

University Sustainability Council

Carbon Neutral Commuting and Fleet Work Group

University Sustainability Council Work Groups

The University Strategic Plan established the goal for the University of Maryland to “become a national model for a Green University.” UMD is making significant progress toward that goal, but much work remains to integrate sustainability into the core of campus operations, teaching, and service. The University Sustainability Council exists to advise the President, the Office of Sustainability, and the campus community on strategies for achieving UMD’s sustainability objectives.

The University Sustainability Council annually reviews general progress on the University’s Climate Action Plan (CAP), trends in selected campus sustainability metrics, and UMD’s recent performance on the Sustainability Tracking, Assessment, and Rating System (STARS). This review and assessment process reveals priority areas where leadership and focused work is needed. The Council, currently chaired by Carlo Colella, Vice President for Administration and Finance, created the following campus-wide work groups to develop recommended goals, plans, and strategies:

- Sustainable Buildings and Energy Sources
- Sustainable Water Use and Watershed Protection
- Education for Sustainability
- Carbon Offsets

Carbon Neutral Commuting and Fleet Background

UMD is making progress toward its goal of carbon neutrality. Between 2005 and 2017, UMD reduced its greenhouse gas emissions by 49%, almost meeting its 2020 goal (50% reduction) three years ahead of schedule. The university’s remaining greenhouse gas emissions essentially come from just three sources: on-campus heat and power generation, commuter vehicles, and the UMD fleet.

Building on UMD’s progress, the UMD Student Government Association (SGA) recently called on the university to accelerate climate action and requested specific changes including:

- 1) Asking to use revenue from the Student Sustainability Fee, a mandatory fee paid by fulltime undergraduate students, to purchase verified carbon offsets to neutralize 100% of undergraduate student commuting emissions. This request received unanimous support from the SGA Legislature and was approved by the University Sustainability Council. UMD will begin offsetting undergraduate commuting emissions for 2018.
- 2) Asking the University Sustainability Council to create a work group to recommend options for achieving carbon neutral faculty, staff, and graduate student commuting by 2025.

- 3) Asking the University Sustainability Council to create a work group to recommend options for achieving carbon neutrality for the UMD fleet by 2025.
- 4) Asking the University President and Sustainability Council to move UMD's carbon neutrality target from 2050 to 2025 to align with recommendations from the climate science community.

UMD is currently exploring options for reducing emissions from on-campus heat and power generation. As UMD works toward these solutions, it must also develop a carbon neutral solution for commuting and fleet in order to achieve its goal.

As of 2017, UMD's total commuter carbon footprint was 33,160 metric tons of carbon dioxide equivalent (MTCO_{2e}). The breakdown per commuter group is estimated to be:

- Faculty/Staff Commuters: 15,553 MTCO_{2e}
- Undergraduate Student Commuters: 11,570 MTCO_{2e}
- Graduate Student Commuters: 5,893 MTCO_{2e}

CAP 2.0 established several strategies for reducing commuting emissions. These include improving fuel efficiency of commuter vehicles (estimated 8,404 MTCO_{2e} reduction by 2025), increasing the use of carpools and vanpools (estimated 1,595 MTCO_{2e} reduction by 2025), and encouraging ridership on the Purple Line commuter light rail (estimated 425 MTCO_{2e} reduction by 2025). However, UMD has not yet identified strategies for achieving carbon neutrality for commuting (by 2025 or 2050).

As for the UMD fleet, specific strategies for reducing emissions have not been identified. CAP 2.0 sets a goal to reduce grounds and landscaping emissions incrementally and achieve carbon neutrality for landscape maintenance by 2050. However, UMD has not yet identified strategies for reducing emissions from its fleet of 1200+ vehicles and 200+ mowers, loaders, leaf blowers, and other fossil fuel powered equipment. As of 2017, UMD fleet emissions equaled 7,891 MTCO_{2e}.

Work Group Objectives

A Carbon Neutral Commuting and Fleet Work Group should develop recommendations for the University Sustainability Council that meet the following objectives:

Commuting Subgroup Objectives

Objective 1: Develop strategies for achieving carbon neutrality (net zero greenhouse gas emissions) for faculty, staff, undergraduate, and graduate student commuting.

Objective 2: Differentiate strategies and estimate costs for achieving carbon neutral commuting in 2020, 2025, and 2050.

Objective 3: Recommend funding sources for each cost.

Objective 4: Consider how to shift costs associated with carbon neutral commuting for undergraduate students from the University Sustainability Fund (Student Sustainability Fee) to another funding source.

Objective 5: Allow for carbon offsetting to be part of the strategy for achieving carbon neutral commuting.

Fleet Subgroup Objectives

Objective 1: Develop strategies for achieving carbon neutrality (net zero greenhouse gas emissions) for the UMD fleet.

Objective 2: Differentiate strategies and estimate costs for achieving carbon neutral fleet operations in 2020, 2025, and 2050.

Objective 3: Recommend funding sources for each cost.

Objective 4: Allow for carbon offsetting to be part of the strategy for achieving carbon neutral fleet operations.

Potential Work Group Members

Commuting Subgroup

David Allen, Executive Director, Department of Transportation Services

Anna McLaughlin, Assistant Director, Department of Transportation Services

Scott Lupin, Director, Office of Sustainability

Mark Stewart, Manager, Office of Sustainability

Sally DeLeon, Senior Project Manager, Office of Sustainability

Amelia Avis, Undergraduate Student Representative, University Sustainability Council

Tim Reedy, Graduate Student Representative, University Sustainability Council

TBD, Faculty Representative, University Sustainability Council

Fleet Subgroup

David Allen, Executive Director, Department of Transportation Services

Scott Lupin, Director, Office of Sustainability

Mark Stewart, Manager, Office of Sustainability

Sally DeLeon, Senior Project Manager, Office of Sustainability

Sue Nash, Interim Director, Business Services

Leigh Remz, Manager, Motor Transportation Services