



Sustainability: Capturing Information on the Good Things You Do



April 2009-Feb. 2012

- Sustainability Coordinator (appointed April 2009) would:
 - Lead MU's American College & University Presidents Climate Commitment effort
 - Identify and work with existing programs to support sustainability efforts
 - Encourage faculty to use sustainable practices in their classrooms and research.
 - Develop a communications plan to reach all audiences – faculty, students and staff



ACUP: Part One

Initiate a comprehensive plan to achieve climate neutrality

- Greenhouse gas emissions assessment due Jan. 15, 2010
- Climate Action Plan, including a target date and interim milestones for becoming climate neutral, due Jan. 15, 2011.
- Integrate sustainability into the curriculum and make it part of the educational experience.
- Climate Plan Update due Jan. 15, 2012
- STARS Reporting system currently being filled out.

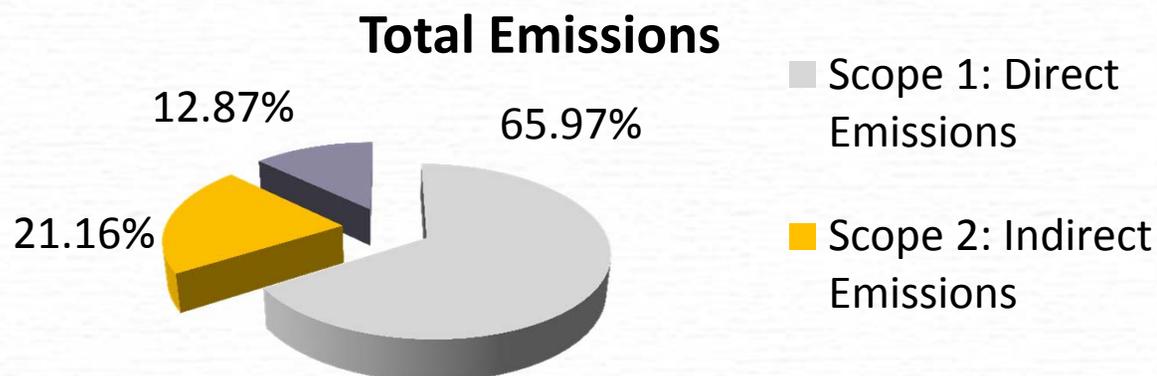


MU's Greenhouse Gas Emissions Assessment

Submitted Jan. 15, 2010

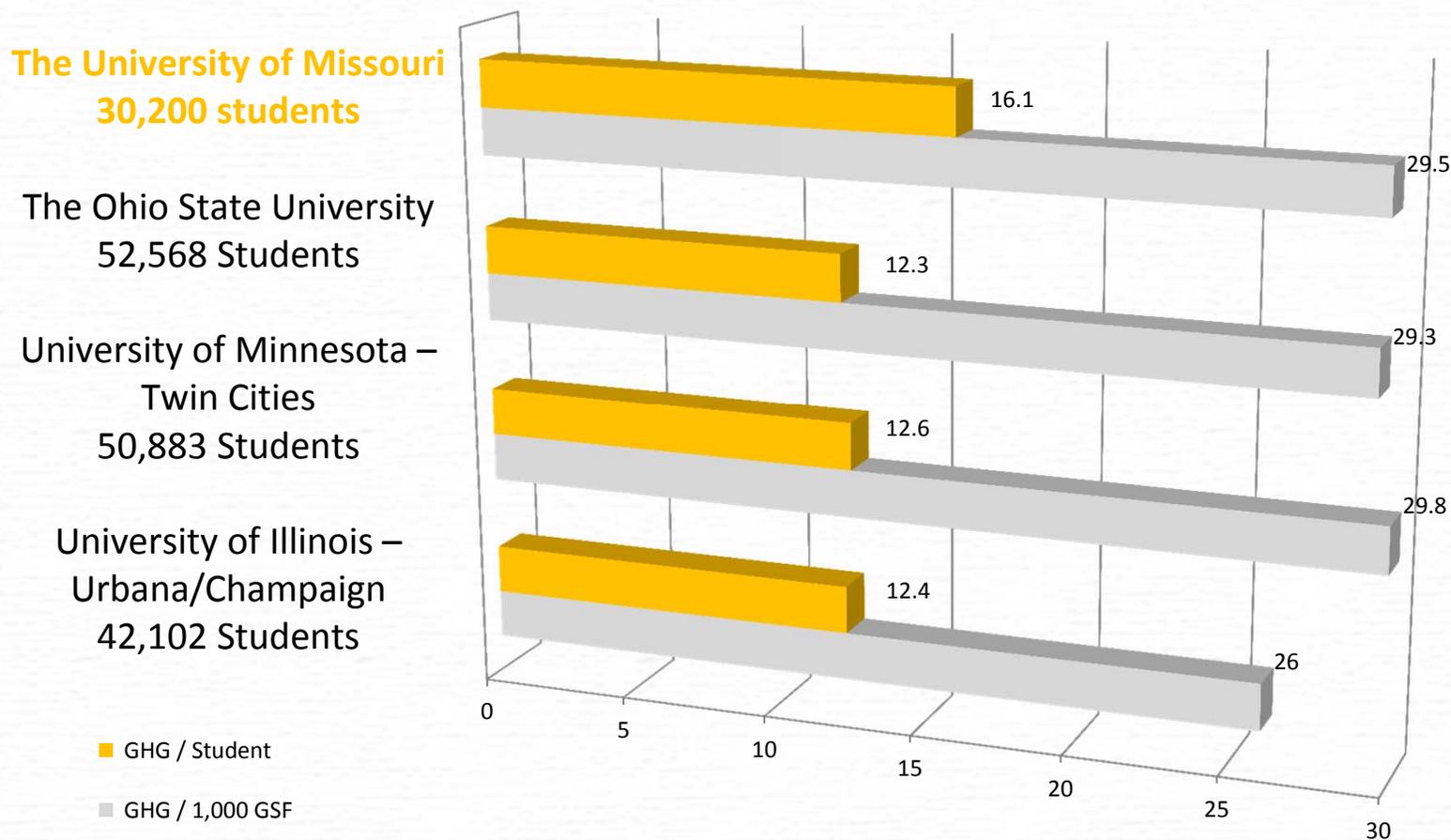
- Scope 1: Direct Emissions, including on-campus power generation, fleet vehicles, refrigerants & chemicals, and agriculture. (97 percent of total comes from power generation.)
- Scope 2: Indirect Emissions, including purchased electricity
- Scope 3: Other Indirect Emissions, including commuting for students, faculty & staff; university-financed travel; study abroad; solid waste and waste water.

Burns & McDonnell environmental division verified the data before it was submitted to ACUP on Jan. 15, 2010.





