

# Campus Sustainability Strategic Plan



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Office of Sustainability  
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## Executive Summary

The Office of Sustainability has been around for over 10 years and has not had a comprehensive strategic plan until now, even though it has had several plans for specific sustainability initiatives.

The Office plays a critical role on campus, fulfilling a core part of the University of Southern Maine's mission to "support sustainable development, environmental stewardship, and community involvement."<sup>1</sup> This is a mission that is becoming increasingly important to today's college students. In the 2016 College Hopes & Worries Survey administered by *Princeton Review*, 61% of respondents indicated that having information about a school's environmental commitment would influence their decision of whether or not to apply to that institution.

Over the past six months, full-time staff in the Office of Sustainability worked with various campus stakeholders to develop an eight-year sustainability plan. The plan's overarching objective is to achieve significant progress toward the University's national commitment of becoming a carbon neutral campus by the year 2040. This effort serves as a stage for many corollary initiatives besides carbon reduction.

The plan is comprised of three major pillars, which are strategically designed to be mutually reinforcing: energy; material resources; and education & outreach. All three pillars help advance carbon neutrality, while also supporting numerous non-carbon objectives, such as resource reuse, cost savings, education and community building.

A summary of the plan, highlighting the major, intermediate goals is provided in the table below:

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<sup>1</sup> USM Faculty Senate (2008)

Goals	Dates	Alignment with President's 9 Goals
<b>ACHIEVE CARBON NEUTRALITY</b>	2040	1, 2, 3, 4, 5, 6, 7, 8, 9
<b>ENERGY</b>		
Reduce greenhouse gas emissions from heat by 35%	2025	1, 3, 4, 5, 7, 9
Reduce greenhouse gas emissions from electricity by 35%	2025	1, 3, 4, 5, 7, 9
Reduce greenhouse gas emissions from transportation by 20%	2025	3, 7, 9
<b>MATERIAL RESOURCES</b>		
Increase waste diversion rate to 70%	2020	1, 2, 3, 8, 9
Reduce overall waste by 25%	2025	1, 2, 3, 8, 9
<b>EDUCATION &amp; OUTREACH</b>		
Build a community around sustainability on campus open to all students by doing the following:	2025	1, 2, 3, 4, 5, 6, 7, 8, 9
Utilize sustainability as a driver for enrollment, retention & giving by achieving national recognition and engaging students in meaningful, hands-on work improving campus	2020	1, 2, 3, 4, 5, 6, 7, 8, 9
Increase sustainability literacy among students, staff & faculty by increasing participation in and ownership over sustainability initiatives	2020	7, 9

\*Baseline for percentage reductions is FY 2006 for energy

\*Baseline for percentage reductions is FY 2011 for waste

The Office of Sustainability is charged with helping the University achieve carbon neutrality, remove waste, support sustainability education in and out of the classroom, raise money, and garner media attention, but has little direct control over any of these activities, with the exception of waste management. Therefore, the Office cannot achieve this plan alone. Success will require broad participation from students, staff and faculty.

Students, staff, and faculty who are interested in joining any of the activities outlined in this plan should contact the Office of Sustainability [here](#).

## Introduction

In 1983, the United Nations formed a commission to address the need for more mindful economic development, given development's link to environmental degradation. This group, known as the Brundtland Commission, coined the term "sustainable development" in 1987 to describe a more mindful approach to development. They defined it as meeting "the needs of the present without compromising the ability of future generations to meet their own needs."<sup>2</sup> The definition is now widely used as a definition for "sustainability" more broadly.

Throughout the 1990's, several environmental issues rose to the forefront of those concerned with sustainable development, including peak oil, acid rain, and climate change. By the mid 2000's, it was clear that climate change, in particular, had captured the attention of the scientific community. Higher education responded in 2006 through a movement led by 12 colleges and universities to create the American College and University Presidents' Climate Commitment (ACUPCC)<sup>3</sup>. The Commitment challenged colleges and universities across the country to become carbon neutral. The organization overseeing the ACUPCC, Second Nature, joined forces with the nascent Association for the Advancement of Sustainability in Higher Education<sup>4</sup> and began inspiring institutions of higher education to sign the pledge and hire sustainability staff to oversee their institution's efforts.

The University of Southern Maine was a charter signatory of the President's Climate Commitment (now known as the President's Carbon Commitment). President Pattenauode signed the public, national commitment in 2007, and it is still upheld today by President Cummings.

USM's pledge is to reduce its net greenhouse gas emissions to zero by the year 2040<sup>5</sup>. The plan calls for an 80% reduction of campus-affiliated greenhouse gas emissions associated with burning fossil fuels for heat, electricity, and transportation, as well as methane emissions from waste disposal. The remaining 20% of emissions are intended to be offset by University initiatives to reduce another entity's greenhouse gas emissions<sup>6</sup>.

USM has made notable progress toward this goal, and by doing so has saved thousands of dollars per year. Since 2006, gross greenhouse gas emissions from heat were reduced by 23% and emissions from waste fell 20%, as the University surpassed a 54% waste diversion rate. In fact, USM's waste diversion activities have earned the school national recognition. Increased efficiency of operations, key behavioral change initiatives, and an expansion of surplus operations resulted in five awards from the US Environmental Protection Agency in the past three years. Additionally, USM has received significant local media attention for educational events and activities on a wide range of sustainability topics.

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<sup>2</sup> The definition was published in the Report of the World Commission on Environment and Development: Our Common Future.

<sup>3</sup> For more on the background of the ACUPCC, see <http://secondnature.org/who-we-are/background/>

<sup>4</sup> The national, professional organization serving sustainability officers, professors, students and administrators interested in sustainability

<sup>5</sup> In January of 2017, the Mayor of Portland, Ethan Strimling, pledged a separate, but related, goal of 100% renewable energy by the year 2040.

