

SUSTAINABILITY AND CLIMATE CHANGE THE UNIVERSITY OF MINNESOTA RESPONDS

We know that progress in fighting climate change is measured in the day-to-day commitments of individuals and communities, businesses and institutions.

At the University of Minnesota we are committed to doing our part and more, systemwide, and to sharing our success stories with colleagues across Minnesota. We can all learn from each other. And these lessons can help us create sustainable solutions that will serve generations to come.

WHERE WE HAVE BEEN AND WHAT WE ARE DOING

For more than a decade, the University of Minnesota has been a leader in tackling the challenge of climate change. In 2004 the University was one of the few higher education institutions to join the Chicago Climate Exchange, the first effort in the United States to create a market for capping and reducing greenhouse gas emissions. That same year the Board of Regents created the Sustainability and Energy Efficiency policy, directing the University to lead on sustainability, model solutions, and reduce emissions to the environment.

In 2008 the University made the bold decision to become a signatory to the Second Nature Carbon Commitment, (previously the American College and University Presidents' Climate Commitment). Since then the University has been implementing solutions consistent with these commitments and has achieved significant success.



2008

U of M becomes a signatory to the Second Nature carbon commitment

32%

Emission reduction systemwide since 2008

The goal is to become carbon neutral by

2020

for Morris campus

2030

for Crookston and Rochester campuses

2050

for the Twin Cities and Duluth campuses

EXAMPLES OF INVESTMENTS IN SUSTAINABILITY INITIATIVES





WATER STEWARDSHIP

WE COLLECT OVER 5 MILLION GALLONS OF RAINWATER EACH YEAR. That water is cleaned and reused for restrooms and for cooling buildings, reducing the amount of water that the University would otherwise need from municipal systems.





WE ADDED 1.8 MW OF NEW SOLAR INSTALLATIONS IN 2019 ON THE DULUTH, MORRIS, AND TWIN CITIES CAMPUSES. In 2018 the University used 55 million kilowatt hours of renewable energy, enough to power 5,000 homes for an entire year!





ENERGY CONSUMPTION

The greenest kilowatt hour is the one we never have to use.

SYSTEMWIDE WE HAVE MADE EXTENSIVE INVESTMENTS IN

ENERGY CONSERVATION AND EFFICIENCY. By implementing district energy solutions, and energy saving technologies like

LED lights and building automation systems, the University has significantly reduced energy consumption. In 2018 the Twin Cities campus alone saved over 10 million kilowatt hours of electricity.



WE'VE SAVED \$29 MILLION IN UTILITY EXPENSES SINCE 2014

For the Twin Cities campus, the University introduced a real-time energy management solution, allowing students, staff, and faculty to look up the energy consumption of the buildings they work, live, and study in. With greater access to data comes new innovations.





INNOVATIVE SUSTAINABILITY SOLUTIONS

Students at Crookston, Duluth, Morris, and the Twin Cities all participate in sustainable gardens to grow produce for local consumption. IN 2019 OVER 60,000 POUNDS OF LOCALLY GROWN PRODUCE WAS SERVED TO STUDENTS VIA OUR RESIDENTIAL DINING PROVIDERS.





WASTE MANAGEMENT

FROM REUSE TO ORGANICS RECYCLING, WE ARE A LEADER IN WASTE-STREAM DIVERSION. On the Morris and Duluth campuses, 48% of the waste streams now go to recycling and composting, an amazing percentage for any institution or community.











It All Adds Up is the University of Minnesota's sustainability campaign. Here are a few examples of free posters, promoting sustainability. Learn more at italladdsup.umn.edu



417 TONS OF MATERIALS DIVERTED FROM THE WASTE STREAM BY OUR REUSE PROGRAM IN 2018

That's over 830,000 lbs. of useful equipment, furniture, and other items that did not get sent to a landfill or an incinerator. In addition, 364 tons were sold to the general public and 53 tons were returned to service at the University.







FOR THE FUTURE

We recognize that sustainability is an important topic to students, faculty, staff, the Board of Regents, and the general public. The University remains committed to sustainable solutions that mitigate climate change, and to being a leader among our peers and neighbors.

Just over a year ago we introduced one of the few combined heat power (CHP) solutions in higher education to the Twin Cities campus. This \$112 million investment created a state-of-the-art power plant that produces steam for heating and chilled water for cooling, and in the process generates electricity for the campus, reducing our need for outside energy production. We are also actively working toward:

- Obtaining all of our purchased electricity from 100% renewable sources
- Increasing use of electric vehicles in the University fleet
- Increasing use of public transit
- Achieving 50% waste diversion on all of our campuses
- Piloting carbon-capture technologies
- Installing more on-campus renewable energy
- Installing energy storage
- Reducing energy consumption in research buildings by 50%

THESE INITIATIVES CAN REDUCE OUR GREENHOUSE GAS EMISSIONS BY MORE THAN 50%.

Across the University of Minnesota system we will continue to explore, analyze, and implement innovative, progressive solutions that meaningfully impact our climate position.