

Mount Holyoke College

RECOMMENDATIONS OF THE
SUSTAINABILITY TASK FORCE

EXECUTIVE SUMMARY

December 2017

Mount Holyoke College
RECOMMENDATIONS OF THE SUSTAINABILITY TASK FORCE
EXECUTIVE SUMMARY

WHY SUSTAINABILITY MATTERS

Climate change is a defining issue of our day: The global threat of warming temperatures, rising sea levels, and extreme weather demands both serious study and decisive action to protect our Earth and its inhabitants. We all share a responsibility to seek solutions to prevent future devastating consequences and to work toward a greener and more equitable world. Colleges and universities around the globe are taking a leadership role in teaching and research on climate change and sustainability, and working to reduce their negative impact on the local and global environment.

Mount Holyoke defines sustainability as ensuring the long-term health of the environment by respecting the vital role of the ecosystem and mitigating the impact of human activity, while promoting equitable resource distribution and economic opportunity, and advancing human rights and social justice.

As a preeminent women's college and educational institution, Mount Holyoke College is poised to lead in training students and the broader community about the complex relationships between humans and their environment. It is also committed to taking significant and innovative measures to improve the sustainability of its campus operations and culture, and to reducing its own carbon footprint. For nearly 200 years, the College has shaped pioneers of thought who step boldly toward issues and ideas—with generations of women leaders, activists, scientists, artists and educators following in founder Mary Lyon's footsteps.

These recommendations are designed to fulfill the vision of Mount Holyoke College as leader in sustainability research and education, and its commitment to investing in faculty, staff, programs and infrastructure that advance a campus culture of sustainability. Our graduates are the next generation of leaders, who will create a more sustainable, just and equitable future across the world. Our approach to sustainability is inclusive, integrative and interdisciplinary, and with its remarkable international and domestic diversity, strong liberal arts tradition and physical setting, the College is an exceptional place for advancing environmental education and research.

These recommendations of the Sustainability Task Force were designed with an eye toward equipping students with the tools they need to confront the urgent environmental challenges of the 21st century and to translate knowledge into action. They draw strength from the College's strong liberal arts mission, social justice tradition, remarkable international and domestic diversity, and enviable physical setting on 800 acres in western Massachusetts. They envision an education that extends beyond the borders of campus, connecting global-to-local experiences. They strive to help students understand the multidimensional facets of environmental issues — ecological, social, cultural, historical, political, and economic — in order to address environmental issues in responsible and equitable ways.

The College's strategic blueprint, the Plan for Mount Holyoke 2021, identifies environmental sustainability as a top priority, emphasizing the need to: "amplify and promote environmental efforts as a commitment to the future of our campus and the planet"; "develop and enrich academic programs in areas of strength or need such as ... environmental studies"; and "enhance, preserve, and sustain the Mount Holyoke campus, including both natural and built environments."

Mount Holyoke College
RECOMMENDATIONS OF THE SUSTAINABILITY TASK FORCE
EXECUTIVE SUMMARY

Acting President Sonya Stephens created the Mount Holyoke Sustainability Task Force in January 2017 to recommend progressive action to advance sustainability in campus operations, programming and the curriculum. Task Force members included students, faculty from the three divisions and staff from departments across campus. At the same time, the College incorporated campus sustainability activities under the Miller Worley Center for the Environment, which improved coordination between campus operations and programming.

TASK FORCE RECOMMENDATIONS

The recommendations of the Sustainability Task Force presented here reflect our strategic vision. They will simultaneously offer students a foundation for citizenship and career in a global world and model sustainable practices. As part of a renewed commitment to a greener living and learning community, the recommendations provide a framework for the College to:

- invest in faculty and staff and imaginative programs to become a leader in sustainability education and research;
- cultivate the next generation of leaders—our graduates—who will create a more equitable and sustainable future;
- reduce our carbon footprint by embedding the principles and practices of sustainability in campus operations; and
- foster a culture of sustainability on campus.

The following recommendations were developed through broad stakeholder participation by students, faculty, staff and administrators from across campus who participated in a series of meetings, focus groups, surveys, community outreach events and comment periods. Under the leadership of the Sustainability Task Force, the bulk of the work was conducted by five working groups that met every two weeks during the spring 2017 semester (see Appendix I: Campus Sustainability Task Force and Working Group Members). The groups evaluated previous and current initiatives, reviewed comparative data, and proposed new and measurable goals, strategies, timelines and funding needs. They focused on these four core areas, while a fifth focused on communications and outreach:

- Education and awareness
- Buildings, energy use and transportation
- Sustainable food purchasing and dining operations
- Grounds and campus field research

The Task Force solicited feedback from the broader College community through meetings with the Student Government Association, the Faculty Meeting, the Operational Policy Committee, the Staff Council and an open student town hall meeting. Additional feedback was obtained through a faculty survey, student comment boards in high-traffic campus locations, a community comment period, and other outreach activities. Enthusiasm for the group's work was high and the comments were thoughtful and wide-ranging.