<sup>6</sup> Offsetting is not intended to be a permanent solution, rather a stopgap to buy more time to continue reducing University emissions as new technologies become available.

Despite the University's success, progress on both energy and waste have begun to slow, and the Office of Sustainability has not been able to sustain a high-level of student and faculty involvement in its initiatives. If USM is to achieve its carbon neutrality goal by 2040, students, staff, and faculty from every corner of campus will have to lend a hand.

Engagement of an entire campus requires a strategic effort across capital planning, daily operations, and the classroom. Sustainability efforts in each of these sectors must support each other in deliberate ways instead of being carried out in isolation, where they could potentially compete. Major achievements resulting in lasting change can only be accomplished when multiple people share a common vision and efforts to work toward that vision are mutually beneficial. Even sustainability goals as closely related as reducing energy use and reducing material waste have to be deliberately tied together or else they risk competing with each other for the scarce resources of time and human effort. Some past initiatives at USM have suffered as a result of the perception of waste and energy or waste and sustainability as being separate universes, when in fact the laws of thermodynamics inextricably tie energy and material waste together as closely related sustainability challenges.

For example, every material resource requires energy to create from resource extraction, to production in a factory, to delivery to the user. At every step in the production chain, fossil fuels are burned and greenhouse gas emissions are emitted into the atmosphere. The energy used in the production chain for a given material object can be considered the "embodied energy" of that product. Therefore, when we throw away material waste, we are throwing away energy. Waste disposal also results in terrestrial and atmospheric pollution. The terrestrial pollution is obvious to most people as trash piles up in landfills or gets dumped in the ocean. Atmospheric pollution comes from waste decomposition in the form of methane, a greenhouse gas. Similarly, energy use creates both terrestrial and atmospheric pollution. Modern industrial processes that use energy result in a range of greenhouse gas emissions including carbon dioxide, methane, nitrous oxide, HFCs<sup>7</sup> and others. Use of fossil fuel also affects land and water through activities such as deposition of acid rain and oil spills. A sustainable society, and thus a sustainable campus, necessitates careful use of both energy and material resources in order to minimize waste and pollution.

The plan presented here targets leverage points in capital planning, daily operations, and the classroom in a coordinated way. It also marries the dual goals of energy and waste reductions by carefully allocating time to both, and outlining education and outreach initiatives to strategically support both.

Education and outreach are also critical elements of the plan because no matter how sustainable the USM campus physically becomes, it cannot be considered truly sustainable unless its students are graduating with a baseline knowledge of sustainability. Basic sustainability literacy is not just a key professional development skill for USM students entering any sector of today's workforce, it is also a crucial skill for students' ability to be informed citizens and active community members.

The world USM graduates are now entering is experiencing unprecedented change. According to the World Meteorological Organization<sup>8</sup>, last year was the hottest year on record since humans began recording temperature, and 16 out of the hottest 17 years have occurred during this century. Many scientists have

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<sup>7</sup> Hydrofluorocarbons

<sup>8</sup> World Meteorological Organization (2017)

published papers in recent years suggesting that the Earth is entering its 6th mass extinction event<sup>9</sup>. When one adds the scarcity of potable water across the planet<sup>10</sup>, the overabundance of plastic waste in the North Pacific gyre<sup>11</sup>, and growing economic inequality<sup>12</sup> to the list of challenges, the task of maintaining a healthy environment, economy, and society appears to be a monumental one.

The science of sustainability, grounded in systems thinking<sup>13</sup>, is perhaps the most effective pedagogical framework higher education has for teaching about the interconnected nature of these issues and training students the analytical skills necessary to face these challenges. As an institution with the motto “University of everyone,” it’s critical to ensure that all USM students receive sufficient education preparing them for the uncertainty of global change, as it will affect every industry and every citizen. Moreover, every discipline has something to offer to sustainability.

The education and outreach elements of the plan are not only designed to teach sustainability literacy to students, staff, and faculty, but to exercise the section of the University’s mission dedicated to “community involvement.” Community involvement requires that the University serve as a responsible local and global citizen, leading through innovation and research. As a partly coastal university within a community vulnerable to climate change, USM has a special role to play in helping to mitigate climate change and its effects. USM is also uniquely situated to support Maine’s economic legacy through responsible forestry and local food production, two key sectors of sustainability research.

Development of the sustainability plan presented here took six months. Office of Sustainability full-time staff began by brainstorming which key components of sustainability should be the basis for a plan for USM, utilizing the 2040 carbon neutrality goal as its overarching framework. They then settled on energy, material resources and education, and began mapping the relationships between these three pillars.

After settling on a conceptual model, many of the core concepts outlined in the 2012 climate action plan were revised and used to flesh out the conceptual model. The team then began an iterative process of adding and refining goals and activities to a spreadsheet based on the conceptual model. They shared the spreadsheet with one stakeholder at a time to garner input, revised the goals and activities according to the input, added new ideas, shared the spreadsheet with another stakeholder, and repeated the process until over 12 key groups were consulted. Therefore, the plan includes strategic leverage points and opportunities from multiple academic and non-academic offices, as well as student groups. The plan was also deliberately aligned with President Cummings’ Nine Goals, as well as the Key Performance Indicators (KPIs) identified by the University of Maine System’s 2015 Administrative Review for Facilities Management.