How does MU's GHG Assessment compare with Sightlines peers?





Climate Action Plan Must include:

Due: Jan. 15, 2011

- ⦿ A target date for achieving climate neutrality
- ⦿ Actions to expand research or other efforts necessary to achieve climate neutrality
- ⦿ Actions to make climate neutrality and sustainability a part of the curriculum and other educational experience for all students
- ⦿ Mechanisms for tracking progress on goals and actions



Part Two

Immediately initiate two or more tangible actions to reduce Greenhouse gases
(ACUP provided actions)

-  Establish a policy that all new campus construction will be built to at least the U.S. Green Building Council's LEED Silver standard or equivalent.
-  Adopt an energy-efficient appliance purchasing policy requiring Energy Star-certified products in all areas for which such ratings exist.
-  Participate in the Waste Minimization component of the national RecycleMania competition, and adopt three or more associated measures to reduce waste.
-  MU project in process



tangible actions, continued:

-  Encourage use of and provide access to public transportation for all faculty, students, staff and visitors.
- ⦿ Within one year of signing this document, begin purchasing or producing at least 15 percent of our institution's electricity consumption from renewable resources.
- ⦿ Establish a policy of offsetting all greenhouse gas emissions generated by university-funded air travel.
- ⦿ Establish a policy or a committee that supports climate and sustainability shareholder proposals at companies where our institution's endowment is invested.