Mount Holyoke College
RECOMMENDATIONS OF THE SUSTAINABILITY TASK FORCE
EXECUTIVE SUMMARY

BENCHMARKING

Using information from the Association for the Advancement of Sustainability in Higher Education (AASHE) Sustainability Tracking, Assessment & Rating System (STARS) self-reporting program, and other sources, Mount Holyoke's sustainability progress was compared with 18 peer institutions:

- Bard College
- Bowdoin College
- Colby College
- Colorado College
- Dickinson College
- Hampshire College
- Haverford College
- Macalester College
- Middlebury College
- Oberlin College
- Pitzer College
- Pomona College
- Smith College
- Swarthmore College
- Vassar College
- Wellesley College
- Wesleyan University
- Williams College

The analysis showed that, while the College has made good progress over the last 20 years in certain areas, such as recycling, composting and energy use, it is significantly behind its peers in other areas, and investment in human resources, capital improvements and programs are needed to be on par with other liberal arts colleges. Some of the key findings are summarized below.

Curriculum: Mount Holyoke ranks 17th among 19 peer institutions in student access to sustainability courses, with 6.9 percent of all courses identified as having a sustainability component. According to STARS statistics, about 25 percent of Mount Holyoke graduates come from programs with learning outcomes related to sustainability, such as environmental studies, geology and coastal and marine sciences. This compares to a large range of self-reported statistics from zero to 96 percent among peers.

Energy use: Mount Holyoke is among the lowest energy users per square foot of building space, at 0.08 MMBtu/ft², or total energy use per square foot, compared to the average 0.12 MMBtu/ft² among peer colleges.

Carbon neutrality: Most peer colleges aim to be carbon neutral by 2030, and some already are. Mount Holyoke is one of only two of the peer schools without such goals. Carbon neutrality involves reducing the amount of carbon released to the atmosphere, primarily by energy efficiency and renewable energy use, and offsetting the rest.

LEED buildings: STARS benchmarking looks at Leadership in Energy and Environmental Design (LEED) building certification at the Gold or above level over the past five years. While the College has one building designated LEED Gold in 2008, none have achieved LEED Gold or Platinum ratings within the past five years. Eleven peer schools have such buildings.

Transportation: Many colleges and universities have started to replace part or all of their transportation fleets with alternative-fuel vehicles (typically hybrid, electric or biofuel). The College currently has no such vehicles.

Mount Holyoke College
RECOMMENDATIONS OF THE SUSTAINABILITY TASK FORCE
EXECUTIVE SUMMARY

Sustainable foods: An estimated 15 percent of the College's food and beverage expenses are local and community-based, and/or from third party-verified organic, fair trade or humane vendors. Peers range from under 5 to nearly 45 percent, with many in the 20-25 percent range.

Pest management: Mount Holyoke is among several campuses leading in this area, with 100 percent of its grounds maintained by a four-tiered integrated pest management program.

Living Laboratory: The College meets one-third of STARS criteria for using the campus as a living laboratory. The majority of peers meet between 60 and 100 percent of the criteria.

SUSTAINABILITY GOALS AND STRATEGIES

Each of the working groups identified 1-3 goals, as well as strategies to reach them. These goals and strategies are summarized below. While presented in separate categories, there are also multiple opportunities to create curricular initiatives around energy efficiency, food sustainability and grounds management.

Education and Awareness

Goal: Mount Holyoke College will become an exceptional destination for students to pursue environmental sustainability and social justice.

- Expand/leverage MHC diversity and its exceptional site-based learning opportunities as well as regional context, and build connections globally, regionally and locally.
- Expand curricular and co-curricular programs in new key areas, such as food and health.

Goal: Faculty, staff and students will have increased awareness of and engagement in campus sustainability practices.

- Educate faculty, staff and students in how and why to be sustainable.
- Raise awareness of how to live/work green on campus in order to change behavior around waste reduction/recycling and energy and water use.
- Support greater collaboration among sustainability organizations, including student groups and faculty and staff.

Goal: The curriculum will offer students a strong, interdisciplinary and foundational knowledge of environmental issues, while co-curricular initiatives will prepare them to apply this knowledge to advance environmental sustainability.