The plan primarily focuses on activities for the next eight years. But, the Office of Sustainability will be refining strategies within the plan on a weekly basis, and planning implementation strategies for the spring and fall

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<sup>9</sup> Williams et al. (2015); Ceballos (2015)

<sup>10</sup> Goldenberg (2014)

<sup>11</sup> Milman (2016)

<sup>12</sup> Piketty et al. (2016)

<sup>13</sup> “Systems thinking” is a problem solving strategy that attempts to understand both macro and micro components of a system and their linkages in order to develop holistic solutions. Modern application of the concept was articulated in Senge (1990) and served as the foundation for the frequently cited “Places to Intervene in a System” by Meadows (1997)



semesters during the winter and summer breaks, respectively. Major revisions will be considered annually in December, to correspond with Carbon Action Planning reporting obligations for Second Nature.

## President's Nine Goals

The sustainability goals outlined in this plan were developed to strategically align with and support the President's Nine Goals. In fact, every goal, as well as every action item, listed in this document has been aligned with one or more of the President's Goals<sup>14</sup>. The President's Nine Goals offer a critically important vision for the future of the University of Southern Maine, and the Office of Sustainability is committed to doing everything it can to help the University realize this vision.

The President's Nine Goals are as follows:

- USM will be known for academic excellence with real-world experiences as a core part of its academic program.
- 80% of our students will state that at least one individual (staff or faculty) knows them well, supports them, and believes in them (NSSE, now below 60%).
- 72% of our students will remain at USM between each school year (IPEDS, now 63%).
- 10% of our alumni will give to USM annually (now 2%).
- The USM Foundation will raise \$50M in scholarships, infrastructure and investments for our students (now \$17M).
- USM headcount enrollment will reach 10,000 (IPEDS, now 8,700).
- USM will be designated as a 'Great Place to Work'.
- 80% will recommend USM to others (post grad survey, now 61%).
- USM will establish a sustainable financial model by attaining industry standards attributable to a financially healthy institution.

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<sup>14</sup> A spreadsheet is available, upon request, that shows a list of all the applicable President's goals affiliated with each of the sustainability goals and action items. For the sake of space, that information is not included in this report.

## Sustainability Goals

The strategic campus sustainability goals are listed below. The goals are divided into three pillars: energy; material resources; and education and outreach. Each goal is represented by bold text. Listed below each goal are specific actions, non-bold, that the office of sustainability plans to take to support the goal.

For each goal, and corresponding actions, the table lists a date, description, metrics, and partners. For goals, the *date* represents a deadline. For actions, the *date* represents the time when the action will begin. The *description* offers more detail about the goal or action. The *metrics* represent how progress toward the goal or action will be measured. Finally, *potential partners* are individuals, departments, groups, or organizations who have either expressed interest in helping with the initiative or are suspected by sustainability office staff as potentially being helpful for the initiative. The office of sustainability staff does not have the capacity to carry-out all of these actions by itself; therefore, the partners represent a crucial resource for success.

### Energy

The energy goals and actions listed here are primarily focused on addressing energy use for campus heat, campus electricity, and campus-affiliated transportation. As discussed earlier, energy and waste are intricately related, but for the sake of organization, the energy implications of waste are primarily discussed in the “material resources” section. USM’s energy initiatives will also require a significant education and outreach effort, but those activities are primarily discussed in the “education and outreach” section.

Goals & Actions	Dates	Description	Metrics	Potential Partners
<b>ENERGY</b>				
<b>Reduce Greenhouse Gas Emissions to 0 by 2040.</b>	FY 2040	See below.	CO <sub>2</sub> e (carbon dioxide equivalent) emissions of primary greenhouse gases. Specific goal is to reduce USM's GHG Emissions by at least 80% per FTE compared to the FY 2006 baseline inventory and purchase offsets for the remaining 20% to achieve 100% reduction.	See partners listed below
<b>Create General Mechanisms for Supporting Greenhouse Gas Reductions</b>	FY 2020		Multiple metrics (see below) (see below)	See partners listed below
Participate in annual capital plan development to identify projects that mutually benefit GHG emissions reductions goals and U-Maine system's KPIs (Key Performance Indicators)	FY 2017	Process will be carried out annually.	Density, Net Asset Value (NAV), Total Cost of Ownership (TOC), Energy Cost per GSF, Energy Cost per MMBTUs, Energy BTUs per GSF, GHG emissions per MMBTUs, GHG emissions per GSF.	Adam Thibodeau, Paul Kuplinski
Publish President's Carbon Commitment annual report	FY 2017	Report will be carried out annually and published on Second Nature's website.	Action completed or not	
Conduct biannual carbon inventory	FY 2018	Will be published on Second Nature's website.	Action completed or not	Quantitative classes
Create Climate Action Planning Committee and/or a Sustainability Council where all concerned student groups have a representative at the table.	FY 2018	Roster will include students, staff and faculty. Role of the committee is to keep up with baseline obligations of the President's Carbon Commitment, and to vet other large sustainability proposals.	Attendance of meetings and frequency of meetings.	President, ESP, student group, local businesses, Portland Climate Action Planning Committee
Conduct an ASHRAE Level 2 energy audit of the campus	FY 2018	Audit will be used to prioritize energy efficiency projects.	Action completed or not	Ron Kelley, Jim Wakefield
Integrate GHG reduction goals into the University's master plan	FY 2018	Integrate carbon neutrality goal into master planning process, as well as waste diversion and education goals.	Action completed or not	President, Chief Business Officer & Muskie School's Community Planning and Development Program (CPD)
Reform University's decision-making structure around space to be more proactive, rather than reactive	FY 2019	A new structure around space could consider consolidating activities to minimize unnecessary building use and unnecessary travel, while also maximizing high use building areas. Such efforts could save heat, electricity, gasoline, material waste and could streamline surplus operations.	Action completed or not	Space Committee & Diane Berry
Guide faculty & academic staff into adopting a Lab21 or comparable management policy for labs	FY 2020	A eco-friendly lab management program could reduce electricity and heat	Number of labs covered by the program	Environmental Health & Safety and science faculty
Explore option for internal carbon pricing structure at USM	FY 2020	A structure for incentivizing behavior and projects that mitigate carbon, while saving the University money from future carbon regulation. Such a framework could align with the U-Maine system's TCO (Total Cost of Ownership) metric.	Action completed or not	Director of Facilities Management, Jon Erickson at UVM, ESP student club, Muskie School, & Chief Business Officer.

