

**PRESIDENT'S COMMITTEE ON SUSTAINABILITY
MUHLENBERG COLLEGE
SUSTAINABILITY STRATEGIC PLAN
ADOPTED BY PRESIDENT JOHN WILLIAMS MAY 2018**

INTRODUCTION

Sustainability is defined as meeting the needs of the present without compromising the ability of future generations to meet their own needs. A sustainable future requires us to use natural resources in ways that maximize renewal, encourage re-use, and minimize waste. This must include the minimization of pollution and the mitigation of climate change. Also, essential to a sustainable future is the elevation of the quality of human life through improved health, education, and the promotion of basic human rights for all. Finally, a sustainable future entails a model of global economic growth that is inclusionary and does not violate the above environmental and social conditions. There is considerable evidence that the global environment, human condition, and economic equity have been in decline and continue to be threatened. However, there is also much to be hopeful about. We have begun to understand that we as individuals, social groups, communities, and institutions can play a major role in the creation of a just and sustainable future for the health of our planet and the well-being of all people. The seeds of transformation in the way we teach, do business and act as individuals have been planted, and their growth is being amplified through the development of new technologies and fundamental changes in values.

The majority of institutions of higher education have come to recognize their important role in contributing to this transition towards a sustainable future. Increasingly colleges and universities have acknowledged the moral imperative of addressing their own impact on human and ecological health; and have accordingly integrated all of the elements of sustainability into their missions and operations. This is being accomplished through the development and implementation of strategic plans focused specifically on campus sustainability. Recently, President John Williams formed The President's Committee on Sustainability at Muhlenberg College to do just that. Through this strategic plan we provide an opportunity for Muhlenberg to not only join, but serve as a leader in what has become a sustainability movement in higher education.

Muhlenberg's mission statement and fundamental institutional values already embrace the principles of sustainability. We are committed to being good citizens of the Earth, and to making institutional decisions that are mindful of our complex relations with its ecosystems. We acknowledge our obligation to improve the lives of all who have less access to education and political power, fewer privileges and resources, and will bear the burden of discrimination. We recognize that it is our ethical responsibility to do everything we can to improve both the environmental and human condition of all people as we carry out the work of the College. This includes all aspects of how we operate as an institution. As well, it is our responsibility to prepare our students to contribute to the creation of a just and sustainable future through changes in their lifestyles and through their future professions. This strategic plan provides direction and

specific recommendations that will guide us as we work to live by these values and meet our own stated obligations.

The sustainability initiatives presented here will serve the College in other ways. They will support our current curricular foci on human difference and global engagement, integrative learning, and our commitments to community engagement and environmental literacy. Integrating sustainability into our daily operations and future planning creates unique learning opportunities by allowing curricular and co-curricular activities to seamlessly interface with the non-academic aspects of the College. This is a unique form of learning for which Muhlenberg already has a growing reputation. Sustainability initiatives also provide the potential for long-term cost savings for the College through their reduction in resource use and increases in efficiency. Prioritizing sustainability will offer increased advancement opportunities by the broadening our donor pool to include those with specific interests in sustainability. This is particularly true for Millennials, who by 2020, will comprise nearly half the working population. According to a study by Morgan Stanley, in what is referred to as *The Millennial Effect*, members of this demographic are twice as likely to support organizations that target sustainability related outcomes such as directly address climate change or reducing global poverty compared to the total pool of donors. There is also an increasing number of grant opportunities for projects that support sustainability initiatives. Our increased commitment to sustainability will allow us to broaden our application pool as campus sustainability has increasingly become an important criterion for diverse, prospective students in making their decision on where to pursue their higher education.

PROCESS

In 2016, President John Williams restructured the existing Campus Greening Committee as the President's Committee on Sustainability and tasked it to consider how Muhlenberg College might continue to further sustainability in its academics, co-curricular initiatives, operations and planning. He directed the creation of a sustainability plan to develop strategic and operational sustainability goals.

