## President's Commission on Carbon Neutrality

# Commission Meeting #16 2/7

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

#### **ATTENDEES**

In Person:

Hank Baier, Anthony Denton, Stephen Forrest, Austin Glass, Jennifer Haverkamp, Brandon Hofmeister, Andrew Horning, Greg Keoleian, Jonathan Overpeck, Barry Rabe, Camilo Serna, Anna Stefanopoulou, Logan Vear, Lisa Wozniak

By Phone (for part or all of the meeting): Liz Barry

Regrets:

Andrew Berki, Valeria Bertacco, Larissa Larsen, Missy Stults

#### **NOTES**

The Commission held interim progress Q&A sessions with the first four of the eight faculty-led internal analysis teams. Each team fielded questions from the Commission for 20 minutes.

The remaining four teams will meet with the Commission on 2/21/2020.

## **Building Standards**

Faculty Co-leads:

Lars Junghans and Jen Maigret

Student Research Assistants:

McHugh Carroll, Hannah Irish, Mitch Mead, Shuhaib Nawawi, Kay Wright

The <u>building standards internal analysis team</u> has undertaken a range of research inquiries intended to achieve optimized outcomes that exceed the benefits of any specific code or standard's impact when understood within a more relational and integrated context. The team has been examining efforts at comparable universities and analyzing current Leadership in Energy and Environmental Design (LEED) version 4.1 strengths and weaknesses from a net-zero emissions standpoint. They have also been working to develop a more holistic framework for a multiple objective optimization algorithm that brings economic considerations to bear on the decisions regarding architectural and building systems approaches to reduce emissions.

There was also a conversation focusing on the emissions associated with existing buildings, and the decision-making process when determining whether to construct a new building or rethink existing spaces. It was noted that the Space Planning & Utilization office within the Office of the Provost is the primary point of contact for these issues and is involved with a variety of related issues. The office has many resources on best practices related to space utilization and allocation.

Finally, the team noted that the university standards currently in use by Architecture. Engineering and Construction exceed State of Michigan building codes. Noting that the original purpose of building codes was to ensure public safety in the built environment, the team's approach to building standards models is to reconceptualize building codes more generally to include the consideration of greenhouse gas emissions within the realm of the protection of life safety.

#### **Campus Culture and Communication**

Faculty Co-leads: Samer Ali and Joseph Trumpey

Student Research Assistants:

Meg Czerwinski, Ben Ingall, Lisa Maillard, Chris Merchant, Madeline Peery

The campus culture and communication internal analysis team has been working to clarify challenges related to their broad scope, and has been developing practical approaches to culture change at UM. The team has divided into two sub-teams: one focusing on behavioral and organizational issues, and another focusing on the UM Diversity, Equity and Inclusion (DEI) strategy as a potential model for carbon neutrality at UM.

The team is looking to the most recent institutional change at the University level, DEI, as a potential model for what a top-down and bottom-up approach to carbon neutrality and perhaps broader sustainability at UM could look like. The team is working to develop both formal and functional analogues as well as to identify the key areas where the carbon neutrality model may differ from DEI. Like DEI, the team is exploring what centralized organizational structures and leadership positions may be needed to ensure accountability and drive progress across the university.

The group also discussed identifying ways to ensure that everyone in the UM community is invested in, and has accountability for, helping to drive progress on reducing University emissions. The UM community is 80,000 people strong, and has the ability to have a large impact through small culture and behavior changes. These behavior changes may be especially important in areas where there aren't a lot of other technological fixes to the challenge, such as commuting or university-sponsored travel.

There was also a brief discussion on climate literacy programming for faculty, staff and students, and the value of such programs being ongoing throughout each group's time at the university.

#### **Energy Consumption Policies**

Faculty Lead: Tom Lyon

Student Research Assistants:

Jessica Carlin, Lyanda Dudley, Taylor Lind, Larson Lovdal

The energy consumption policies internal analysis team has focused primarily on two potential policy measures: 1) an internal carbon tax, and 2) a revolving energy fund (REF). The former would provide a consistent price signal across business units corresponding to the external impacts of GHG emissions and an incentive for greater energy efficiency at the unit level. The tax would generate funding for the REF, which would allow business units to invest in energy conservation measures.

Currently the team has focused its work on scope 1 and 2 emissions. The team has not yet considered how a carbon price would work with scope 3 emissions categories, such as university-sponsored travel or commuting, but sees potential value in using a common carbon price across emission scope categories.

#### **External Collaboration**

Faculty Co-leads:
Andy Hoffman and Trish Koman

Student Research Assistants: Gopichand Alla, Amelia Brinkerhoff, Zoie Chang, Wenjie Liu, Erin O'Shaughnessy, Joe Samulski, Anya Shapiro

The external collaboration internal analysis team has begun creating foundations for engagement on each of the three UM campuses through a variety of meetings and conversations with key stakeholders. The team has also worked to coordinate across the eight internal analysis teams to understand each team's external engagement needs, and has benchmarked peer institutions to identify best practices.

The group also discussed the importance of engagement to ensuring that UM's solutions are scalable and transferable. The team plans to identify formal external networks for universities, cities, and other institutions in this space to identify potential opportunities for UM to share what it learns through this process. The team is also thinking about opportunities that these networks might have to influence environmental standards by working together.