

THE MINNESOTA STATE, MANKATO UNIVERSITY-WIDE ENVIRONMENTAL COMMITTEE – REPORT, GOALS, AND REQUEST FOR FUNDING FOR 2012-2013

Introduction:

The creation of the Environmental Committee as a university-wide standing committee with representation from the campus collective bargaining units and the Student Association was authorized by President Davenport following a September 2011 review by the President's Cabinet. The charge given to the Committee was –

- 1) To advise the university president and the university community on environmentally friendly practices and sustainable facilities and practices;
- 2) To work toward an environmentally progressive campus where a community consciousness is promoted dealing with energy use and savings, recycling, and reducing the use of items that might otherwise end up in a landfill; and
- 3) To implement expectations of the Environmental Committee contained in Goal 1 of the Campus of the Future part of the Strategic Plan 2010-2015.

(See the Committee Charter in Section I of the Background Information at the end of this document.)

The Committee recognizes that it builds on the work of various campus groups; to cite just one example, Facilities Management has taken numerous steps to make campus buildings more energy efficient since the 1990s. (See Section II of the Background Information.)

The Committee met for the first time on February 1, 2012, and has met monthly through Spring Semester.

Following are the accomplishments of the Committee this Spring Semester; its goals for the 2012-2013 academic year; and a request for funds to meet these goals.

Accomplishments:

- Spring, 2012: Minnesota State University, Mankato *Today* article “Good to Be Green” featuring Ryan Bechel and Erica Johnson of the Environmental Committee.
- March: Ryan Bechel and Erica Johnson attended “A Better Together Get-Together,” a gathering of Mankato area community groups that work on issues within the arena of sustainability.
- March: Environmental Committee endorsed the passing of the Green Transportation Fee. In May, the Green Transportation Fee passed. (See Section III to learn more about the Green Transportation Fee.)
- March: Presentation given to the group by Greg Ackerson of McKinstry. The group obtained a better understanding of American College and University President's Climate Commitment (ACUPCC) and the requirements for determining the campus carbon footprint.
- April: Jason McCue gave a presentation on Waste Stream Management, and the campus recycling. For the carbon footprint, the committee is interested in learning more about the handling of waste refuse, including vendor tours of LJP and Waste Management. See Section IV for the current Waste Stream Management at MSU.
- April: Ron Fields, Assistant Vice President for Facilities Management, presented the sustainability report for Century College as an example for what MSU Mankato can do.

- April: Committee member Medea Myhra (on behalf of IRETI) presented to the Blue Earth County Board of Commissioners in support of the new composting facility in Good Thunder. The Board approved by a vote of 3-2 the first composting facility in Blue Earth County. MSU is in discussion about using the compost site.
- May: Several committee members assisted with the Earth Day Celebration and Campus Beautification Day, planting flowers that are more sustainable and consume less water.
- May: The Committee formally began review of the goals in section 3.5 of the Minnesota State University, Mankato Campus Sustainability Plan 2010-2035 conducted by the Urban & Regional Studies Institute (URSI), December 20, 2010.
- May: Ron Fields reported that Facilities Management will now be using water-based products on all gym floors, instead of oil-based products.

Goals for academic year 2012-2013:

The Environmental Committee has set these goals for the 2012-2013 academic year, based on its mandate under the Campus of the Future part of the MSU Strategic Plan and the text of the American College and University Presidents' Climate Commitment (ACUPCC). Even though the University has not signed on to the ACUPCC, the Committee believes that it serves as a useful template for action by the Committee.

1. Complete a carbon footprint analysis.
2. Develop a three-year plan to enhance a campus culture of energy conscious behavior and sustainable life style.
3. Develop a campus sustainability policy and implementation principles.
4. Utilize pathway landscaping in collaboration with the Physical Plant Grounds Supervisor to improve the appearance of the campus, and work with the Safety Committee to also improve safety by preventing slips, trips and falls.
5. Propose that MSU join the Association for Advancement of Sustainability in Higher Education.
6. Develop and propose a green purchasing policy for office supplies and equipment.
7. Propose a policy that all new renovations and construction meet the silver standards or better of the LEED energy-rating program.
8. Sponsor a campus event and/or forum with a well-known environmental speaker.
9. Develop a document reduction program, such as using double-sided printing and reducing colored paper use. Also, look at printer cartridge refilling.
10. Plan and implement a pilot program in collaboration with the International Student Office (ISO) to expand their bike loan program to reach all MSU students.
11. Promote and continue to update a website featuring efforts of the Environmental Committee.