<b>Reduce Scope 1 Emissions by 35%</b>	<b>FY 2025</b>	<b>Take the below options, while being careful not to sacrifice occupant comfort as we must maintain comfortable and secure buildings to facilitate learning.</b>	<b>Metric Tons of CO<sub>2</sub>e</b>	<b>See partners listed below</b>
Research possibility of hiring an Energy Service Company	FY 2017	A committee is currently developing a Request for Proposals. Infrastructure or programmatic initiatives will be determined with winning vendor(s).	Action completed or not	Purchasing, Legal Counsel, Development Office, Facilities (Trades), Facilities (Architecture & Engineering), UMO, ESP faculty & students, Meghan Cadwallader (Director of Educational Partnerships-- Provost's Office).
Install more advanced Building Automation Systems, as well as sub-meters for buildings served by steam	FY 2018	Streamline data collection for heat and increase quality.	Number of BAS systems and sub-meters installed	Tim Pratt, Paul Kuplinski & Chip Gavin.
Develop a regular maintenance & replacement policy for vehicle fleet	FY 2018	More frequent circulation of vehicles may aid in efficiency.	Percentage of vehicles covered by the policy and number of years for vehicle cycle	Bob Adams & Doug Bogdan
Explore option of adding alternatively-fueled vehicles to University's fleet or creating a policy for fuel economy	FY 2018	Fully electric, partially electric or highly efficient gasoline vehicles can all play a role.	Action completed or not	Paul Kuplinski and Environmental Science & Policy department
Implement energy efficiency projects identified by an Energy Service Company	FY 2019	Projects will likely be a mix of supply and demand-side.	Density, Net Asset Value (NAV), Total Cost of Ownership (TOC), Energy Cost per GSF, Energy Cost per MMBTUs, Energy BTUs per GSF, GHG emissions per MMBTUs, GHG emissions per GSF.	President, Development Office & Facilities Management.
Explore option of transforming central heat plants to Combined Heat & Power (CHP)	FY 2019	Consider pursuing a project that utilizes Efficiency Maine incentive.	Action completed or not	Efficiency Maine, Bob Adams, LAC, UMO
Explore option of installing more geothermal on campus	FY 2019	Research options for expanding geothermal based on GIS data and existing heating technologies.	Action completed or not	Applied Energy Program, occupants in Abromson and Wishcamper, Master Planning Committee, Chris Rand, Development
Explore option of installing air-to-air heat pumps on campus	FY 2019	Air-to-air heat pumps will likely be best in smaller buildings.	Action completed or not	Bob Adams and Environmental Science & Policy department
Replace #2 oil stand alone units with an alternative, such as biofuel or natural gas at the end of their useful lives	FY 2020	Stand-alone units are mostly in smaller buildings.	Number of boilers using alternative fuels	Bob Adams and Environmental Science & Policy department
Explore option of installing biomass on campus or engaging in biomass district heating	FY 2023	Partnerships with nearby businesses should be explored.	Action completed or not	Applied Energy Program, Oakhurst, UMF (Jeff McKay), Greenhouse by the Science Building, Development



<b>Reduce Scope 2 Emissions by 35%</b>	<b>FY 2025</b>		<b>Metric Tons of CO<sub>2</sub>e</b>	<b>See partners listed below</b>
Research possibility of hiring an Energy Service Company	FY 2017	A committee is currently developing a Request for Proposals. Infrastructure or programmatic initiatives will be determined with winning vendor(s).	Action completed or not	Purchasing, Legal Counsel, Development Office, Facilities (Trades), Facilities (Architecture & Engineering), UMO, ESP faculty & students.
Install electricity sub-meters in all buildings in Portland & Gorham	FY 2018	Streamline data collection for electricity, while increasing quality.	Number of buildings with sub-meters	Tim Pratt, Paul Kuplinski & Chip Gavin.
Install high efficiency lamps in all buildings on campus	FY 2018	Significant low hanging fruit still exist.	Action completed or not	Applied Energy Program, Bob Adams
Implement energy efficiency projects identified by Energy Service Company	FY 2019	Projects will likely be a mix of supply and demand-side.	Density, Net Asset Value (NAV), Total Cost of Ownership (TOC), Energy Cost per GSF, Energy Cost per MMBTUs, Energy BTUs per GSF, GHG emissions per MMBTUs, GHG emissions per GSF.	Applied Energy Program, Bob Adams, Daniel Martinez, Chad Seeley
Explore Power Purchase Agreements and Renewable Energy Certificate Arrangements	FY 2019	These projects may consists of solar, wind, biomass, hydro and other alternatives.	Action completed or not	Applied Energy Program, Development, Fred Padula, Oakhurst, Master Planning Committee
Revitalize Energy-STAR purchasing policy	FY 2020	Policy will need to be revitalized and compliance will need to be ensured if it is to be effective.	Number of appliances covered by policy and percentage of appliances that meet the policy's criteria	Adam Thibodeau, Staff Senate, Faculty Senate

