

UMBC Climate Action Steering  
Committee  
Meeting Minutes

# Spring 2022 Meeting

## Attendees

Claire Runquist, Ryan Kmetz, Charlie Hogan, Chuck Boddy, Jason Loviglio, John Zahor, Linda Zepp, Emily Faber, Julianne Simpson, Kathy Dettloff, Larry Hennessey, Lenn Caron, Lydia Stamato, Maggie Holland, Molly Power, Sarah Fouts, Sharon Paul, Shawn Blum, Steve Pitts, Susan Sterett, Bharat Prakash, Hasan Mahmud Prottoy, Dawn Biehler, Matthew Baker

## Minutes

1. Introductions: Ryan, Lenn, Kathy, and Working Group Chairs
2. **Working Group Updates** (25-30 mins, 3-5 mins per group)
  - a. Academics, Outreach, and Engagement (M. Holland - GES Faculty)
    - i. Has met twice, with the second meeting being larger and with greater representation
    - ii. Discussions of how to better categorize and advertise courses across campus with regard to sustainability/climate change and have it more integrated across departments for information sharing (some of this happening on the Sustainability website)
    - iii. Working on proposing a general education requirement for sustainability/climate change
    - iv. Possibility of developing a minor (where it would be housed, what it would look like)
    - v. Tying courses and offerings that we offer across the university to the Sustainable Development Goals
    - vi. Would like a more coordinated effort around Earth Week and have an academic engagement presence. Lots of previous efforts were paused due to the pandemic.
  - b. Energy (S. Blum - Campus Energy Manager)
    - i. Lean and green approach (using less energy, electricity, and stationary combustion—natural gas) and working to get more electricity from renewable sources
    - ii. Progress from 2007-2021: The campus has grown 25% and the student population has grown by 16% and more people living on campus—and electricity use has gone down by 17% over that time period. Half of our carbon footprint reduction is due to reduced energy use and renewables.
      1. Renewables have gone from 2.5% in 2007 to 42% in 2021
    - iii. Focus on low-cost initiatives, the projects that we have invested in have started to pay off (e.g. set point controls, air handler controls, building automation systems, energy management systems, and better preventative maintenance procedures)
    - iv. Going forward challenges include campus continuing to grow as well as legislation pushing renewables, which is a good thing, but we are focused on doing so in a cost-effective way
    - v. Current renewable energy sources include wind and solar (direct purchasing agreements and renewable energy certificates)

1. One Solar PPA (and retained RECS) and Two Wind PPAs account for ~15% of UMBC's renewable energy the other X% comes from Green-e Wind RECs
- c. Climate Resilience (R. Kmetz - Dir. Sustainability)
    - i. Met in fall 2021
    - ii. Heat island impact of campus on the surrounding area
    - iii. Vulnerability of campus and surrounding area to floods
    - iv. Starting a program this fall to evaluate the impact of plants (invasive species) on campus as we adapt to climate change and the impact on our flora and fauna
    - v. When the campus updates the campus tree inventory we will be doing a climate vulnerability assessment (pest, disease, other climate impacts) and tie it into a maintenance and replacement process over the next 20-40 years
  - d. Transportation (C. Boddy - Dir. Parking and Transportation)
    - i. Met twice this calendar year so far
    - ii. Installed 17 additional EV charging stations on campus (March 2020)--19 total charging stations
    - iii. Hosted Bike to Work event at OCA Mocha, pretty solid turnout for the inaugural event and already making bigger, better plans for next year
    - iv. Used to have a carpool platform (Zim ride) closed during the pandemic and are looking at options to bring it in-house and started in early spring, but over conversations with General Counsel, have decided to use a 3rd party app
    - v. 700 staff/faculty teleworking, 38 working remotely completely, which drastically impacts transportation GHG emissions
    - vi. ~100 less faculty/staff and ~1200 fewer student parking permits in Academic Year 21-22
    - vii. Fewer public transit stickers were given out to employees (17 stickers issues)
    - viii. Next year: coordinate a campus-wide sustainability message from a transportation perspective.
    - ix. Working on how we can implement the Climate Action Plan initiatives through working with other campus services (Residential Life, Transit, etc.), balancing costs
    - x. Has there ever been a green fee discussed? There have been discussions about that as a way to pay for sustainability initiatives and started by doing some benchmarking from other universities--ran into the challenge of how to get it approved and implemented
  - e. Waste (C. Hogan- Manager Landscape and Grounds)
    - i. Started a plastic film recycling program (about 2 years ago) which is paying off well--baling shopping bags, plastic shrink wrap film, and pretty much any soft plastic and it's taking plastic out of the waste stream
    - ii. Cardboard that we have been baling--doing more than we ever have (could be related to the number of people on campus)
    - iii. Students very interested in composting has been a common theme in the past couple of years--very interested in composting and did a Residential Composting Pilot this past school year. Interest in where compost is going, how it's being composted, hauling, etc.