Funding Requests to Achieve Goals:

- Carbon Footprint Analysis, conducted by McKinstry or another company by bid: \$7,000
- Membership in the Association of the Advancement of Sustainability in Higher Education (AASHE): \$1,610/year
- Registration and travel expenses for 2 faculty / staff and 2 students to attend a national conference: \$6,000
- Funds to bring a well-known speaker to campus: \$500
- Reassigned time for a faculty/staff member to work on Committee goals: \$8,400
- Bikes for pilot bike loan program: \$2,500
- Concrete work for pathway safety improvements: \$1,000

Total: \$27,010

Justification of the Funding Requests:

1. Carbon Footprint Analysis: \$7,000

A first step in the development of a three-year plan (Committee Goal 2; Campus of the Future Goal 1, Objective B) is to conduct a carbon footprint analysis / analysis of greenhouse gas emissions on campus. A carbon footprint analysis is important because it provides a quantitative snapshot of the reliance of the campus on fossil fuels and also of campus energy efficiency measures; it creates a baseline to measure against; and it provides a quantitative way of measuring progress. McKinstry can provide this analysis based on data supplied by Facilities Management at a cost of \$7,000.

2. Membership in the AASHE: \$1610/year

University membership in the AASHE provides a wealth of information and opportunities for support in reaching MSU's sustainability goals. Membership covers all individuals on campus including both staff and students. Twenty-one academic institutions in Minnesota are already members of the AASHE. (See Section V of the Background Information for the list.) More information about the AASHE is available at www.aashe.org.

3. Registration and travel expenses for 2 faculty / staff and 2 students to attend a national conference: \$6,000

The AASHE annual conference this year is in Los Angeles from Oct 14 – 17. Attendance at the conference would enable MSU campus representatives to find out about sustainability efforts at campuses nationwide and would afford numerous networking opportunities. Estimated cost for one person to attend is \$1500 (registration, flight, hotel, meals, and transportation), for a total cost of \$6,000.

4. Funds to bring a well-known environmental speaker to campus: \$500

The Environmental Committee wishes to sponsor an event featuring a well-known environmental speaker presenting on a topic of general interest and open to everyone on campus and in the community, as a way of highlighting environmental / sustainability issues. Estimated speaker's fees and other costs are \$500.

5. Reassigned time for a faculty/staff member to work on Committee goals: \$8,400

Achieving our goals will require a considerable amount of time. Developing a three-year plan and developing new policies will require, research, coordination with other offices at MSU, and requesting and evaluating feedback from stakeholders in the campus community. Environmental committees at other institutions that have successfully met their goals have received reassigned time for a committee member (Century College, for example). The Committee is requesting three credit hours (or one-quarter load) of reassigned time for one committee member for one semester to research and coordinate work on our goals.

6. Bikes for pilot bike loan program: \$2,500

Staff of the International Student Office (ISO) have been providing MSU international students the opportunity for 'rent' a bike during their time at MSU. The ISO receives requests from non-international MSU students who also wish to rent a bike. Unfortunately the ISO office will not supply the few bikes it 'owns' to students outside of its department. The Committee wishes to obtain funding to purchase 25 bikes for the pilot program (assuming an average cost of \$100/bike). A sub-committee has been formed to collaborate with the ISO on this project.

7. Concrete work for pathway safety improvements: \$1000

The Committee wishes in collaboration with the Physical Plant Grounds Supervisor to utilize pathway landscaping to improve the appearance of the campus, and work with the Safety Committee to improve safety by preventing slips, trips and falls. Estimated cost of the concrete work for pathway safety improvements is \$1000.

The Committee asks that you consider our funding request.

Thank you.

Troy Schmidt, Student Association

Nachella Swift, Student Association

Ryan Bechel, Student Association, Co-chair

Medea Myhra, MAPE, sub-committee member

Kim Rademacher, AFSCME

Scott Fee, IFO

Monika Antonelli, IFO

Erica Johnson, MSUAASF, Co-chair, sub-committee member

Barry Wilkins, MMA, sub-committee member

Louis Schwartzkopf, Emeriti Faculty, sub-committee chair

Mike Lexvold, Facilities Management

Ron Fields, Assistant Vice President for Facilities Management

Background Information:

Section I: The Charter of the Environmental Committee as a University-Wide Standing Committee

Minnesota State University, Mankato Environmental Committee - University Wide Standing Committee