<b>Reduce Scope 3 Emissions by 20%</b>	<b>FY 2025</b>	<b>See below</b>	<b>Metric Tons of CO2e</b>	<b>See partners listed below</b>
Survey campus on transportation patterns, needs and barriers	FY 2017	Survey USM students, staff & faculty to determine carbon footprint of transportation, what alternative modes of transportation are most desirable and which corresponding incentives would be most effective.	Response rate	Dr. Abigail Fuller, SOC 307, Former bike club, Portland Gear Hub, Bicycle Coalition of Maine, Muskie School of Public Service
Extend shuttle routes and improve shuttle footprint	FY 2019	Work with provider to establish a maximum idling policy, preference for hybrid/alternative-fueled vehicles, and potentially expanded routes. Research options for shuttle service to Lewiston-Auburn campus.	Frequency of bus routes, length of bus routes and % of alternatively-fueled vehicles in fleet.	Dean Joyce Gibson & Student Senate
Explore option of starting a carshare program on campus	FY 2019	Both Student Senate and Facilities Management have discussed possibilities for a carshare program.	Action completed or not	Student Senate & Paul Kuplinski
Create a Comprehensive Transportation Demand Management (TDM) strategy	FY 2019	Use survey data to develop incentives for reducing traffic on campus including possibly special parking spaces, different parking rates, charging for peak hours, parking pass trade-in for bicycle, stipend for those who don't park on campus, etc.).	Action completed or not	Forthcoming infrastructure academic program, Champlain College, University of Vermont, auxiliary services coordinator
Create adequate bicycle infrastructure & education on campus to support people who would consider biking	FY 2020	Consider installing more bike racks, installing covered racks, installing bike share program, and making biking more safe on campus.	Number of bike racks, bike parking, bikes available for rent, and bike routes on campus.	Former bike club, Portland Gear Hub, Bicycle Coalition of Maine
Create adequate carpooling infrastructure & education on campus to support people who would consider carpooling	FY 2020	Consider resurrecting Husky Rides or an established rideshare program. Consider coupling these efforts with a carshare program. Consider preferred parking places for people who carpool.	Existence of online carpooling platform, number of users, number of rides offered, number of rides completed, and number of priority parking spaces available or other incentives	Former bike club, Portland Gear Hub, Bicycle Coalition of Maine
Create modest incentives for hybrid or electric vehicles	FY 2020	Consider establishing preferred parking places for those driving hybrid or electric vehicles. Consider installing an electric vehicle charging station in Gorham.	Number of priority parking spaces available and number of free charging stations available	Public Safety, Assistant Director for Grounds
Explore a partnership with Rise-Up to award incentives for alternative transportation commuting	FY 2020	Rise-up is the University's health incentive program.	Action completed or not	Trestle Tree
Explore possibility of creating a carbon on-setting project with local low-income households	FY 2022	May require acquisition of an Americorps position.	# of households, # of money saved on households' energy bills and # of CO2e mitigated.	Daniel Martinez, Efficiency Maine, Applied Energy Lab, Habitat for Humanity, York County Community Action, Portland Housing Authority, AVESTA Housing, Cumberland country equivalent of York County Communication Action, other low-income charities and service providers, Travis Blair, Portland Climate Action Team, Window Dressers Community Group, ESP Club, Joey Espinosa from Furman U and Charles Adair from Duke U.
Develop mechanism for incentivizing more sustainable business travel	FY 2020	May include preferred travel options and/or an internal carbon offset pricing structure.	Action completed or not	Purchasing department

<b>Reduce Scope 1 Emissions by 65%</b>	<b>FY 2035</b>		<b>Metric Tons of CO2e</b>	<b>Partners will be determined in 2025</b>
Strategies will be determined in 2025	FY 2025- FY 2035	TBD		
<b>Reduce Scope 2 Emissions by 75%</b>	<b>FY 2035</b>		<b>Metric Tons of CO2e</b>	<b>Partners will be determined in 2025</b>
Strategies will be determined in 2025	FY 2025- FY 2035	TBD		
<b>Reduce Scope 3 Emissions by 45%</b>	<b>FY 2035</b>		<b>Metric Tons of CO2e</b>	<b>Partners will be determined in 2025</b>
Strategies will be determined in 2025	FY 2025- FY 2035	TBD		
<b>Reduce Scope 1 Emissions by 90%</b>	<b>FY 2040</b>		<b>Metric Tons of CO2e</b>	<b>Partners will be determined in 2035</b>
Strategies will be determined in 2035	FY 2035- FY 2040	TBD		
<b>Reduce Scope 2 Emissions by 100%</b>	<b>FY 2040</b>		<b>Metric Tons of CO2e</b>	<b>Partners will be determined in 2035</b>
Strategies will be determined in 2035	FY 2035- FY 2040	TBD		
<b>Reduce Scope 3 Emissions by 60%</b>	<b>FY 2040</b>		<b>Metric Tons of CO2e</b>	<b>Partners will be determined in 2035</b>
Strategies will be determined in 2035	FY 2035- FY 2040	TBD		



## Material Resources

The material resource goals listed below include strategies to address downstream waste issues, as well as upstream waste issues. This dual approach recognizes the benefit of proactive strategies in addition to the traditional reactive strategies. USM's material resource initiatives will require significant education and outreach efforts, and although some of those efforts are discussed here, many of them are discussed in the "education and outreach" section.