- Support the current environmental studies curriculum while also promoting additional sustainability courses or modules across the curriculum.
- Advocate for a requirement that students learn about sustainability.
- Foster intentional pathways between a student's academic program, and co-curricular and professional experience through opportunities such as entrepreneurship programs, senior theses, internships and local and global engagement to cultivate the skills needed to be sustainability leaders.

Mount Holyoke College
RECOMMENDATIONS OF THE SUSTAINABILITY TASK FORCE
EXECUTIVE SUMMARY

Buildings, Energy Use and Transportation

Goal: The College will achieve carbon neutrality (reducing carbon releases from operations or mitigating those releases to achieve net zero carbon emissions) on campus by 2037 — the Mount Holyoke College bicentennial.

- Increase on-campus renewables.
- Reduce energy use on campus.
- Green the fleet.
- Develop a robust rideshare program.
- Increase use of public transportation.
- Improve greenhouse gas emission accounting.

Goal: We will become a leader in sustainable retrofitting of historic campus buildings.

- Accomplish a retrofit of one campus building to be carbon neutral by 2022.
- Host a conference on sustainable retrofitting of campus buildings.
- Establish endowment/reserve for operation and maintenance of sustainable buildings.
- Establish best practice standards for all renovations.

Sustainable-Food Purchasing and Dining Operations

Goal: The College will implement sustainable best practices in food, beverage, equipment and supplies procurement.

- Increase percentage of dining services food that is third-party-verified under one or more recognized food and beverage sustainability standards, or both local and community-based, as defined by STARS, to 20 percent in two years and 25 percent in five years.
- Develop a sustainability culture within dining services.
- Establish criteria for the purchase of equipment and supplies.
- Apply sustainable best practices in non-dining purchasing of food and beverages on campus.

Goal: Faculty, staff and students will reduce waste through conservation, recycling, composting and education.

- Reduce food waste through portion control, preparation and education, and food waste diversion.
- Use dehydrator in centralized dining to produce compost out of food waste.
- Sponsor a robust composting, recycling and waste-reduction program.

Goal: We will increase campus participation and support for sustainable-food systems and practices.

- Make information about dining operations and purchasing practices publicly available.
- Design and implement communications/education programming and coordination.

Mount Holyoke College
RECOMMENDATIONS OF THE SUSTAINABILITY TASK FORCE
EXECUTIVE SUMMARY

Grounds and Campus Field Research

Goal: The Mount Holyoke campus will become a model for sustainable use and management of the physical landscape and will serve as a living laboratory for the community, providing opportunities for cross-disciplinary teaching, research and learning.

- Use sustainable best-management and use practices for all campus land.
- Encourage and support use of campus as a living laboratory and for cross-disciplinary teaching and research.
- Broadly engage students, faculty and staff and the wider community in utilizing and exploring the campus for teaching and research.

OVERARCHING NEEDS

The Task Force also identified several overarching needs. For example, it calls for hiring a full-time sustainability officer, support for endowed faculty positions related to environmental sustainability and social justice, further development of a climate-action plan, and continuing investment in capital projects, such as energy-efficiency improvements across campus, increasing on-campus renewables, and switching to alternative fuel vehicles. The recommendations also include establishing a campus-wide sustainable-purchasing policy and a comprehensive plan for waste reduction and recycling.

MOVING FORWARD

Accomplishing the recommendations will require a strong commitment from the College's leadership to both set the vision and support its implementation. While many recommendations are financially neutral, others will need additional funding from the College and/or critical external support. It is important to note that the College has a strong foundation for many of these recommendations and has already been making progress on many of them.

EXISTING INITIATIVES

Miller Worley Center for the Environment: The center has become a hub for coordinating sustainability action and programming on campus. Established in 1998 to make environmental literacy a central part of a Mount Holyoke education, the Center was renamed the Leslie Miller and Richard Worley Center for the Environment in 2010 in recognition of a generous gift from Leslie Miller and Richard Worley. As one of three Academic Centers on campus, it prepares students to think critically, creatively and globally as environmental leaders to tackle the world's most complex issues. It advances a culture of sustainability on campus and beyond as a legacy for future generations. And it fosters connections between our campus and learning opportunities around the globe. The Center will continue this work with an added emphasis on supporting curricular connections among teaching, research and campus sustainability initiatives.

