



Annual Report 2012-2013



One of the five solar panel arrays installed at Truman during the summer of 2013.

Truman State University's Sustainability Principles:

- *Acknowledging the interdependence of humanity and nature*
- *Embracing inter-generational stewardship*
- *Accounting for triple bottom line practices*
- *Conserving natural resources*
- *Striving to eliminate waste*
- *Investing in collaborative community-based projects*
- *Developing a closed-loop local food system*
- *Promoting multi-modal transportation*
- *Innovating - Evolving - Educating*

**Truman
Awarded
STARS **BRONZE**
Rating**



The Association for the
Advancement of
Sustainability in Higher
Education

Summary of Truman Sustainability Efforts

Education and Research

Co-Curricular Education - Engaging students in sustainability issues through co-curricular activities allows students to deepen and apply their understanding of sustainability principles. Activities Truman has undertaken include:

- Continued providing sustainability hints and tips during new student orientation, as well as the Residence Life sustainability educators program.
- Sustainability Outreach Campaign - automated the graduation process to include a request to all graduating students to sign a sustainability pledge.
- 2012-2013 Sustainability Events -
 - Sustainability Series Speakers -
 - Fall - Jay Walljasper (partnered with Global Issues)
 - Spring - Anton Daughters (partnered with Global Issues)
 - University Conference Day - conducted professional development for employees
 - Student-sponsored Earth Week activities
 - Campus Sustainability Day 2012 activities
- Students participated in the "Forward on Climate Rally"
- Updated the sustainability website: <http://sustainability.truman.edu> website

Curriculum - By training and educating future leaders, scholars, workers, and professionals, higher education institutions are uniquely positioned to prepare students to understand and address sustainability challenges.

Truman participates in this educational mission through:

- Offering 9 Sustainability-Focused & 45 Sustainability-Related Courses, representing a **TOTAL of 54 courses across 14 DEPARTMENTS**
- A minor in Environmental Studies
- An online Sustainability Certificate

Sustainability-Focused Courses

- concentrate on the concept of sustainability including its social, economic, and environmental dimensions; or
- examine an issue or topic using sustainability as a lens

Sustainability-Related Courses

- incorporate sustainability as a distinct course component or module;
- concentrate on a single aspect of sustainability; or
- address a sustainability principle or issue

Research

- Work is underway to create a sustainability tag in the University's institutional repository to track sustainability research.

Planning, Administration and Engagement

Coordination and Planning - Truman is dedicating resources to sustainability coordination, incorporating sustainability into primary campus plans, and developing plans to move forward on sustainability. This is demonstrated through the following:

- The President's Sustainability Action Committee has developed a tactical plan, with a goal to achieve the STARS Silver rating by 2015.

Public Engagement - Volunteerism and the sense of compassion that community service helps develop are fundamental to achieving sustainability. Community engagement can help students develop leadership skills while deepening their understanding of practical, real-world problems. Activities included:

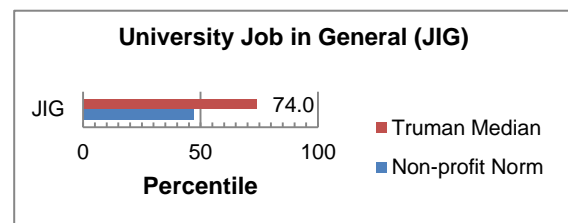
- Green Thumb Project - A VISTA volunteer (funded by a grant from the Missouri River Coalition) is housed at Truman, and participates with the local K-12 schools on community gardening efforts and education.
- Truman was included on the President's Higher Education Community Service Honor Roll 2013

Human Resources - Investment in human resources is integral to the achievement of a healthy and sustainable balance between human capital, natural capital, and financial capital (the triple bottom line). Truman tries to address this balance by:

- Educating employees about sustainability -- the President's Sustainability Action Committee developed the new employee orientation sustainability brochure.
- Updated the non-discrimination policy to be more inclusive.
- Conducted an employee survey in the spring of 2013, covering commute issues, campus diversity, and employee satisfaction. The President's Sustainability Action Committee is working with Human Resources and the Staff Council on follow-up activities.

Survey Highlights:

240 employees completed the survey, a 31.9% response rate overall
41.7% faculty, 31.7% exempt staff, and 26.7% non-exempt staff

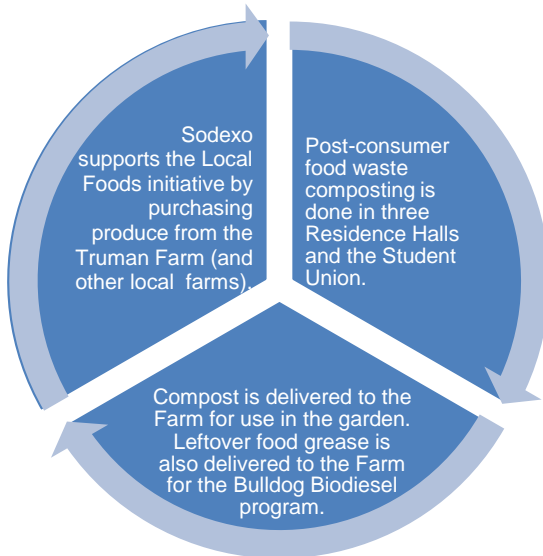


Summary of Truman Sustainability Efforts (continued)

Operations

Dining Services - Truman is working in partnership with Sodexo to help build a sustainable food system. There have been many sustainability efforts implemented over the past several years, and this past year we've continued to focus on the Farm-to-School Program even through difficult budget cuts.

