compiled from a variety of data sources across UM's campuses. They have also developed and issued a survey to faculty, staff and students across UM that is designed to assess motivations for university travel and to characterize willingness to reduce and mitigate travel. The team is also exploring various strategies to reduce the amount of university travel.

The team's scope includes all travel paid for by the University, including cases where the University pays for non-UM individuals to travel to campus.

Through its work, the team is considering strategies to reduce the need for UM faculty, staff and students to travel. A major driver of travel is to attend conferences. It is probably not likely that UM or any single university could alter academic norms around conference attendance, but this potentially is an issue that UM could take up in partnership with our peer institutions through groups we are a part of (e.g., UC3, Ivy League +, ASHAEE STARS, AAU) to help create a culture shift away from unnecessary conference attendance.

The team is also exploring a potential carbon fee for traveling based on mode and mileage.