Mount Holyoke College
RECOMMENDATIONS OF THE SUSTAINABILITY TASK FORCE
EXECUTIVE SUMMARY

Student action: Under the guidance of the Miller Worley Center for the Environment, student eco-reps focus on reducing the environmental footprint of student campus life through educational programming and work with departments across campus. Programming focuses on waste reduction, recycling, composting, and energy and water conservation. The Center has also created new programming for orientation and a sustainability tour. Active campus student organizations, such as the Climate Justice Coalition, Think Outside the Bottle and Food Justice Society have engaged the community to promote sustainable practices on campus and beyond.

Environmental studies: Students can study environmental issues in the Department of Environmental Studies, as well as through connections with and in many other disciplines, where faculty engage in environment- and sustainability-related research and teaching. The Department, together with other departments across campus, offers a concentrated and interdisciplinary major and minor in which students are required to take courses in the natural sciences, social sciences and humanities in order to develop the intellectual tools and breadth of understanding needed to confront the environmental challenges of the present and future. The recently announced endowed professorship in environment offers an opportunity to address some of the curricular gaps identified by the Task Force.

Greenhouse Gas Reduction Goals: In 2004, the College adopted greenhouse gas reduction goals consistent with the 2001 Regional Climate Action Plan adopted by the six New England states and the premiers of the five eastern Canadian Provinces. The first goal was to reduce emission levels to 1990 levels by 2010. Through investment in energy efficiency and conservation efforts across campus and changes in fuel use, the College met the 2010 goal. The current goal is to reduce emissions to 10 percent below 1990 levels by 2020. Although the College has achieved the 2020 goal in three of the past six years, that target remains dependent on variable heating demand. Facilities Management and Miller Worley staff are currently crafting a climate-action plan to meet the proposed 2037 carbon-neutrality goal. As an example, initial estimates are that through a \$14M investment on energy efficiency, we can reduce energy use by 20% with an estimated annual savings of \$750,000.

Energy Efficiency Audit: In 2016, the College conducted a scoping audit that identified \$2 million in energy-efficiency opportunities. Collectively, these projects will reduce the College's annual greenhouse gas emissions by the equivalent of more than 900 metric tons of carbon dioxide. The fiscal year 2018 capital budget allocated \$510,000 toward such efficiency projects. Facilities Management is making energy-efficient improvements to lighting at the Morgan Street lot, radiator valves in student rooms, and energy management in Rooke Theatre and Abbey-Buckland.

Green Revolving Fund (GRF): The College established a Green Revolving Fund (GRF) in 2015 to support energy conservation, renewable energy and other sustainability projects that reduce resource use and generate cost savings. A GRF frames resource reduction expenditures as an investment that creates a measurable return. The goal for contributions to the GRF over the first five years is \$500,000. In fiscal year 2018, \$100,000 in capital expenditures was allocated to the GRF.

Campus Buildings: In 2005, the College committed to sustainable-building practices, such as:

- designing all new construction to LEED Silver or the equivalent standards, with an emphasis on minimizing lifetime-energy use;

Mount Holyoke College
RECOMMENDATIONS OF THE SUSTAINABILITY TASK FORCE
EXECUTIVE SUMMARY

- renovating buildings using Mount Holyoke’s Environmentally Responsible Principles and Guidelines, which follow LEED principles;
- conducting energy modeling on all new construction; and
- improving energy efficiency through lighting and equipment replacement, building insulation and heat recovery systems.

Partnerships and Endorsements: In June 2004, Mount Holyoke partnered with Clean Air-Cool Planet, a regional organization dedicated to addressing climate change, establishing our current goals for reducing greenhouse gas emissions. In 2014, Mount Holyoke was selected to participate in the Mass College Green program, an innovative energy-efficiency initiative funded through a partnership with the Association of Independent Colleges and Universities in Massachusetts and MassDevelopment. Efficiency projects completed under this program are expected to deliver more than \$580,000 in lifetime energy savings to the College. In June 2017, Acting President Stephens and 29 other college and university presidents called upon elected officials to put a price on carbon to spur reductions in greenhouse gas emissions. She also endorsed the “We are Still In” declaration supporting the Paris Agreement’s global commitment to climate action, despite the U.S. government’s decision to withdraw.

Community center: The College’s new community center, set to open in 2018, represents a leap forward in sustainable operations by consolidating six dining halls into one facility designed and constructed to LEED Silver-equivalent standards. Key green features will include solar-thermal hot water, Energy Star appliances, efficient heating and cooling systems, and a food waste dehydrator system. New menus will encourage sourcing of local and sustainable food.

Composting and recycling: The College established pre- and post-consumer composting in all dining halls in 2005. In 2016, it composted 273 tons of food waste and diverted 57.5 percent of its overall waste from landfills or incineration. The Botanic Garden, with Facilities Management support, is currently developing a pilot on-site composting program.