Goals & Actions	Dates	Description	Metrics	Potential Partners
<b>WASTE (MATERIAL RESOURCES)</b>				
<b>Increase Waste Diversion to 70%</b>	FY 2020	See below	Total short tons of waste diverted from the landfill compared to the total tons of waste generated, referencing FY 2011 as a baseline	See partners listed below
Carry-out bids for new waste haulers	FY 2017	USM is at the end of its contracts for municipal solid waste, universal waste, recycling, and composting and needs to select a new set of vendors for the next 3-5 years.	Action Completed or Not	Ryan Ward & Rachel Piper (Purchasing), Fred Brittain & Jerry Brokos (IT)
Continue serving the University through Surplus operations	FY 2018	The Surplus program serves the University through cost avoidance, waste reduction, and helping to meet peoples' equipment needs	Surplus revenue, cost avoidance from purchase of new equipment, and number of customers served	See partners listed below
Help Student Senate serve students through Surplus operations	FY 2017	Space in the Surplus store will be dedicated to student needs and special effort will be given to acquiring surplus items students need	Number of students served	Student Senate, Camden Edge & Samantha Elliot
Develop a clear, streamlined accountability structure for vacating space	FY 2018	Effort may include policies, committees or other tools. Outcome will reduce unintended disposal of material, increase waste diversion and reuse, and even reduce wasted heat and electricity.	Action Completed or Not	EH & S, Custodial (Facilities), Trades (Facilities), Architecture & Engineering (Facilities)
Explore U-Maine System's interest in a System-wide surplus function proposed in the Administrative Review for Facilities Management	FY 2018	Such a function could take many forms including an online database to facilitate transactions	Action Completed or Not	Chip Gavin
<b>Improve Efficiency of Waste Operations</b>	<b>FY 2018</b>		<b>Multiple metrics (see below)</b>	<b>See partners listed below</b>
Increase efficiency of daily waste operations	FY 2018	Certain operations can be limited to particular days while others can be expanded.	Number of work orders in the queue	Custodial (Facilities)
Evaluate waste streams with cost-benefit analysis annually	FY 2018	Data can be used to inform efficiency improvements.	Savings in dollars and GHG emissions in MTs of CO <sub>2</sub> e	EH & S, Custodial (Facilities), Trades (Facilities), Architecture & Engineering (Facilities)



<b>Improve Marketing for Waste Operations</b>	<b>FY 2018</b>		<b>Action Completed or Not</b>	<b>See partners listed below</b>
Develop a more inspiring term than "waste"	FY 2018	"Waste" needs to be re-branded to appeal to students.	Action Completed or Not	Eco-reps, Public Affairs, Communications & Media Studies
Create consistent and clear marketing for waste diversion	FY 2018	Waste stations across campus are consistent and clear in some ways, but not others.	Action Completed or Not	Eco-reps, Public Affairs, Communications & Media Studies
<b>Improve Waste Diversion in Athletics</b>	<b>FY 2018</b>		<b>Visual appearance of waste stations, weight of trash &amp; recycling over time, percentage of total waste.</b>	<b>See partners listed below</b>
Engage with key stakeholders and evaluate opportunities for improvement at games	FY 2017	Stakeholders will include athletic director, coaches, students, and custodians who serve athletics facilities. Evaluation includes attendance and data gathering at games.	Appearance of waste stations and trash & recycling weights before implementing action items.	Al Bean, Coaches, sports teams, Sodexo, students, custodial
Begin implementation of improvement projects	FY 2017	Projects may include student representatives on teams, announcements during games, half-time shows, and other creative projects.	Appearance of waste stations and trash & recycling weights before implementing action items.	Al Bean, Coaches, sports teams, Sodexo, students, custodial
Review successes and failures, re-evaluate and implement next round of improvements through an iterative process	FY 2018	Evaluate the program and decide on next round of initiatives.	Appearance of waste stations and trash & recycling weights after implementing action items	Al Bean, Coaches, sports teams, Sodexo, students, custodial
<b>Improve Waste Diversion at Events</b>	<b>FY 2019</b>		<b>Multiple metrics (see below)</b>	<b>See partners listed below</b>
Hold meetings with key stakeholders & develop a calendar for major events	FY 2018	Stakeholders include event coordinators, outside entities renting space, and Public Affairs.	Action Completed or Not	Elizabeth A. Morin & Sherry Phillips (Conference Services), Diane Berry, President's Office, Custodial, campus body, Sodexo, Public Affairs
Implement event waste diversion measures	FY 2018	Initiatives may include pre & post announcements, education of event planners, and remodeling of waste stations.	Appearance of waste stations and trash & recycling weights before and after implementing action items.	Elizabeth A. Morin & Sherry Phillips (Conference Services), Diane Berry, President's Office, Custodial, campus body, Sodexo, Public Affairs
<b>Improve Waste Diversion in Residence Halls</b>	<b>FY 2019</b>		<b>Multiple metrics (see below)</b>	<b>See partners listed below</b>
Carry-out Mindful Move Out	FY 2017	Mindful Move-out is the effort aimed at diverting all the material students leave behind when the move out of the residence halls at the end of the spring semester.	Action completed or not	Custodial, Grounds, Campus Life, Eco-reps
Create summer orientation activity that targets waste in residence halls	FY 2018	Activity will provide hands-on education.	Number of incoming students participating	Campus Life
Hold public engagement sessions at waste stations in the residence halls	FY 2018	Activity could be carried out by Eco-reps.	Numbers of students interacted with	Campus Life & Eco-reps
Plan educational outreach and activities in the residence halls	FY 2019	Initiatives may include partnership with Resident Advisors, training for custodial staff, residence hall competitions, etc.	Number of students attending	Residential Life's Community Service Disciplinary Program, student fire marshal (hall monitor)