The President's Committee on Sustainability created five Sub-Committees highlighting target areas of sustainability integration. Academic and Co-Curricular, Buildings and Grounds, Dining, Energy and Climate, and Administration and Planning. Each Subcommittee consisted of students, faculty, staff, and alumni. Input was also gathered from College suppliers, advisors and partners. These Sub-Committees met numerous times to develop the goals and strategies. Throughout this process, the President's Committee on Sustainability met to comment on progress and provide feedback to the groups. This document is a synthesis of the ideas, goals, and strategies generated by the Sub-Committees. It is endorsed by the President's Committee on Sustainability.

OVERVIEW – CORE PLANNING AREAS AND GOALS

Our overall goal of this planning process is to develop strategic initiatives that will move sustainability education, operations, and administration forward at Muhlenberg College. We will educate our students and community in sustainable practices to allow all of us the opportunity to be better citizens of our local communities and our world; measure the difference our efforts make; operate the school according to a sustainability ethic; use fewer resources in all areas; and incorporate sustainable values into our administrative practices.

ACKNOWLEDGEMENTS

The Sustainability Committee would like to thank the following faculty, staff, students, and alumni who have contributed to this process. Thank you for your support and work in creating the Sustainability Strategic Plan.

Adam Ackerman '20

Jim Bolton, Director Plant Operations

Aaron Bova '00, Former Assistant Director of Residential Services

Maire Callahan '19

Olivia Chatfield '18

Ranajoy Ray-Chaudhuri, Assistant Professor, Business & Finance

Rita Chesterton, Director, Innovation and Entrepreneurship Program

Jennifer Cote '19

Devin Domeyer '18

Kent Dyer, Chief Business Officer, Committee Co-Chair

Noah Firth '20

Justin Frankl '18

Bret Fulton, Assistant Director, Plant Operations

Glenn Gerchman, Director, Seegers Union

Sophia Guido '19

Kimberly Heiman, Senior Lecturer, Biology

Carlos Herrera Acevedo '17

Daniel Kier '18

Tim Korn, Mechanical Maintenance Supervisor

Hannah Kuperman '20

Samantha de Lannoy '19

Megan Leahy '18

Benjamin Lefkowitz '20

Tom Littrell '18

Kim Nguyen, Assistant Director of Admissions

Jon Middleton, Director of Culinary Operations, Muhlenberg Dining

Allie Mirsky '20

Richard Niesenbaum, Director of Sustainability Studies, Professor of Biology, Committee Co-Chair

Jon Pasquerello, General Manager, Muhlenberg Dining

Kalyna Procyk, Sustainability Coordinator

David Rabold, Capital Projects Manager

Will Rantz, Grounds Manager

Naomi Reitzin '20

Kiara Ryan '19

Leah Santacrocce '19

Kate Shelley, Assistant Director of Residential Services

Joe Spirko, Housekeeping Manager

Peter Stark, Operations Manager

Rachel Szachara '19

Kammie Takahashi, Assistant Professor, Religious Studies

Natalie Warhit '19

William Zoha '79 P '17, President, Prescient Energy Corporation

MUHLENBERG COLLEGE SUSTAINABILITY STRATEGIC GOALS

Curriculum and Co-Curricular Integration

Goal #1: Recognize that equity and inclusion priorities share common goals with sustainability objectives.

- Create and support collaborative programs, projects and initiatives with social justice, community engagement and diversity groups on campus.

Goal #2: Increase and assess broader sustainability education to all students by integrating into existing and new co-curricular programming.

- Create new student orientation program and integrate into the annual orientation program for first year students.
- Create an Eco-Reps sustainability peer training program whose goal is supporting Muhlenberg College's Sustainability Action Plan through peer projects, outreach, and events.
- Create cross-curricular and co-curricular partnerships where students, faculty, staff, and Muhlenberg Dining Services improve food sustainability in Wood Dining Commons.
- Develop workshops and educational materials with campus organizations linking sustainable food practices with health, fitness, nutrition, culture, and ethics.¹
- Organize regular speakers, lecture and/or workshops on sustainability topics.
- Assess sustainability learning at beginning of first year and end of senior year to determine knowledge, growth, behavior, and attitudes.

