SUSTAINABILITY

THE OHIO STATE UNIVERSITY

Ohio State SustainabilityFund

FY 2017 ANNUAL REPORT

Overview

The Ohio State Sustainability Fund was established to support improvement of the sustainability profile of the university – through projects that improve the efficiency of campus operations and lead to increased understanding or more sustainable behaviors in the university community.

The Office of Energy and Environment (OEE) manages the Ohio State Sustainability Fund (OSSF). The OSSF has been renewed with $1 million from the Office of Business & Finance annually since 2010. For FY 2017, the OSSF provided nearly $334,000 in project support, which included committed projects that extended beyond the fiscal year calendar. All projects are presented to the President and Provost's Council on Sustainability (PPCS) for discussion prior to any final funding decisions.

The OSSF committed funds for five projects in FY 2017, ranging from $25,000 to assist with the installation of electronic landscape irrigation controls to conserve water use in the Academic Core of the Columbus campus, to $100,000 in support for the establishment of an inter-disciplinary micro-farm at Ohio State's Mansfield campus.

As in the past, many of the OSSF investments are expected to result in quantifiable operational cost savings for the university. OEE is pleased to report that to date, investments of the OSSF are generating a cumulative annual cost savings in excess of $1.3 million – effectively netting out the annual renewal of the OSSF and returning a financial net positive result to Ohio State.

Due to the amount of staff activity dedicated to finalizing the Comprehensive Energy Management Project (CEMP) throughout FY 2017, OSSF grant development activity was deemphasized. This resulted in lower than normal activity through OSSF, and a considerable $1.3 million year-end balance. However, demand is pent up for OSSF grants, from both pending proposals that were not acted upon in FY 2017 and expected new proposals in FY 2018. With the CEMP now executed, more focused attention has returned to OSSF grant management.

Project Funding Guidelines

Guidelines for the eligibility and selection of projects the OSSF supports are summarized below. Proposals are reviewed and considered individually and in light of all other funded projects and pending proposals. Proposed projects must address the eligibility criteria below. The individual projects that best meet the eligibility criteria are then evaluated for funding support in consideration and comparison to all previously funded projects and pending proposals.

Eligibility guidelines: Individually, does the proposed project meet the following criteria:

- ***Contribute to sustainability –*** Projects improve the sustainability of campus operations and/or improve the sustainability awareness of campus populations.
- ***Campus impact –*** Projects are restricted to Ohio State campuses and must be led by a staff or faculty member.
- ***Existing university operating budget –*** Projects that are covered by an existing university operating budget are not eligible. Projects and project funding are not intended to be an alternative path to the normal annual budgeting process.
- ***Partial funding support –*** The Sustainability Fund should be used to seed, catalyze, or gap-fill funding on projects rather than be the sole funding source. The fund may be used to support the launch of a program but not for regular year-over-year programmatic funding.

Selection Evaluation Guidelines: Relative to previous projects and all other pending project proposals:

- ***Feasibility –*** Is the project likely to succeed? Has the project accounted for contingencies and major obstacles?
- ***Sustainability Impact –*** Does the project measurably improve or accelerate the sustainability of Ohio State's campuses or the realization of Ohio State's Sustainability Goals and priorities?
- ***University Population Impact –*** Does the project lead to increased understanding, greater engagement, or sustainable behavior change in the university community?
- ***Economic Impact –*** What are the financial benefits? What are the cost-savings, return on investment, or payback over time? Positive return on investment is strongly encouraged.
- ***Innovation –*** Does the project exhibit innovative technology, processes, or application of knowledge?
- ***Institutionalization/Scalability –*** Can the project become embedded in the University's routine operation? Does it need only start-up funding to then sustain itself over time? Can it be expanded to other campus locations if successful?