<b>Improve Waste Diversion in Dining</b>	<b>FY 2020</b>		<b>Multiple metrics (see below)</b>	<b>See partners listed below</b>
Increase waste diversion among dining hall customers	FY 2018	Clerks can remind patrons at point-of-sale that their material is recyclable, catering staff can be trained to compost left-overs, and waste monitoring can be carried out by bins to educate customers.	Percentage of food weight diverted from the landfill over time	Tadd Stone, Kevin & Olivia (Sodexo), Lee Forrest, Eco-reps
Implement the Food Recovery Network Program & Expansion of	FY 2018	Effort helps to address food insecurity among students.	Lbs of food given away and number of people	Sarah Holmes (Campus Life), Tadd Stone, Kevin & Olivia
Explore the option of installing post-consumer composting in Woodbury	FY 2020	Project could serve as pilot for other post-consumer composting locations	Additional lbs of food diverted from landfill stream	Eco-reps & ESP Club
<b>Improve Waste Diversion in Offices</b>	<b>FY 2020</b>		<b>Multiple metrics (see below)</b>	<b>Custodial, Department heads, President's Cabinet, Chief Business Officer, future liaisons within each department.</b>
Track/record shredded paper	FY 2018	Acquire data on shredded paper weight from vendors and explore cost savings through a single contract.	Monthly reporting of shredded tonnage	Departments' billing employees
Track yard waste and improve efficiency of disposal	FY 2018	Acquire data on disposal and research options for streamlining operations.	Monthly reporting of tons of yard waste	Grounds crew
Expand Tiny Trash program		Tiny Trash is the program where staff give-up their large trash bins for a small container capable of handling the small amount of actual trash generated.		
Create composting-at-home initiative to educate staff	FY 2020		Number of staff participating	Staff & Faculty Senate
<b>Reduce Total Waste Creation by 25%</b>	<b>FY 2025</b>	<b>See below</b>	<b>Multiple metrics (see below)</b>	<b>See partners listed below</b>
<b>Decrease Volume of Staff Purchases through Procurement Policy Changes</b>	<b>FY 2021</b>	<b>Policies may target furniture, electronics, paper, books and other sectors. Policies would aim to maximize longevity of use, minimize environmental impact of material purchased, and minimize packaging.</b>	<b>Surplus tonnage and total tonnage of waste</b>	<b>Purchasing, Department heads, Chief Business Officer</b>
<b>Decrease Volume of Student Purchases, Without Negatively Impacting Quality of Education or Life</b>	<b>FY 2022</b>	<b>Community-based social marketing research is needed to begin to identify leverage points for changing culture on campus.</b>	<b>Total tonnage of waste</b>	<b>See partners listed below</b>
Install more refillable water bottle stations across campus & carry-out campaign to educate campus about the benefits of using reusable bottles	FY 2020	Put them in places where they are most convenient for students, staff, and faculty.	Number of refillable water bottle stations on campus	Eco-reps, Student Senate & Facilities Management



## Education & Outreach

The pillar of education and outreach is carefully designed to support the other two pillars: energy and material resources. It is also designed to accomplish something greater than energy and material resources could on their own. In the framework of Donella Meadows' <sup>15</sup> "Places to Intervene in a System," this education and outreach pillar is aimed at changing the "goals" and the "paradigm" of the system<sup>16</sup>. Meadows argues that the goals and paradigm are the two most transformative leverage points in a system.

Many of the people who contributed to crafting this plan believe that building a strong community around sustainability at USM will foster a paradigm shift in how the University and larger community think about sustainability. Sustainability can remain a value-added side project in higher education, or it can become the norm of how universities operate. The goals and actions listed below are aimed at achieving the latter.

Goals & Actions	Dates	Description	Metrics	Potential Partners
<b>EDUCATION &amp; OUTREACH</b>				
<b>Build a Community around Sustainability at USM</b>	FY 2025	A community that facilitates education on sustainability for all students, staff, and faculty regardless of major or background, and fosters collaboration between diverse groups on campus to solve our society's most challenging social, economic and environmental issues.	Multiple metrics (see below)	See partners listed below
Create New Student Orientation on Sustainability	FY 2017	This hands-on activity during orientation would introduce new students to USM's sustainability commitments, while teaching them a sustainability concept. The activity would be carried out on all three campuses and would supplement existing outreach efforts during Husky Fest and the welcome BBQ.	Number of incoming students participating	Campus Life, Rodney Mondor, Dean Joyce Gibson (LAC), Janet Etzel (LAC)

<sup>15</sup> Meadows (1997)

<sup>16</sup> The "system" in this case is the University, as a functioning entity.

Unveil Goals & Inspire Participation in Them Across Campus	FY 2018		Multiple metrics (see below)	See partners listed below
Update office of sustainability marketing material to accurately reflect current initiatives and to address social sustainability	FY 2017	Update website and other marketing material to reflect current initiatives and to highlight social sustainability resources for students on campus such as resources related to food security, inclusion and safety.	Action completed or not	Nancy Griffin, Andrew King (Admissions), Danielle Vayenas (Public Affairs), Student Senate, Eco-reps, Multicultural Center, Husky Hunger Initiative, Center for Sexuality & Gender Diversity, Queer Straight Alliance, Student Veterans Association, Wellness Centers, USM Cares Student Support Network, Office of Marketing & Brand Management.
Feature sustainability office in a USM episode of the CTN TV show	FY 2017	Appear on a show in the month of April, so that it corresponds with Earth Week.	Action completed or not	Bryan Roche (Public Affairs) & Danielle Vayenas (Public Affairs)
Include sustainability initiatives in Monday Missive	FY 2018	Every six weeks, include an item in the Monday Missive addressing sustainability and highlighting progress toward our initiatives.	Number of Monday Missive appearances	President Cummings & Bob Stein
Inspire University leaders to include sustainability at major functions, events, interviews, and publications.	FY 2018	Whether in video or written form, announcements should serve the dual purpose of advertising USM to prospective students and including key information about the office's initiatives: 1) USM's sustainability mission & goal, 2) accomplishments to date, 3) specific details about how to properly dispose of your waste.	Number of major events that include sustainability pitch	Bob Stein, Public Affairs, Conference Services
Present goals & methods for student involvement in the Environmental Science & Policy (ESP) department	FY 2018	This information can appear on a bulletin board in the hallway of the ESP department and in the sustainability study room in Bailey Library.	Action completed or not	Eco-reps & ESP Club