Farm-to-School Program



... Sodexo continues to look for more GAP/GHP certified producers (i.e., producers who follow the Guidelines for Good Agricultural Practices and Good Handling Practices.)

Waste - Truman is moving toward zero waste by reducing, reusing, recycling, and composting. New efforts this past year included:

- Weighing food waste at the farm - Approximately 300 lbs. of food per day is wasted, and we are using this information to help educate students on portion control and waste.
- Recycled 320 mattresses=19,200 lbs of recycled material.
- Student Senate piloted a new glass recycling program.
- Re-upholstered furniture in McClain and Pickler Library.

Grounds - Campus grounds can be planned, planted, and maintained while minimizing the use of toxic chemicals, protecting wildlife habitat, and conserving water and resources. Over this past year, Truman has:

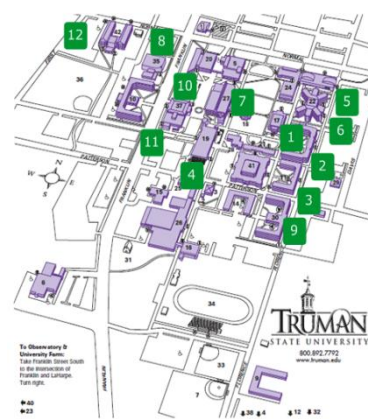
- Worked with the Missouri Conservation Department on a plan for native trees on campus. Due to the drought and storm damage, we will be planting many new trees.
- Put together a campus committee to finalize our application to become a Tree Campus USA member. Applications are due December 2013.

Transportation - Moving toward sustainable transportation systems can reduce greenhouse emissions and other pollutants.

- Investigated a car sharing program-it was cost prohibitive.

Energy - Implementing conservation measures and switching to renewable sources of energy can help save money and provide some protection from utility rate volatility. Recent Truman conservation measures include:

- Building Energy Consumption - Created student and employee energy participation plans, and have included both of these plans as part of new student and new employee orientation.
- Lighting - Updated lighting with LED fixtures, replaced ballasts, and completed other lighting retrofit projects on campus.
- Completed the installation of building meters in the Library, Union, Rec Center and all of the Residence Halls. These meters are now measuring the electricity being used in each building. The usage information feeds to a University energy dashboard every 15 minutes, allowing us to track usage and patterns.



Campus Demands		
1	BNB1	173.0 kW
2	BNB2	30.9 kW
3	Dobson Hall	106.0 kW
4	Grim Hall	7.3 kW
5	Missouri Hall	226.6 kW
6	MO Hall	86.8 kW
7	Pickler Library	542.0 kW
8	Rec Center	111.6 kW
9	Ryle Hall	148.8 kW
10	Student Union	224.7 kW
11	SUB	240.1 kW
12	West Campus Suites	195.1 kW

- Renewable Energy - Completed the installation of solar panel arrays on five (5) campus buildings to help offset electrical costs. The solar arrays can generate up to 25 kilowatts each, accounting for about 2% of the total electrical needs for any given year.



The solar panel arrays are part of a 20 year lease program, and the installations were done with no up-front cost to the University.

Summary of Higher Education Sustainability Efforts

AASHE - The Association for the Advancement of Sustainability in Higher Education

2012 Higher Education Sustainability Review - National Campus Sustainability Trends Identified from Articles and Updates Submitted to AASHE -

New Developments - Sustainable investment, affordability & access, and global sustainability initiatives have arisen as key areas of focus in 2012.

- Sustainable investments rose significantly, with 20 stories in 2012 compared to only one in 2011.
- The number of stories dealing with higher education access and affordability increased from 4 in 2010, to 36 in 2011, to 76 in 2012.
- 201 unique bulletin stories featured an institution or organization outside of the U.S.

Changing Dynamics - The sustainability movement is constantly evolving particularly in the area of curriculum, research, funding and staffing.

- Curriculum
 - Eight new sustainability-focused associate degree programs were announced in 2012 - a four-fold increase since 2011. The majority of new programs and initiatives were found in the areas of general sustainability and renewable energy.
 - While most curriculum stories featured new academic programs, nine 2012 initiatives focused on infusing sustainability across the curriculum.
- Research
 - Sustainable transportation and urban sustainability were significant topics of sustainability research in 2012.
 - Nearly half of all research identified in 2012 stories involved renewable energy initiatives.
 - General sustainability research was the second most popular topic area, identified in 15% of research initiatives.
 - Six stories involved research initiatives on transportation or alternative fuel technologies, up from 2011.
 - Four initiatives involved urban sustainability research, up from one in 2011.
 - Eight new sustainability research centers were established.
- Of the 165 funded initiatives that were announced in 2012, 23 were funded through student fees while 9 were funded through green revolving funds.
- With 14 position announcements, sustainability jobs related to communication & outreach were the most prevalent specialization in AASHE job announcements.

