

In 2011, the University of Minnesota's Twin Cities Sustainability Committee developed a campus climate action plan (CAP) as a signatory to the American College and University Presidents' Climate Commitment and to implement University of Minnesota sustainability goals. The CAP identifies specific strategies for reducing greenhouse gas emissions and moving the campus on the path to climate neutrality by 2050.

The Sustainability Committee, a standing body charged by the president, is a representative group of faculty, staff and students co-chaired by the Associate Vice President of Facilities Management and the Head of Horticulture Science Department. The committee includes staff from Facilities Management and other University Services units.

The CAP builds on a foundation set by several years of related initiatives to advance sustainability broadly at the institution. These efforts include:

- Board of Regents Policy on Sustainability and Energy Efficiency:** This policy, adopted in 2004, defines sustainability as a "continuous effort integrating environmental, social and economic goals through design, planning and operational organization to meet current needs without compromising the ability of future generations to meet their own needs." It commits the University of Minnesota to incorporate sustainability into teaching, research, outreach and operations under the direction of six guiding principles: leadership, modeling, operational improvements, energy efficiency, research and education and outreach. The comprehensive nature of the policy supports decisions that will create healthier communities for the people of Minnesota.
- Energy Management Principles:** Informed by the regents policy, in 2005 the University's Energy Management unit established a set of guiding principles – Reliability, Environmental Stewardship and Cost Control. They serve as the paradigm for decisions on how to provide electricity, heat and cooling to campus. Emissions from energy account for 80% of the campus' carbon footprint.
- Professional Sustainability Staffing:** In 2008, the Twin Cities campus hired full-time professional staff focused on advancing sustainability efforts within operations and the curriculum, additional staff have been added since.



Benefits

Environmental Impact

The plan's proposed projects will reduce annual greenhouse gas emissions by 50 percent (or 321,000 tons) by 2020. In addition, it lays out reduction targets and broad strategies for years 2020 - 2050 to bring net emissions to zero. Other emissions and pollutants, such as mercury from coal burning, are also projected to be reduced under the plan.

Cost Savings

Projects proposed for the first 10 years of the CAP emphasize energy efficiency and cost savings. If implemented, the proposed strategies would result in \$15 million in annual operating costs avoided by 2020. The University has already achieved substantial cost savings by setting and achieving aggressive energy reduction goals. In fiscal year 2010, the campus reduced energy use by more than five percent, avoiding \$2.6 million in operating costs. Since then, additional goals have been set resulting in total savings in excess of \$4 million.

Bottom Line

Carbon footprint cut in half by 2020

- **Systemwide Sustainability Goals, Outcomes, Measures and Process:** In April 2008 University of Minnesota President Robert H. Bruininks established a 23-member systemwide committee composed of faculty, staff and students. The committee proposed goals and performance measures aligned with each guiding principle to facilitate implementation of the Board of Regents policy.
- **Twin Cities Sustainability Committee:** In April 2010, President Bruininks formed a committee of faculty, staff and students on the Twin Cities campus. The committee was charged with taking steps to advance sustainability broadly and implement the policy and its campus goals. The committee's mandate included completion of the campus' climate action plan.

The Twin Cities Sustainability Committee began meeting in the summer of 2010. Subcommittees were formed to develop specific sections of the CAP, including energy/operations, education/outreach and research. As an initial step, the energy/operations subcommittee proposed a date for climate neutrality and reduction targets, which was adopted by the Twin Cities Sustainability Committee. The committees then sought input broadly from the campus community on how to achieve climate neutrality. This input was collected from students, staff, faculty and neighboring communities through forums, presentations to university governance bodies, meetings with employees directly involved in implementation, discussions with city council members and an online idea submission form. In addition, a faculty science advisory group reviewed the ideas generated by the process.

The Twin Cities Sustainability Committee also analyzed the input to determine which specific strategies to pursue, and in what order. Strategies which provide an emissions reduction, save money and have other benefits will be implemented first. Strategies that result in a carbon reduction and other benefits, but are cost neutral or involve increased costs will be considered after cost saving options have been exhausted.



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President's Climate Commitment

In January 2008, University of Minnesota President Robert Bruininks signed the American College and University Presidents' Climate Commitment (ACUPCC), which unites more than 670 University presidents from around the country to support scientific consensus about adverse impacts of climate destabilization and global warming. As signatory, the President agreed the University would strive to achieve climate neutrality (i.e. to reduce greenhouse gas emissions from current levels to net zero) and that the institution would develop a plan for achieving this goal.

The spirit of the ACUPCC closely aligns with the direction set by the Board of Regents Sustainability and Energy Efficiency policy, as well as other efforts and initiatives, including:

- Adopting the Board of Regents Sustainability and Energy Efficiency policy in 2004 (http://www1.umn.edu/regents/policies/administrative/Sustain_Energy_Efficiency.pdf).
- Joining the Chicago Climate Exchange (<http://www.chicagoclimatex.com/>).
- Forming the Institute on the Environment, a center for discovering solutions for environmental problems through cutting edge research, partnerships and leadership development (<http://environment.umn.edu/index.html>).
- Creating sustainability goals, outcomes and measures for the University of Minnesota system (http://www.uservices.umn.edu/sustainableU/UM_Systemwide_Sustainability_Final_Report.pdf).

The ACUPCC is a natural extension of and complement to these efforts. Combined, these initiatives and many others have contributed to the University being a national leader in sustainability. In fact, the University of Minnesota was among the first large research institutions to become a signatory to the ACUPCC and the first Big 10 institution to do so. Since the University signed the commitment, two other Big 10 schools have joined – Ohio State University and the University of Illinois at Urbana-Champaign – and other Big 10 institutions have engaged in similar efforts to reduce their emissions.