Goal #3: Support the integration of sustainability concepts and themes into existing courses across the entire curriculum and the development and promotion of new courses specifically focused on sustainability.

- Develop and offer a "Sustainability Across the Curriculum Workshop" based on the pioneering success of the Ponderosa Project at Northern Arizona University and the Piedmont Project at Emory University² for all faculty.
- Incorporate food sustainability studies into courses and sustainability curriculum.
- Explore possibility of integrating sustainability into Fitness and Wellness or Intergroup dialogue course.

¹ Partners could include Health Center, Counseling Services, Life Sports Center and Residential Life, Muhlenberg Dining Services, Multicultural Life, Office of Community Engagement, Religious Life, or Global Education.

² This model has now been implemented successfully at dozens of institutions around the country, and has successfully achieved the goal of broadening sustainability education across entire curricula.

<https://www.aacu.org/publications-research/periodicals/curricular-innovation-sustainabilitythe-piedmont-ponderosa-model>

Goal #4 - Create a sustainable living learning program in buildings that facilitates sustainable living, teaches a sustainability ethic, and integrates academic and student life.³

- Create a sustainability living learning program that considers integrating mixed use learning spaces, providing space for live-in staff, introducing staff/faculty office spaces, staffing the program and ensuring ongoing programming within the space in planning for Prosser Hall renovation, residential retail space and other upcoming capital projects.

Buildings and Grounds

Goal #1 – Decrease resources used campus-wide.

- Identify specific target reductions in energy, chemical usage, recycling, paper, water, greenhouse gases, and waste.
- Decrease chemical use in housekeeping.
- Implement a paperless Plant Operations work-order system.
- Replace and upgrade College-owned vehicles and equipment, when needed, to decrease use of fossil fuels.
- Purchase in bulk to reduce packaging waste and work with suppliers to decrease packaging sent to the College.
- Improve data collection and reporting of waste, recycling, composting/yard waste, fuel and energy use.

Goal #2 – Establish and prioritize sustainability and sustainable practices in campus operations.

- Create sustainable policies and practices in campus operations including: purchasing, chemical application, fossil fuel use, building automation systems, energy use, integrated pest management, planting and grounds, water conservation, Life-cycle Cost Analysis, lighting, building envelopes, and campus construction.
- Increase grounds initiatives of native drought-resistant plants, limit use of sprinklers, create no-mow zones or meadows, replace trees, and reduce chemical applications.
- Follow national green building design standards in new construction and renovation. (Ex. LEED, Net-Zero, Living Building Challenge, BREEM etc.)
- Operate and maintain buildings consistent with LEED or similar green Operations and Maintenance policies.

³ Harvard's recent House Zero project provides a good model of an ultra-efficient building that requires almost zero energy, relies on natural day lighting, and produces no carbon emissions.

- Renovate or replace retiring campus buildings with facilities that consider sustainable and biophilic architectural and landscape design, adhere to sustainable urban design/ Smart Growth principles, utilize sustainable construction practices, and incorporate other green building strategies.
- Expand the reuse and recycling of renovation byproducts. (Ex. metal, wood products, blocks, stone, etc.)

Goal #3 – Advance the presence of sustainability through education in building and grounds management, making it simple and visible to students, faculty, and staff.

- Educate staff on buildings and grounds sustainable practices during staff Professional Development Day.
- Publicize Plant Operations best practices through Plant Operations website, Sustainability website, social media, annual report, and STARS reporting.
- Provide students information on sustainable behavior and responsibilities in student housing agreements and MILE house-specific packets.
- Engage community in Allentown Recyclebank Program Incentives for Allentown residents and Recyclemania.
- Collaborate with Eco-Reps and classes on projects.

Food and Dining

Goal #1 – Educate and conduct outreach activities on sustainable food across campus.