MU project in process



Recycling

- Tiger Tailgate Recycling
- Tiger Treasures Rummage Sale
- Surplus Property
- For-Pay Recycling Contract with the City
- Recycled Paper at Printing Services and Procurement
- Hazardous Chemical Recycling
- Composting Food Waste
- Zero-Waste Picnic
- MU Placed 13th nationally in the Recyclemania
- Public E-waste Collection



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Calculations based on research by Environmental Defense Fund and other members of the Paper Task Force.

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Recycling

- 75% of buildings on campus have indoor recycling. There are also outdoor recycling containers all over campus.
- Materials that you can recycle on campus include: paper, cardboard, plastics #1 & #2, steel, aluminum and glass.
- Special materials that you can recycle in specific bins include printer cartridges, batteries, and cell phones
- Several recycling events are held throughout the year, including Tiger Tailgate Recycling (during the football season), the Sustain Mizzou electronic waste drive, Tiger Treasures (at the end of the academic year)



Recycling

◎ Recycling rates have increased from 24 percent to 31 percent in the past year.

◎ Tiger Treasures Rummage Sale of student-donated items diverts 18 tons from the landfill, saving solid-waste costs.

◎ Campus Facilities Planning Design & Construction and Procurement's Surplus Property teamed up last year to recycle 230 tons of pallets, building materials and metals.





Energy Conservation

- ◎ Energy Conservation program
- ◎ Alternative fuel (TDF, biomass)
- ◎ Biomass Boiler
- ◎ Occupancy sensors campus wide





Renewables

MU is building a new Biomass Boiler that will reduce coal use by 25 % and Greenhouse Gas Emissions by 20% annually by 2015

MU will install a photovoltaic array on the materials handling building of the Biomass Boiler

MU will install a wind generator on campus for research and demonstration purposes.

MU will purchase 10.5 megawatts of wind power that will reduce MU's Greenhouse Gas Emissions by an additional 7% annually by 2016



Sustainable Master Plan

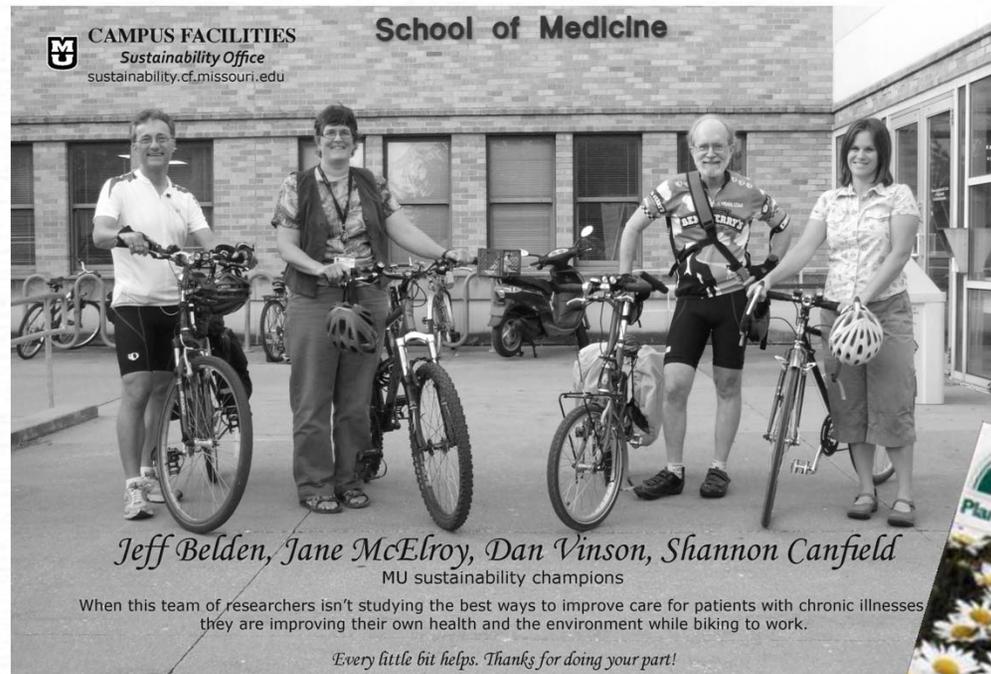
- MU has one of the country's most extensive systems for monitoring building conditions and energy demand.
- MU's Master Plan includes planned green spaces as well as building sites.





