

MSU Greeniversity: The Center for Place-based Learning about Sustainability

Strategic Plan Theme: Stewardship and Sustainability

Funding Level: Between \$1-5 million

Facility Needs: Adjustments to existing facilities will be needed

Submitting Unit: NA

Collaborating colleges/departments/units involved with this proposal.

Allison Dobbins, Integrated Performance Media Design; Anna Kirkwood Graham, Department of Romance and Classical Studies, IAH; Bill McConnell, Center for Global Change and Earth Observations; Carla Iansiti, Residential and Hospitality Services Sustainability Officer; Crystal Eustice, CANR, Department of Community Sustainability; Jen Owens, CANR, Corey Marsh Ecological Research Center, Department of Fisheries and Wildlife; Jeno Rivera, CANR Liberty Hyde Bailey Scholars Program; Laura Young, MSU Office of Sustainability; Laurie Thorp, Residential Initiative on the Study of the Environment and Student Organic Farm; Mark Sullivan, Computer Music Studios, Data Visualization, Serious Gaming; Mary Tate Bremigan, CANR Department of Fisheries and Wildlife; Vincent Delgado, RCAH Program on Sustainability; Wolfgang Bauer, Mobility, MSU's Energy Transition Plan

What is the proposal's big theme or idea?

Problem Statement: Global challenges – climate change, food insecurity, access to water, and environmental inequity —are increasing. At MSU, sustainable experiential education, research, and outreach are not intentional and are not heavily invested in. This lack of support and commitment has resulted in many MSU students, staff, and faculty who are ill prepared to face systemic challenges holistically. There are missed opportunities to sustain or expand programming. We propose the MSU Greeniversity: The Center for Place-based Learning about Sustainability to position MSU as a world-class institution for delivering high impact learning experiences in sustainability and global challenges.

MSU has dozens of sustainable initiatives in place across campus and around the world. But, because these initiatives on sustainability are dispersed across the university and elsewhere, they are siloed. There are missed opportunities for utilizing operations for teaching and research while increasing efficiencies and support fiscal responsibility. Often faculty, staff, and students are unaware of these initiatives and do not partake in the program research, teaching, and outreach offerings. Yet we know their interest in sustainability is considerable. For example, incoming students are looking to attend institutions that are committed to sustainability. According to the 2022 Princeton Review study on college commitment, 78% of student respondents indicated that a college's commitment to the environment and sustainability would affect their decision to apply to or attend a school.

By building on the MSU Office of Sustainability's vision, MSU will become a driving force in collaborative global sustainability and action regarding climate change. The purpose of the Center is to foster innovative approaches and solutions that promote connections between research, teaching, and outreach with a broader community. By promoting and developing curricular and extracurricular experiences the Center will develop "real world" experiences with the research, the methods, and the problems, solutions, and environments involved.

For MSU to truly represent its sustainability bonafides, students, staff, and faculty need a trans-collegiate, trans-disciplinary, one-stop shop that supports, advocates, and connects the campus community to well-

resourced, well-run, easily accessible place-based opportunities to address a host of sustainability challenges. The Greenversity, as a unit focused on place-based learning, would utilize radical reciprocity to ensure global community and university impact, consistent with MSU's land-grant mission. Further, we know such an initiative would attract new donors concerned about increasing both sustainability and environmental stewardship in the pipeline—from investing in programming for incoming students to investing in future leaders in corporate responsibility.

What is the proposal's goal?

The goal of the Center is to distinguish MSU as a global leader in high impact learning for sustainability. The MSU Greenversity, will provide MSU students, staff, and faculty access to opportunities to learn about, engage directly in, and develop new knowledge and solutions to one of the most pressing challenges of our time— Sustainability. In places around the globe and close to home the MSU community will be able to: - Create new knowledge and design just solutions. - Use creativity, ethics and dialogue to create socio-cultural change. - Innovate new financial processes and entrepreneurial structures.

Drawing on existing research, curricular strengths, and the wealth of MSU living laboratory sites, the Center will foster the growth and evolution of efforts, add faculty, and increase sites and options for students. The efforts and outputs of the center will complement both the Global Innovation and Student Success initiatives, building MSU's capacity to function as a globally significant member of the efforts to respond to the wicked problems of global sustainability, and particularly climate change.

We aim to draw on aspects of the land grant (LG) tradition - those related to integrating a “living laboratory” into the educational experience and expanding the “real-life training and on-the-job experience.” We also seek to counteract aspects of the LG tradition by implementing a radically reciprocal model to advance the LG mission. We will foster a teaching, learning, and research environment that creates and sustains attention to social-political factors, ethics, diversity, equity, inclusion, access throughout the educational experience, and cultivating and sustaining high degrees of reciprocity with community partners and organizations. STUDENT SUCCESS. In response to the MSU Strategic Plan 2030 goal to: Expand sustainability teaching and learning opportunities through formal courses and co-curricular activities, we propose the following student success initiatives of the Center: - Create an “environmental stewardship and sustainability” (ESS) high-impact learning requirement, emphasis, or track, for all undergraduate students based on place-based learning – student-centered – where students engage students in their own communities, or those related to their project and discipline, and engage with the physical environment, local culture, history, and various generations of people. The ESS option would appear on student transcripts, like the Honors option, or the Entrepreneurship option. - Explore credentialing “Sustainability and Environmental Stewardship” for all faculty, staff, students, and external community members. - Create structures and processes that support “whole student development.” Partner with the STEM Institute to purposely integrate the humanities and sciences and engage in ethical inquiries into sustainability, environmental inequity, across a wide range of communities.

