

Carbon Neutrality Task Force Meeting Minutes
Friday, December 3, 2021

Attendees: Gavin Leach, Cindy Paavola, Kathy Richards, Brandon Sager, Jim Thams, Mike Bath, Sarah Mittlefehldt, Jes Thompson, Randy Klitzke, Bethany Beavers

Absent: Nicole Shoup

1. Approval of Past Meeting Minutes
 - a. November 12, 2021-no corrections required.
 - b. November 19, 2021-one correction to bullet point in item 1, add “Collaborate with Michigan Tech University to” create a STEM center for researching climate innovations.
 - c. Motion to approve minutes from November 12 and 19, 2021 with noted correction to November 19th minutes was made by Jess Thompson, seconded by Jim Thams. Motion carried.
 - d. A Carbon Neutrality Task Force Web page will be established that is linked to both the Sustainability and Strategic Plan pages. Jes Thompson and Cindy Paavola with work with Marketing and Communications to establish the Carbon Neutrality Task Force page. The approved meeting minutes will be posted to this webpage.

2. Reviewed the recommendations in the Northern 2030 Sustainability Plan (see attached) as to guide the development of the university’s carbon neutrality plan.
 - a. Upon review, the first recommendation, Strive for Carbon Neutrality, and its three listed initiatives were agreed upon to be the focus of the Carbon Neutrality Task Force.
 - b. The Sustainability Advisory Council will focus on the four other 2030 sustainability plan recommendations including improving water and recycling, protecting fresh water, promoting education and awareness and building local partnerships.
 - c. Discussion noted that the three carbon neutrality initiatives should be written more broadly. For example, “solar investment” should change to “renewable energy investment” and “electric vehicles” should include “hybrid vehicles.” The transportation initiative may be expanded to include grounds maintenance equipment.
 - d. Mike Bath noted that the NMU Police Department has ordered their second hybrid vehicle, hybrid 2021 Ford Explorer. Their first hybrid vehicle was being put into use that night; it took 9 months to receive it from time of order. Mike will report back on its performance in the cold weather and logistics of hours of run time versus available recharge time.

3. Continued reviewing Carbon Neutrality Task Force Areas of Focus (see attached).
 - a. Areas that will be part of Campus Energy Master Plan (CEMP) process are noted. These focus areas will be informed by technical recommendations from Black & Veatch, the engineering consultant, contracted by the university to

develop the Campus Energy Master Plan in support of planned future facility development on campus. The energy master plan will take seven months to complete and the process will begin in the next few weeks. The consultant will engage with the Carbon Neutrality Task Force in a future meeting to discuss the university's goals related to the carbon neutrality plan which will be used to inform their recommendations for the Campus Energy Master Plan.

- b. Areas that can be worked on alongside of the Campus Energy Master Plan development are listed in the attachment. The following assignments were made to begin gathering support data for review in the development of recommendations towards achieving carbon neutrality.
 - i. University-owned Vehicles: Jim Thams and Mike Bath will provide inventory and annual fuel usage.
 - ii. University-owned Grounds Equipment: Jim Thams will provide inventory and annual fuel usage.
 - iii. Trees: Jim Thams will work with Sarah Mittelfeldt to have a student group/class inventory trees on university property via GIS app. Once the inventory has been completed, the university could complete a Tree USA application.
 - iv. Building Construction: Jes Thompson will forward information on LEED Zero certification to task force.
 - v. Space Utilization: Jim Thams will present the process used to evaluate and make decisions on space assignments and use on campus.
 - vi. Communication: Jes Thompson and Cindy Paavola will work on the development of the Carbon Neutrality Task Force webpage.
 - vii. Local Partnerships: In future meetings, invitations will be extended to representatives from Marquette County, City of Marquette and Marquette Board of Light and Power to share their plans of action towards carbon neutrality.
 - viii. Faculty/Staff/Student Commuting: Potential sources of data to evaluate include vehicle registrations, campus survey, MarqTran county-wide ride data.
4. Mike Bath reported that NMU was gifted two Adirondack chairs that were made from the single-use nitrile gloves the university has recycled through the pandemic. The full story can be read at <https://news.nmu.edu/nmu-gifted-chairs-made-recycled-gloves>.
5. Next Scheduled Meeting: December 10, 2021, 10 am-Cancelled due to BOT Meeting
6. Next Meeting: Friday, January 21, 2022 at 11 am.
 - a. Future Agenda Items
 - i. Prioritize areas of focus based on cost and impact
 - ii. Set goals and define boundaries of each goal; share with engineering consultant in subsequent meeting
 - iii. Determine how progress will be measured for each goal
 - iv. Experience exchange with potential local partners