Getting Around & Enjoying Campus

- Recreation Trails
- Pedestrian Friendly Campus
- Bicycle Plan
- Transportation Survey
- Mizzou Botanic Garden
- Plants of Merit





Sustainable Building Design

◎University Health System's Orthopedic Institute and the Patient Care Tower will be LEED-certified buildings.

◎MU administrators, Sustainability, and Planning, Design & Construction staff are working together to develop a sustainable self-certification for future campus buildings.

◎Student video focuses on green building standards in Mid Campus Housing





Mizzou Dashboard and other student-driven projects

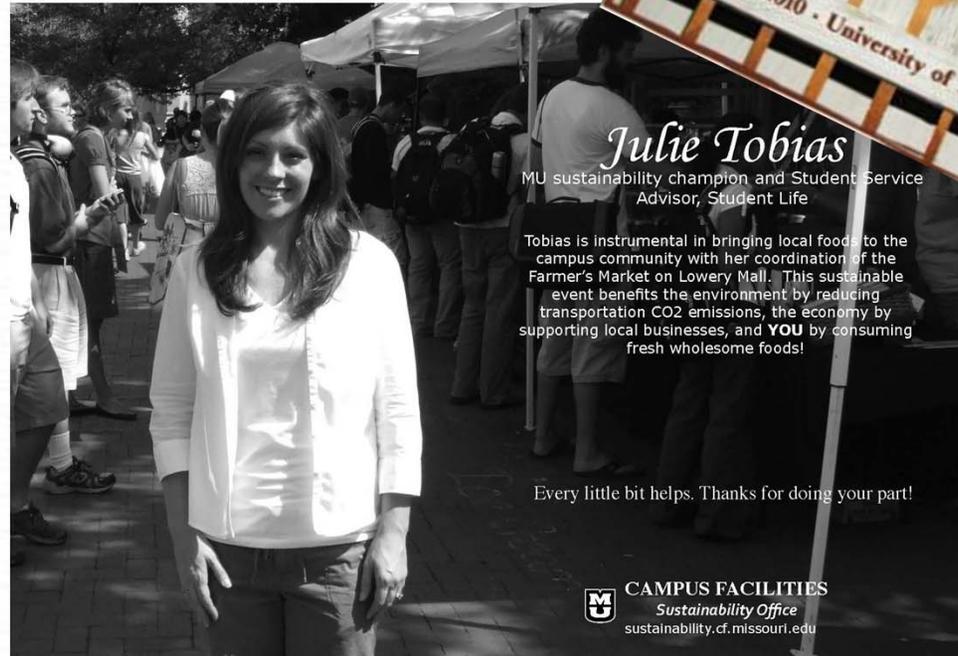
- ◎Students voted to increase fees by \$1 each semester for sustainability initiatives.
- ◎Students sought funding for web-based, real-time energy usage in three residence halls.
- ◎Mizzou and Missouri Science & Technology students partnered to design and compete against 19 international teams in the USDoE's Solar Decathlon.
- ◎Sustain Mizzou was the catalyst in starting Tiger Tailgate recycling at home football games, diverting 78 tons of beverage containers, in the past five seasons, from the landfill and saving solid-waste costs.
- ◎Student PSA promotes recycling.





Dining & Market Options

- ◎ Buying locally
- ◎ Farm to Table event
- ◎ Green Cleaning Products
- ◎ Farmers' Market