Mandate Reference

Creation of this university-wide committee was authorized by President Richard Davenport following a September 2011 review by the President's Cabinet after consultation through the Meet & Confer process with campus collective bargaining units and the Student Association. (Of five strategic action steps within the University's *Strategic Plan 2010-2015* <http://www.mnsu.edu/strategicplan/>, the Environmental Committee is referenced in **#4 Reinvalidate our physical home and build the campus of the future.**)

Committee Charge

Advise the University President and the University Community on environmental friendly practices and sustainable facilities and practices. Work toward an environmentally progressive campus where a community consciousness is promoted dealing with energy use and savings, recycling, and reducing items that might otherwise end up in a landfill. (Sustainability refers to societal efforts that meet the needs of present users without compromising the ability of future generations to meet their own needs.) Implement expectations affecting the Environmental Committee contained in the *Strategic Plan 2010-2015*, cited herein:

Strategic Plan 2010-2015 <http://www.mnsu.edu/strategicplan/>

Item #4. Reinvalidate our physical home and build the campus of the future.

<http://www.mnsu.edu/strategicplan/future.html>

Goal 1. Create a campus culture supporting energy efficiency, resource conservation and sustainability.

Objective A. Create a campus sustainability policy and support network.

Item 2. Maintain a campus Environmental Committee.

Objective B. Develop a three year plan to enhance a complete culture of energy conscious behavior and sustainable lifestyle.

Item 2. Through the Environmental Committee, sponsor events and forums with a sustainability focus that also includes opportunities to solicit community input.

Reporting Relationship

The Environmental Committee reports to the University President through the Vice President for Finance and Administration (or designee). As a University-wide advisory panel, recommendations adopted by the Environmental Committee, depending on their scope and topical area, may be referred by the Administration to the Meet & Confer consultative process to ensure the broadest feedback and input from the campus community.

Membership – Regular Members

Type	Term	Term Expires	Constituency	Appointing Authority
1.	Student	One Year	Ends Sept. 1	Student Body Student Association President
2.	Student	One Year	Ends Sept. 1	Student Body Student Association President
3.	Student	One Year	Ends Sept. 1	Student Senate Student Association President
4.	Employee	Two Years	Ends Sept. 1	MAPE MAPE President
5.	Employee	Two Years	Ends Sept. 1	AFSCME Local 658 AFSCME Local 638 President
6.	Employee	Two Years	Ends Sept. 1	IFO Faculty Association Faculty Association President
7.	Employee	Two Years	Ends Sept. 1	IFO Faculty Association Faculty Association President
8.	Employee	Two Years	Ends Sept. 1	MSUAASF MSUAASF President
9.	Employee	Two Years	Ends Sept. 1	Middle Mgmt. Assn. (MMA) MMA President
10.	Retiree	Two Years	Ends Sept. 1	Emeriti Faculty Environmental Committee
11.	Ex-officio, Nonvoting	On-going	On-going	Facilities Management Assistant Vice President for Facilities Management

Membership – Alternate Members

An alternate may be appointed for each voting member and shall be appointed using the same process as the regular member affected. Alternates can attend meetings but can only vote when a regular member from their constituency is absent.

Organization

- Two committee co-chairs shall be elected in October by and from among the ten regular voting committee members. One of the co-chairs shall be a student. The secretary shall be the Facilities Management representative (or designee).
- The committee shall meet at least five times within twelve months between Sept.1st and Aug.31st.
- Staff assistance shall be provided by Facilities Management
- A website location shall be maintained on the University website to disseminate committee information. (See this website: <http://www.mnsu.edu/greencampus/>)

Section II: Minnesota State University, Mankato Physical Plant Conservation Efforts (prepared by Barry Wilkins)

- **LIGHTING**
 - Fluorescent T8 electronic ballast
 - Campus wide retrofit 1994-98
 - Lighting levels adjusted to Illumination Engineering Standards (IES) standards
 - LED Exit signs – from as much as 40W to 5W (on 24/7)
 - Occupancy sensors
 - Hallways
 - Bathrooms
 - Classroom
 - Daylight sensors
 - Some digital lighting controls
- **WINDOWS**
 - Replace with low-e where possible
 - UV film in Wigley
- **HVAC**
 - Direct Digital Controls
 - Fan Scheduling
 - Variable Air Volume (VAV) systems with Variable Frequency Drives (VFD) on fan motors
 - High efficiency motors (part of Minnesota Energy Code)
 - CO2 Sensor for outdoor air settings in selected zones
 - Pool heat recovery unit
- **WATER CONSERVATION**
 - Reduced flow fixtures – selected buildings
 - Computer controlled irrigation – Evapotranspiration (temp, wind, solar, rainfall)
- **NEW CONSTRUCTION**
 - Minnesota B3 website <http://www.msbg.umn.edu/>
 - Purchase equipment with highest efficiency and rebate potential