Define the significance, or impact of your big idea.

The MSU Greenversity will transform teaching, learning, research, and outreach by creating an integrated organizational structure that can better address global challenges. The Center will set MSU apart from other institutions for its commitment to sustainability and producing the next generation of stewards. This commitment can attract students as we face a looming higher education enrollment cliff and attract faculty and staff who seek a healthy work environment committed to green practices and learning.

Initially, the MSU Greenversity will initiate a concerted effort to focus and expand the impact of MSU projects and people on global efforts to create solutions to the most pressing issues related to climate change, with particular emphasis on environmental inequity. We foresee the following impacts: - Enhancing capacity. Additional awareness and education among programs, students, faculty, staff, and community members will increase synergistic relationships producing more effective and efficient outputs. - Strengthening operational efficiencies. Coupling infrastructure with teaching and learning can be cost- saving. By integrating the daily practice of operations into teaching and learning we can better utilize on-campus knowledge and resources. -

Increasing job satisfaction and retention. Making sustainability efforts and engagement valued in all roles across campus will increase the number of employees engaged in work that is meaningful to them. - Ensuring HIPs for all students. One of the most important goals is developing democratically engaged students who can evaluate scientific knowledge and policy options based on informed criteria. This will enable students to act, along with other partners, to formulate solutions to the wicked environmental problems facing us, to formulate ways to implement those solutions, and to create sustainable and equitable frameworks for living and developing in a global context. - Modeling Radical Reciprocity. Demonstrating the collective impact approach on policy and research practice, as well as in the creation of informed decision making and practices related to environmental concerns, would allow MSU, in the short term, to make a highly significant contribution to global efforts to avert a wide range of catastrophic consequences. - Educating all learners. By developing and perfecting traditional and innovative approaches to education we can provide learners with what they need to create and sustain human activity in desirable ways into the future. Enhanced educational experiences will better prepare the next generation of leaders who are disproportionately impacted by the effects of climate change and food insecurity. - Supporting green infrastructure. MSU is its own self-contained city. This institute can teach our students every component of how to run any city's infrastructure in a more sustainable way, providing rich experiential components, as well as the theoretical framework.

Who will be impacted?

Undergraduate and graduate students, Faculty and Staff in a broad range of colleges across the entire University, including UOE and Extension, as well as Community Members, lifelong learners, and Project Partners.

We have identified over 50+ people and units around campus and our communities who invest in sustainability. Some of these partnerships are already active and others will need to be developed and strengthened. We have identified partners with unique assets that we would like to collaborate with at the start of the center. This is just a brief listing of programs that will be targeted with the intention of broadening participation. - Campus-wide sustainability efforts related to academics, infrastructure, research, and outreach, such as the Office of Sustainability - AgBioResearch Stations and Centers, such as Corey Marsh Ecological Research Center - Virtual/Gaming platforms related to study of the environment, such as the Games for Entertainment and Learning Lab (GEL Lab) - Integrated STEM and humanities lab space at the MSU Science Gallery Co-Lab and MSU Museums - Learning abroad sustainability programs, such as RCAF Sustainability in Costa Rica Program - Department-level integration of sustainability, CANR – Dept. Of Community Sustainability - Experiential learning lab (on main campus)- Student Organic Farm - Experiential learning lab (off campus)- Detroit Partnership for Food, Learning, and Innovation - Student/MSU Community Services- MSU Bike Center - Greater Lansing Community Services- Recycling Center and Surplus Store

What does sustainability for your proposal look like?

The Center has the potential to support fiscal stewardship of university resources directly and indirectly through cost savings, recruitment, and development efforts.

Sustainability projects continue to generate cost savings for MSU, such as the new 20-megawatt solar array which is projected to save MSU at least \$40 million in electricity expenditures over its lifetime. The Center could be operated in a self-sustaining way if some of the cost savings from sustainable infrastructure projects and operational efficiencies realized from the Center's initiatives were funneled back into the Center's operation. The former Spartan Energy Treasure Hunt program is a successful example of this concept. The net savings from the program were shared evenly between the units occupying a building and the central administration.

The Center can increase tuition revenue by strengthening recruitment of prospective students who are increasingly aware of sustainability's global importance and the impact it will have on their own future. Just as peer institutions are trying to stand out in their sustainability efforts, MSU needs to embrace our unique characteristics in the sustainability arena. With extensive land resources on the main East Lansing campus, properties throughout the state, and strong community partnerships locally, regionally, and globally, MSU is uniquely positioned to be a leader in place-based sustainability education. The Center will give the university

a competitive edge in recruiting undergraduate students as well as the best talent for graduate students, post docs, and faculty.

The Center can serve as a strategic partner in cultivating development opportunities. The high impact sustainability learning experiences fostered by the Center will build a foundation for increasing alumni engagement. The immersive learning projects using the campus as a living lab often provide the opportunity for students to leave behind a legacy, such as the student-led outdoor green walls along the library pedestrian bridge. These sustainable sites are iconic fixtures of the Spartan experience and something that Spartans will be personally invested in as they advance in their lives and careers. With over 90% of S&P 500 companies publishing sustainability reports in 2020, there are also opportunities to nurture corporate giving in support of the Center.

Perhaps most importantly, the Center will elevate the value of sustainability across campus and further embed the university's sustainability framework of the 4Cs into academics. The Center embodies the interconnections between Campus, Curriculum, Community, and Culture and will be a catalyst for helping Spartans understand the role they play in advancing the university's sustainability goals and objectives outlined in the strategic plan.