v. Review of campus space use analysis process

Northern 2030 Sustainability Plan Recommendations

(CNTF-Carbon Neutrality Task Force, SAC-Sustainability Advisory Council)

1. Strive for Carbon Neutrality-(CNTF)
 - a. Solar Investment (transition to at least 35% renewable energy by 2030)
 - b. Improvement of infrastructure and energy efficiency in existing and future facilities on campus
 - c. Replace 50% of NMU's current transportation fleet with electric vehicles by 2030, with complete transition by 2050

2. Improve Water & Recycling-(SAC)
 - a. Implement waste & waste diversion tracking systems to provide baseline metrics on recycling rates as well as electronic, organic and office waste
 - b. Increase institutional recycling rates by 10%
 - c. Reduce institutional waste by 10%
 - d. Implement composting systems on campus and create dining alternatives

3. Protect Fresh Water-(SAC)
 - a. Reduce water usage by 30% by replacing water fixtures with more efficient technologies such as waterless urinals and increasing the number of dual flush toilets
 - b. Expand stormwater management efforts by increasing the number of permeable pavements, vegetative swales and other examples of green infrastructure on campus

4. Promote Education and Awareness-(SAC)
 - a. Implement a new general education "additional requirement," much like the World Cultures requirement, that requires students to take at least one course that is either focused on sustainability or inclusive of sustainability.
 - b. Develop certificate programs in sustainability.
 - c. Provide an educational training program to faculty about integrating sustainability into their curriculum across all disciplines.
 - d. Incorporate sustainability in new student orientation and tours.

5. Build Local Partnerships-(SAC)
 - a. Create a Sustainability Hub for Innovation and Environment (SHINE) to help NMU cultivate relationships with sustainability-related organizations in the region and to facilitate sustainability work across campus
 - b. Increase local food purchasing on-campus to 18-20%

Areas of Focus for Sustainability Plan and Carbon Neutrality Plan

SUSTAINABILITY PLAN

Waste Minimization/Diversion

Recycling

Composting

City Water Use Reduction

Storm Water Diversion

Education & Awareness

Employee Educator Program

Promoting Bicycle Use

Purchasing Policies

Sustainability Curriculum

Research

Food & Dining

Green Fund Application Review

Wellbeing & Work

Assessing Diversity and Equity

Communication

Local Partnerships

CARBON NEUTRALITY PLAN

Carbon Emissions-*Need Greenhouse Gas Inventory*

Energy Efficiency/Conservation-Electric and Gas-*Part of CEMP Process*

Sourcing of Electricity-*Part of CEMP Process*

Natural Gas for Ripley Plant-*Part of CEMP Process*

Natural Gas-Heating for Other Buildings-*Part of CEMP Process*

Refrigerants-*Part of CEMP Process*

Renewable Energy-*Part of CEMP Process*

Renewable Energy Credits-*Part of CEMP Process*

Air Conditioning-*Part of CEMP Process*

Natural Gas for Cooking-*Impacted by CEMP Process*

University-owned Vehicles

University-owned Ground Equipment

Trees

Building Construction

Space Utilization

Communication

Local Partnerships

Faculty/Staff/Student Commuting