Project Selection

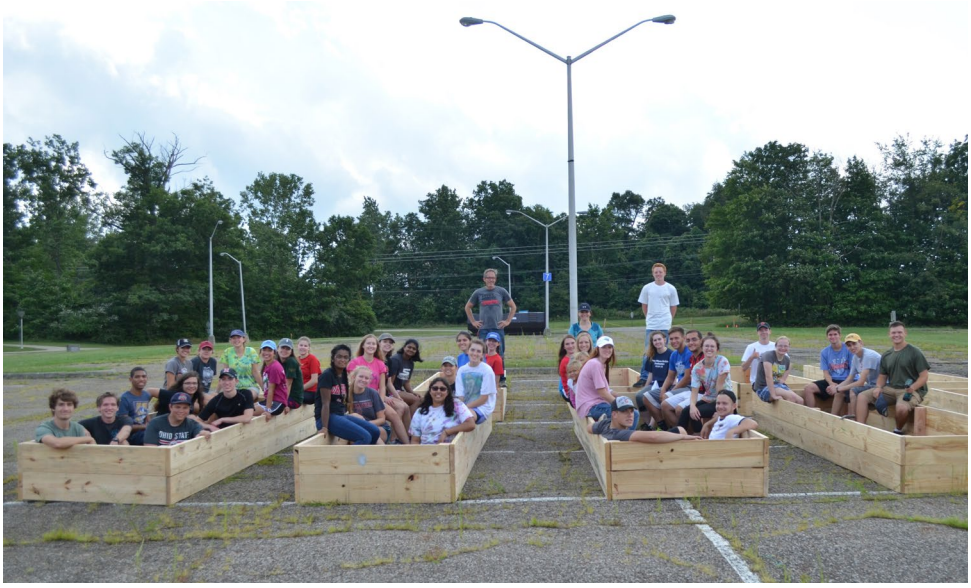
OEE receives and seeks project proposals from across the university including colleges, student groups, regional campuses, research centers, Student Life, Facilities Operations and Development, Wexner Medical Center, and Athletics. OEE continually reviews projects throughout each fiscal year.

Following a review by OEE, recommended projects are presented to the President and Provost's Council on Sustainability (PPCS) for further review and consideration. Projects receiving a concurrence from the PPCS are then awarded funding.

FY 17 Funded Projects

MANSFIELD CAMPUS MICRO-FARM

$100,000



Mansfield, Ohio is a small city experiencing long-term economic losses from a depleting manufacturing employment base. As a result, the city contends with elevated levels of poverty, contains the eighth most economically disadvantaged K-12 student population in the state, and a significant residential food desert.

To help address these issues, the staff and faculty at the University's Mansfield campus are developing a long-term research and community outreach project to demonstrate the economic benefits of locally growing healthy, sustainable food for and within an economically depressed urban area.

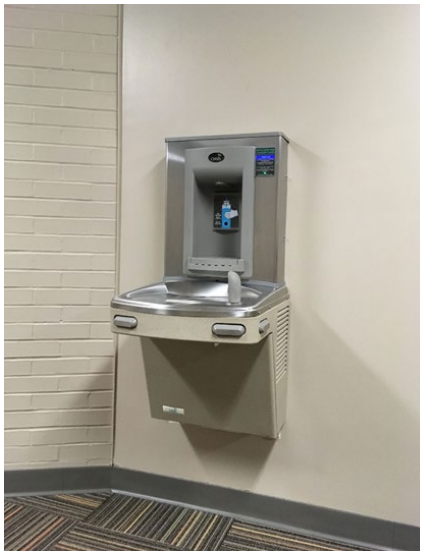
SUSTAINABILITY GOALS ADVANCED BY PROJECT

- Teach sustainability in innovative ways in and out of the classroom
- Foster sustainability culture on and off campus
- Increase production and purchase of locally and sustainably sourced food
- Achieve zero waste by 2025

By converting a deteriorating parking lot to a raised bed "micro-farm" on the Mansfield campus, this project will develop a local, healthy food supply for the Mansfield campus dining service and community food banks; provide agronomy and small business educational programs for students and area residents; and enhance many environmental benefits on campus such as composting food waste.

WATER BOTTLE REFILLING STATIONS

$93,200



Polyethylene terephthalate (PETE) plastic represents almost 4% of the university's total waste load. Disposable plastic bottles are a major source for this type of plastic waste on campus.

While this material is recyclable, it often ends up in landfills due to contamination of recycling collections or improper disposal into trash bins.

To reduce the amount of this waste generated on campus in the first place, Student Life accelerated the installation of combination water bottle stations/water fountains on every floor of every residence hall. These stations work well with any refillable water bottle, including the Student Life Dining Services' MyCup, increasing the value of that offering to students.