Sustainable products: The College has increased purchasing of food and beverage products that are locally produced and/or come from third party-verified organic, fair trade or humane vendors. Dining Services continues to increase sourcing of local and sustainable foods.

Campus Living Laboratory (CLL): Mount Holyoke’s campus and its diverse ecosystems offer exceptional opportunities for year-round research, teaching and recreation. It enables students to learn about contemporary environmental issues through field studies and other hands-on projects using the campus’s natural and built landscape as a research and teaching laboratory. Through coursework and independent research, students can study the complexity of diverse ecosystems and gain research experience in their own backyard. The Miller Worley Center is enhancing education and outreach, including additional signage, a mobile app, and grants supporting use of the CLL.

Landscape management: Since 2005, the College has maintained the campus in accordance with an integrated pest management (IPM) plan and best practices for managing storm water. (IPM combines biological, cultural, physical/mechanical and chemical tools to solve pest problems while minimizing risks to people and the environment).

Mount Holyoke College
RECOMMENDATIONS OF THE SUSTAINABILITY TASK FORCE
EXECUTIVE SUMMARY

NEXT STEPS

In Fall 2017, the Sustainability Task Force's draft recommendations were discussed with the Mount Holyoke community. During the subsequent year, they will be shaped into a Sustainability Plan that will provide a campus-wide road map, including timelines and required investments for moving sustainability forward at Mount Holyoke over the next five years and beyond. A Sustainability Steering Committee will oversee the development of the Plan and its implementation. Comprised of faculty, staff and students, the Steering Committee will present annual reports to the President, Vice Presidents and Board of Trustees.

As Mount Holyoke approaches its bicentennial in 2037, these Recommendations provide a framework for cultivating environmental leadership that echoes the pioneering spirit of educator, chemist, and College founder Mary Lyon. Her enduring legacy of innovation and social justice will guide us forward to a greener campus and future.

Mount Holyoke College
 RECOMMENDATIONS OF THE SUSTAINABILITY TASK FORCE
 EXECUTIVE SUMMARY

Appendix I: Campus Sustainability Task Force and Working Group Members	
Rachel Alldis - Assistant Dean of Students and Director of Residential Life - Office of Residential Life	Dale Hennessey - Director of Dining Services - Dining Services
Nancy Apple - Associate Director for Sustainability - Miller Worley Center for the Environment	Carly Kite - Director of Strategic Marketing and Communications - Communications and Marketing
Alexi Arango - Associate Professor of Physics	Kimberly Kedziorek – Senior Leadership Gifts Officer
Katherine Ballantine - Assistant Professor of Environmental Studies	Frederick Kroll - Assistant Director of Purchasing - Dining Services
Richard Bigelow - Associate Director and Chief Engineer - Facilities Management	Danielle Lund - Associate Director of Programs - Alumnae Association
Ann Blake '85 - Board of Trustees	Kevin McCaffrey - Director of Government and Community Relations - Advancement
Leszek Bledzki - Senior Research Associate - Miller Worley Center for the Environment	Julia Opel '18 - Student
Paul Breen - Director of Facilities Management and Planning - Facilities Management	Farah Rawas '17 - Student
Michael Buckley - Assistant Director, Operations and Budget - Facilities Management	Nichole Reynolds - Associate Director of Admission - Admission
Thomas Clark - Botanic Garden Director	Shannon Seigal '19 - Student
Catherine Corson - Leslie and Sarah Miller Director of the Miller Worley Center for the Environment and Miller Worley Associate Professor of Environmental Studies	Taylor Scott - Senior Director of Marketing and Communications - Mount Holyoke Alumnae Association
Catarina Costa-Wofford - Associate Dean of Admission - Admission	Stephen Taranto - Associate Director - Miller Worley Center for the Environment
Naomi Darling - Five College Assistant Professor of Sustainable Architecture	Kathryn Tyler '17 - Student
Steven Dunn - Professor of Geology	Lenore Reilly - Senior Advisor to the President - President's Office
Tim Farnham - Associate Professor of Environmental Studies	Doug Vanderpool - Director – Auxiliary Services

Mount Holyoke College
RECOMMENDATIONS OF THE SUSTAINABILITY TASK FORCE
EXECUTIVE SUMMARY

Appendix I: Campus Sustainability Task Force and Working Group Members	
Gary Gillis - Associate Dean of Faculty	Al Werner - Professor of Geology
Aaron Haesaert - Creative Director – Communications and Marketing	Dyan Wiley - Associate Director of Foundation Relations - Advancement