1. Students are very aware of education and the importance of that tied to compost on campus—it's always been a challenge on campus (lots of contaminated compost)
- iv. Presentation from Lydia Stamato (Ph.D. student) on behalf of the ad-hoc compost group. Group came together this past semester to look at the role of UMBC in environmental justice and composting
  1. Working to support the Zero Waste group via the South Baltimore Community Land Trust in environmental justice pursuits—these community leaders have been fighting for environmental justice and they are working on a community-led compost facility
  2. UMBC signed a commitment to send our compost waste to the South Baltimore site (inspired by work at Hopkins)
  3. Conducted a survey at UMBC about compost infrastructure and behavior on campus and results indicate that people are unsatisfied with current compost and that more education is also needed
  4. Working on a small grant with Public Policy and Media Communications to help with education and capacity building—digital storytelling
3. **Maryland Climate Solutions Now Act Overview** (15 mins)
  - a. Introduced in 2022 session, passed but didn't get signed/vetoed by Hogan
    - i. Additional related bills did not pass but will be looked at again in the future (ran out of time)
    - ii. Emissions Reductions Requirements: reduce GHG emissions by 60% based on 2006 baseline and statewide net-zero GHG emissions by 2045. MDE is tasked by developing a plan by next year (including net economic benefits and net employment increase)
      1. UMBC needs to figure out how to shed 18,500 MTCO<sub>2e</sub>/year over 10 years (numbers from the past few years are anomalous)
    - iii. Zero Emissions Vehicles: battery-electric, plug-in electric, or hydrogen. By FY30 100% ZEV state fleet owned passenger vehicles and by FY36 light-duty vehicles must be 100% ZEV
      1. 105 fleet vehicles (of ~170) are passenger or light duty vehicles)
      2. Facilities Management has the bulk (55) Res Life is second (10)
      3. ZEVs are in short supply and in high demand
      4. We need an electrical infrastructure upgrade to support this
    - iv. New Construction and Renovations: net-zero direct GHG emissions by 2035
      1. Adopt the 2018 International Green Construction Code (we use the older version already)
      2. MDE to develop building emissions standards that considers energy use intensity based on building type
      3. By 2025 building owners are required to annually report direct emissions
      4. We will be required to report our emissions (we already do this voluntarily)
      5. The fee for non-compliance would be the social cost of carbon (\$51 per ton of carbon currently)
      6. Will require building-level energy data (sub-metering)
      7. Supports a move away from natural gas but within a national grid that can't necessarily support that

- v. Electricity: By 2030, 75% of electricity must be from low carbon renewable energy sources (geothermal, wind, solar, hydrogen)
    - 1. We had originally targeted 2050 for net-zero but will be reevaluating
  - vi. Planning Considerations: must identify and recommend specific changes to help mitigate and adapt to climate change
  - vii. Environmental Social Justice: consider the impact of decisions on vulnerable communities
  - viii. What's Next? Clarification from USM and MDE, FM is working on estimating budget implications, SWOT Analysis needed? Climate Action Plan Revision needed?
4. **Open Discussion** (10 mins)
- a. Currently very difficult to access electric vehicles (John Zahor). They've been unable to find and source electric vehicles (or even hybrid vehicles)

## References & Resources

Powerpoint Link: <https://umbc.box.com/s/dz5vuww5c4sspuan7u7wmohodda417>