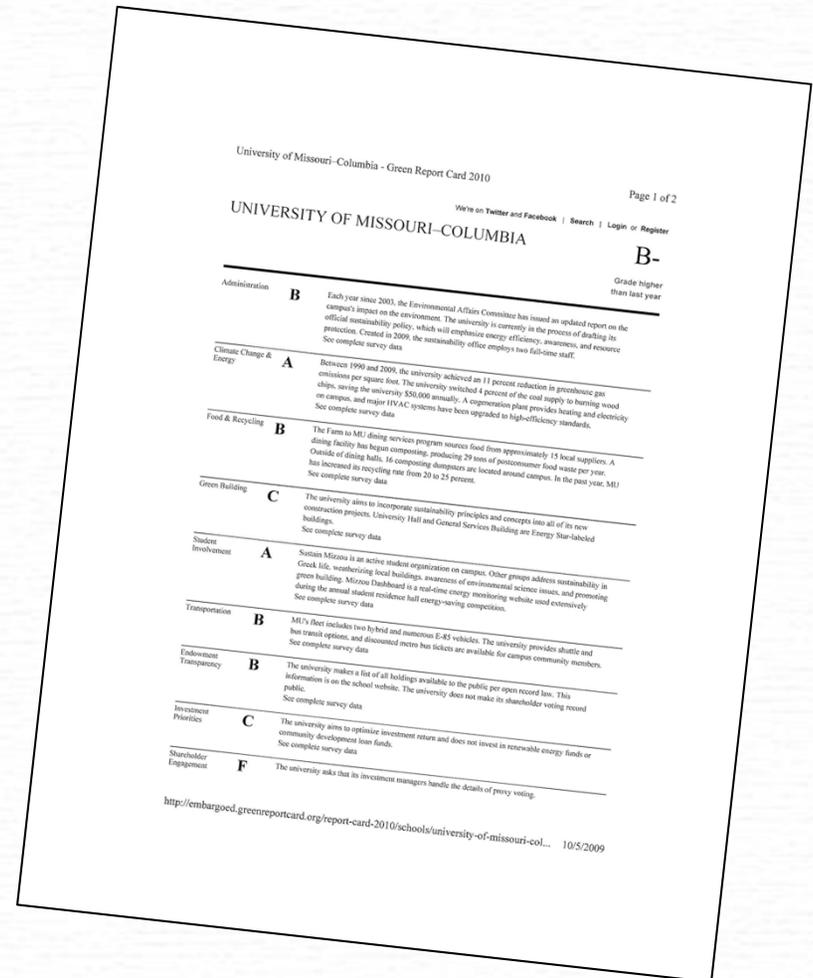


Green Report Card

Sustainable Endowments Institute

● Improved our grade from last year's C- to a B-.

● Received an A for Climate Change & Energy and for Student Involvement.



2012 Solid Waste Advisory Board



MU is a Sustainability Rock Star

- Sustainability at Mizzou

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- *“Mizzou is known for a lot of things: great Division-I athletic teams, one of the nation’s largest Greek systems, not to mention fantastic academics. But now it’s known for something else: being a sustainability rock star.” –Princeton Review, April 2011*

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- sustainmizzou@gmail.com

- sustainmizzou.org

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- History/who we are

- **Sustain Mizzou** is a student group that started in 2004 focused on education, cooperation and local action regarding the environment.

- The **MU Sustainability Office**, a part of Campus Facilities, was started by Chancellor Deaton in 2009. The MU Sustainability Office works on all aspects of sustainability all across campus.

- **Student Sustainability**, in the Department of Student Life, manages the Student Sustainability Fee and works to get students involved with sustainability issues through a variety of programs.

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Encourage Faculty to be Sustainable

- ◎ More than 100 faculty in 40 disciplines teach environmental courses
- ◎ Sustainable Agriculture major in CAFNR
- ◎ Working with Energy Conservation to educate researchers on energy consumption of fume hoods.



Mizzou Advantage

- ◎The Center for Sustainable Energy includes 70 faculty involved in alternative energy research.
- ◎MU's Power Plant serves as a working research lab to test-burn biomass.
- ◎Internationally acclaimed scientists discussed feeding the world in the 21st century at MU-hosted International Plant Molecular Biology Congress symposium.
- ◎Missouri Energy Summit focused on finding new energy sources and better use of environmentally friendly sources.





Communication/Education

- ◉ Word of Mouth
- ◉ Online and social media





“The sustainable campus is one that adopts those practices necessary to fully protect and improve the environment of the campus, its locality and surrounding natural habitats and systems, ...”

Perry Chapman, Master Planner Emeritus

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