Section III: The “Green Transportation Fee” (prepared by David Cowan)

The “Green Transportation Fee” is based on an activity fee increase of 75¢ per credit hour, or \$9 per semester, and would produce an estimated \$262,500 annually which is then used to:

- Eliminate the need for bus passes (\$45 Semester; \$16 Thirty Day) and fares (50¢) as the MavCard becomes the “ticket to ride” anywhere in the Cities of Mankato and North Mankato. This is the “U-Pass” concept other campuses have used. Ridership should increase as a result and the pressure on the parking stalls should be reduced.
- Expand nighttime bus service to apartment complexes on James Avenue down the hill on Stadium Road (Southwood Terrace Apts., Valley View Apts.).

- Expand the Stomper Express (Route 11) nighttime coverage from its current 3 days (Thursdays, Fridays, Saturdays) to 6 days including Monday, Tuesday, Wednesdays, from 6 PM to 11 PM. The Stomper Express makes direct runs to Wal-Mart, River Hills Mall, Old Navy and back to campus. Many residence hall students and international students use Stomper.
http://www.mnsu.edu/parking/pdf/SHOP27MP_stomper%20express.pdf
- Upgrade existing 91 bike racks and increase bike parking capacity beyond existing 1,092 spaces.
http://www.mnsu.edu/parking/bike_racks/bike_racks.html
- Continue existing routes associated with the Student Senate's Campus Express Route 1 and the Route 8 Circulator.
http://www.mnsu.edu/parking/pdf/SHOP02BR_U-Zone%20Map.pdf

Section IV: Waste Stream Management (prepared by Jason McCue)

Waste Stream Management

Waste Management
Food Refuse/Mixed
Solid Waste

Transported to Minnesota Processing Company in the Twin Cities

- Large objects separated with magnets or by hand
- Bottles, plastics and other refuse trash chopped and shredded
- Turned into RDF (Refuse Derived Fuel) product used by Xcel Energy burned at Wilmarth Plant Mankato
- Leftover ash put in lined landfill (2-3%) and put in the Ponderosa Landfill.

Waste Management
Recycling

Transported to Blue Earth County Recycling Center

- Cardboard and paper is bundled and taken to Metro area and sold to paper companies
- Co-mingled cans/plastic bundled and transported to Minneapolis recycling facility, sorted and sold

Section V: Minnesota Institutions of Higher Education that are Members of the AASHE

Organization	Type	Location
Augsburg College	Four Year Institution	Minneapolis, Minnesota
Bemidji State University	Four Year Institution	Bemidji, Minnesota
Carleton College	Four Year Institution	Northfield, Minnesota
Century College	Two Year Institution	White Bear Lake, Minnesota
College of Saint Benedict	Four Year Institution	Saint Joseph, Minnesota
Concordia College-Moorhead	Four Year Institution	Moorhead, Minnesota
Dakota County Technical College	Two Year Institution	Rosemount, Minnesota
Gustavus Adolphus College	Four Year Institution	Saint Peter, Minnesota
Hamline University	Four Year Institution	Saint Paul, Minnesota
Hibbing Community College	Two Year Institution	Hibbing, Minnesota
Inver Hills Community College	Two Year Institution	Inver Grove Heights, Minnesota
Lake Superior College	Two Year Institution	Duluth, Minnesota
Macalester College	Four Year Institution	Saint Paul, Minnesota
Saint John's University	Four Year Institution	Collegeville, Minnesota
St. Cloud State University	Four Year Institution	Saint Cloud, Minnesota
St. Olaf College	Four Year Institution	Northfield, Minnesota
University of Minnesota, Duluth	Four Year Institution	Duluth, Minnesota
University of Minnesota, Morris	Four Year Institution	Morris, Minnesota
University of Minnesota, Twin Cities	Four Year Institution	Minneapolis, Minnesota
University of St. Thomas (Saint Paul, MN)	Four Year Institution	Saint Paul, Minnesota
Winona State University	Four Year	Winona, Minnesota