Areas of Prevalence - With the majority of sustainability news stories falling under campus operations, a great deal is happening in the areas of energy, buildings, measureable outcomes, and more.

- Energy was the most common topic in the 2012 stories, found in one-third of campus news stories (114 solar installations, 19 wind installations, 20 geothermal projects, 37 energy overhaul and retrofit projects, 20 energy campaigns, 18 campus energy monitoring efforts, 15 renewable energy plants, 17 new energy curricular programs).
- 70 stories included outcomes that have made a measureable difference in advancing sustainability.
- 49% of stories related to new building construction and renovation highlighted energy efficiency measures, while 30% included water efficiency measures (28 green roof installations, 29 water efficiency features such as low-flow plumbing fixtures or grey-water systems, 14 construction projects with a waste diversion rate of 75% or more - 8 diverted over 90% of construction waste).
- 54 new bike initiatives, including 19 bike sharing programs, 12 bike repair stations, and 14 bike storage features
- 38 new or expanded recycling programs, including 10 new single stream recycling efforts
- 32 new or expanded campus/community gardens
- 10 institutions earning Tree Campus USA designations
- 9 institutions receiving Fair Trade status
- 7 institutions announced projects or initiatives aimed at greening athletics, including offsetting emissions from travel, green tailgating and installation of user-powered sports equipment
- 6 institutions banned the sale of bottled water on campus, while 4 campuses instituted bottled water reduction initiatives. 11 institutions announced the installation of water bottle refilling stations

How Renewables are Winning

Total US carbon emissions are at their lowest levels since 1994 and are expected to continue to fall as more renewable energy comes online.

In January, 2013, 100% of the new capacity added to the US electricity grid was from renewable sources.

By reducing greenhouse gas emissions by only 3%, US businesses could save \$780 billion over 10 years.

US Wind energy capacity has grown from less than one gigawatt in 1998 to nearly 65 gigawatts in 2012.

In 2012, wind power became the #1 source of new US energy generating capacity, providing 42% of all new electricity.

In the first half of 2013, growth of US renewables outpaced coal, oil, and nuclear power combined.

- Renewable Choice Energy

Strategic Plan for Sustainability, 2013-2015

The University's Strategic Plan for 2011-2015 identified sustainability as a strategic goal under **Theme 2: Securing Financial Stability and Growth**

GOAL 2.4. Make campus more sustainable by reducing consumption of resources.

The purpose of goal 2.4 is to emphasize to our community the importance of considering the sustainability of our various practices. Whether the resources consumed are financial, environmental, or human capital, we need to ensure that our practices are in balance for the long haul. Strategies and action plans supporting the triple bottom line (finances, planet, and people) should result from this goal.

RESPONSE: The University is striving to achieve the STARS SILVER rating by the end of the 2015 calendar year. This rating represents a continued focus on triple bottom line activities.

The focus through 2014 will be on:

- Documenting sustainability research activities, using the new STARS 2.0 tool.
- A focus on diversity and employee satisfaction assessments and follow-up activities.
- Recommending transportation options, based on survey data gathered.
- Becoming a "Tree Campus USA" member.
- Benchmarks for energy consumption and energy metering (gas, electric, steam, water), as well as the establishment of an online energy dashboard.
- Reducing energy consumption and carbon emissions.
- Waste diversion strategies.
- Increase participation from academic areas on sustainability in the curriculum as well as research.

President's Sustainability Action Committee

Committee Charge - The President's Sustainability Action Committee will **identify and evaluate** ways to modify university practices to bring them into increasing accord with the principles of the Sustainability Initiative. Furthermore, for identified practices of interest, the committee will **document** the current state of these practices and **develop practical benchmarking** for assessing progress towards desired modifications of such practices. The committee will **provide regular advice** to the University President regarding suggested best practices, and will **present an annual report** of its activities to the University President that records progress on practices of interest and indicates future plans.

The "Paino Pear" tree turns 3 years old.



2012/2013 Committee Members

Nancy Asher
Coordinator of Testing and Reporting and Associate Budget Officer

John Gardner
Director, Residence Life

Donna Liss, Chair
CIO, Information Technology Services

Lora Cunningham
Director, Sodexo Food Services

Karl Schneider
Director, Facilities Management

Lori Shook
Design Project Manager, Campus Planning

Dr. Wolfgang Hoeschele
Faculty Member, Society and Environment

Dr. Michael Kelrick
Faculty Member and Biology Department Chair

Valerie Dobson
Student, Student Government Environmental Affairs Committee Liaison

Vacant
Student, Public Relations Liaison

Judi Schweitzer
Consultant, Sustainability Expert

Vacant
Community Member