MARION CAMPUS SOLAR ENERGY INSTALLATION

$62,450

The Marion campus is highlighting sustainability with the installation of solar panels on the roof of its new Science and Engineering Building. This new building replaces and expands the campus' original science laboratories on campus, which were built in 1968. The building houses various biology, chemistry and research labs with equipment and infrastructure that will require a considerable amount of power. The solar array helps to minimize the energy use and environmental impact of the building. The building also features energy-saving measures such as Low-E glass windows, heat recovery units, natural light harvesting, LED lights and activity sensors.

"We wanted the building to represent science and technology," says Marion campus Dean and Director Gregory Rose.

The solar panels are not capable of producing the majority of the building's power; however, they provide an educational experience for students. The campus has installed technology that monitors how much energy the panels generate and read-outs that are available for students to see. The data indicates the percentage of the building's energy use that is coming from the panels and how much they reduce the carbon footprint of the building.

Rose says that moving forward, the Marion campus is considering adding solar panels to more buildings because the installation process was so simple.

SUSTAINABILITY GOALS ADVANCED BY PROJECT

- Teach sustainability in innovative ways in and out of the classroom
- Achieve carbon neutrality by 2050
- Reduce campus building energy consumption by 25% by 2025

The stations individually track their use, which will enable the university to quantify how many disposable water bottles are diverted from the waste stream, and can be the basis for competition events between floors and buildings to create educational programming for students about plastic waste and healthy water consumption.

SUSTAINABILITY GOALS ADVANCED BY PROJECT

- Teach sustainability in innovative ways in and out of the classroom
- Foster sustainability culture on and off campus
- Achieve zero waste by 2025

Sustainability Fund Projects
FY 2014-2017

2014

	Funding	Savings/Year
Olentangy River Restoration Project	$50,000	$7,600
Zero Waste Program - Schottenstein Center	$50,000	NA
Townsend Hall – Digital control upgrade	$68,000	$30,320
Drinko Hall – Digital control upgrade	$129,591	$78,630
Agricultural Engineering Bldg – Digital control upgrade	$146,759	$50,220
Bolz Hall – Energy conservation measures	$39,615	$8,246
Mirror Lake – Well drilling and testing	$15,000	$33,182
FY 2014 Totals	**$498,965**	**$208,198**

2015

	Funding	Savings/Year
Clean Fuels Ohio - Compressed Natural Gas Station	$10,000	NA
Mendenhall Lab - Energy conservation measures	$191,108	$118,754
Hagerty Hall - Energy conservation measures	$20,184	$62,915
Hitchcock Hall - Energy conservation measures	$26,600	$22,810
Caldwell Lab - Energy conservation measures	$63,147	$40,529
Drinko Hall - Energy conservation measures	$150,877	$71,670
Ohio State Bicycle Sharing System	$200,000	$28,125
New Recycling Panels for Recycling Bins	$26,000	NA
FY 2015 Totals	**$687,916**	**$344,803**

2016

	Funding	Savings/Year
LED lighting for B. Davis, J. Owens, and Buckeye Field Stadiums	$150,000	TBD
Recycling Infrastructure Expansion and Standardization	$150,000	NA
University Organics Hauling Vehicle	$345,260	TBD
CNG Filling Station – Construction Budget Support	$500,000	TBD
Center for Ethics and Human Values – Sustainability Project	$144,000	NA
Collaborative to Reduce and Redirect Consumer Food Waste	$27,500	NA
Reusable Hot/Cold Beverage Cup Program	$200,000	NA
AASHE STARS – Carbon Footprints for Regional Campuses	$18,000	NA
Ohio State-Lima Campus Hybrid Electric Car	$17,000	$250
Hot Water Pipe Upgrades	$171,000	TBD
FY 2016 Totals	**$1,722,760**	**TBD**

2017

	Funding	Savings/Year
Zero Waste Goals	$53,000	TBD
Water Bottle Refilling Stations	$93,200	NA
Mansfield Campus Micro-Farm	$100,000	TBD
Marion Campus Solar Energy Installation	$62,450	TBD
Electronic Landscape Irrigation Control	$25,000	TBD
FY 2017 Totals	**$333,650**	**TBD**

Fiscal Years 2010–2017 Summary	Total Investment	Annual Cost Savings*
79 funded projects	**$6.7 million**	**$1.3 million**

* **NOTE:**
Efforts to quantify the cost savings for 2016 and 2017 projects are ongoing and will be reported as it becomes available.

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