- Engage in ongoing outreach to students and community about sustainable foods including regular workshops, supporting student projects, and enabling Farmer’s Markets and farm trips.
- Expand outreach efforts and marketing in the area of meatless alternatives including vegan options.
- Market Muhlenberg Dining Services programs to engage faculty, student, and staff in existing and new sustainability initiatives to increase participation.

Goal #2 - Reduce pre and post consumer food waste, packaging waste, and energy consumption.

- Develop and implement pre-consumer and post-consumer food waste reduction programs at all outlets including catering.
- Investigate replacing disposable containers at all dining outlets with reusable containers.
- Monitor and reduce non-food waste throughout all Muhlenberg Dining Services operations including working in-house and with suppliers to reduce packaging waste and serving waste.

Goal #3 - Increase proportion of purchases that are sustainable and local.

- Conduct Muhlenberg Dining Services inventory to identify food and beverage purchases that are third party verified for sustainability standards or local and community based each semester.⁴
- Develop time-based objectives for increasing the proportion of purchases that are sustainable and provide annual reporting for meeting objectives.

Energy and Climate

Goal #1 - Reduce greenhouse gas emissions.

- Re-evaluate signing the President's Climate Commitment Challenge to limit Greenhouse Gas Emissions.
- Establish goals for reducing greenhouse gas emissions.
- Replace 10% of low efficiency lighting with high efficiency lighting fixtures (LEDs) each year.
- Convert residential housing heating systems from oil to natural gas including annual targets.
- Reduce energy inefficiencies in academic and administration buildings.
- Complete decommissioning of central steam plant.

Goal #2 - Reduce indirect carbon emissions and related impact on natural resources.

- Reduce hot water consumption in laundry facilities.
- Reduce overall student domestic water use.
- Install water meters to enable meaningful feedback on building water consumption.
- Promote reducing individual student car use, increasing efficiency of existing campus shuttle, and using City of Allentown bike share program.
- Promote public and/or alternative transportation for campus employees.
- Create incentive program for employees who do not drive to work.
- Mitigate greenhouse gas emissions by increasing and/or preserving greenspace and plantings.

⁴ See Stars 2.1(AASHE) technical manual for details.

Planning and Administration

Goal #1 – Identify and incorporate sustainability as a core value, who we are as well as how we behave.

- Incorporate sustainability into foundational College documents such as Master Plan, Board of Trustees policies, Vision/ Mission/ Values statements, Diversity Strategic Plan, Muhlenberg branding, and key policies.
- Engage faculty and staff in programming and workshops to increase sustainability knowledge, engagement, and behavior.
- Explore ways to invest endowment that are more consistent with sustainability objectives and the values of the College.
- Create a Green Office/ Green Residence Hall Certification.
- Include sustainability initiatives in new employee orientation.
- Develop signature behavior change campaigns.
- Convert part-time Sustainability Coordinator position to full-time position.

Goal #2 – Fund sustainability initiatives and projects.

- Create a Revolving Green Fund, using cost-savings from previously financed projects to invest in sustainability projects with a return on investment.
- Develop funding streams to support class-related initiatives, faculty and student research, and co-curricular projects in startup and operational and maintenance phases.⁵

Goal #3 – Publicize sustainability goals and achievements.

- Invest in marketing sustainability achievements as part of core Admissions information.
- Develop sustainability elements in prospective student campus tours.
- Place signs across campus identifying and highlighting sustainability commitments and features.
- Create maps of campus sustainability information.
- Maintain a website including Sustainability Action Plan materials and updates.

⁵ See model of Campus Sustainability Incubator Fund. <https://sustainability.mit.edu/campus-sustainability-incubator-fund>

Goal #4 – Develop methods and tools to measure progress towards stated goals.

- Collect building energy information to provide accurate and timely feedback into progress towards sustainability goals.
- Measure staff and faculty sustainability knowledge, engagement and behavior.
- Establish regular reporting on Sustainability Action Plan.