<b>Expand the Visibility &amp; Accessibility of the Office of Sustainability</b>	<b>FY 2018</b>		<b>Multiple metrics (see below)</b>	<b>See partners listed below</b>
Establish satellite office on the Gorham campus	FY 2017	Office can be in the Energy Lab at 19 College Avenue in order to build a partnership with the ESP Department and be more accessible to Gorham's residential students.	Action completed or not	Robert Sanford (ESP) & Daniel Martinez (ESP)
Establish an outreach program on Lewiston-Auburn Campus	FY 2018	Initiatives could include service learning projects with LAC classes, an educational program during a department meeting, a waste diversion training session for facilities staff, tabling in the lobby, and a partnership with one of the community organizations that serves LAC. LAC is also a great place to run pilots of sustainability projects that may later be scaled up to the rest of campus.	Number of students and staff reached	Dean Gibson (LAC), Randy Estes (LAC), Sodexo, Campus Compact, Michelle Vazquez Jacobus (LAC's Coordinator of Community Service Learning).
Hold "pop-up" office sessions in Luther Bonney & other high-profile areas	FY 2018	Following the model of employee tables in Luther Bonney, have random days when the Sustainability Office tables in high-traffic areas. We could also carry-out gorilla theater in or around these tabling events to get attention. This could be coupled with the idea of having someone dressed in plastic bags carrying out a community-based social marketing campaign. With funding we could give out free reusable mugs, reusable grocery bags or some other sustainable item.	Number of students reached	Community Engagement Office, Eco-reps & ESP Club
Explore possibilities for creating a distinct, physical office on Portland campus for office of sustainability staff & students	FY 2020	The goals would include increasing visibility and accessibility for people seeking office services, provide a space for students to participate in hands-on projects, and build a team atmosphere.	Number of students, staff and faculty reached	Robert Sanford (ESP) & Daniel Martinez (ESP)
<b>Build Effectiveness of Eco-rep Program</b>	<b>FY 2019</b>	<b>Maintain program at 10 or more students per semester.</b>	<b>Multiple metrics (see below)</b>	<b>See partners listed below</b>
Instill professional-growth opportunities into the Eco-reps program	FY 2017	Build incentives for work study or internship students to rise up in levels of specialty from generalists to topic experts. Insert resume and portfolio building exercises into the program.	Action completed or not	Office of Community Enagement & Career Development, Eco-reps
Build professional habits	FY 2018	Establish clear protocols for tardiness & absenteeism	Tardiness & absenteeism	Eco-reps
Train Eco-reps in social sustainability issues and social sustainability services available	FY 2018	Train Eco-reps, so that they are well educated on social sustainability issues and capable of providing support to peers. Baseline training should be learning about key resources provided by every relevant department and student club at USM. Additionally training could be taking the implicit bias tests, safe zone training, Green Zone training, etc.	Number of Eco-reps trained	Sarah Holmes, Student Senate
Transition Eco-rep positions into internships	FY 2019	The goal is to have an internship path available for five or more diverse majors at USM	Number of majors covered through an internship and number of Eco-reps earning internship credit	Provost's Office, Office of Community Enagement & Career Development



<b>Activate Sustainability as a Driver for Enrollment &amp; Gifts to the University</b>	<b>FY 2020</b>		<b>Multiple metrics (see below)</b>	<b>See partners listed below</b>
Create tools and training for admissions	FY 2018	Create "a day in the life of a USM student" brochure on sustainability for the Admissions department to use for recruitment & give Admissions department a training on talking points	Number of brochures given out annually & number of admissions staff in training session	Nancy Griffin, Andrew King (Admissions), Danielle Vayenas (Public Affairs)
Write story for the alumni magazine about sustainability at USM	FY 2018	Story can feature past achievements and future initiatives.	Action completed or not	Danielle Vayenas (Public Affairs)
Publicly display sustainability awards we've won around campus	FY 2018	Display awards in Luther Bonney, Bailey and other areas.	Action completed or not	Bob Stein
Earn additional national award for waste program	FY 2018	Award agencies may include the US Environmental Protection Agency.	Number of awards won	President's Office, Nancy Griffin, Danielle Vayenas (Communications)
Create an oral sustainability tour that Eco-reps & Admissions Counselors are trained in.	FY 2018	Tour segments can include all three campuses.	Number of people trained to give the tour	NEECF (Nancy Martin & Martha Sheils)
Create an interactive map of sustainability on campus, complete with short videos, that can serve as a self-guided tour	FY 2019	Map can include all three campuses.	Action completed or not	Nancy Martin, Media & Communications Department
Land 2+ articles a year in an off-campus newspaper	FY 2019	Papers may include Portland Press Herald and Lewiston Sun Journal.	Number of articles published	Danielle Vayenas (Public Affairs), an editor at Portland Press Herald, an editor at Lewiston Sun Journal
Conduct outreach to local schools about USM's Office of Sustainability	FY 2020	The goal is twofold: to serve as a positive community partner and to recruit applicants to USM.	Number of presentations given	David McKenzie (Campus Life), Community Engagement & Career Development Office
Research costs & benefits of submitting reports to national sustainability ranking programs	FY 2020	Programs include Sierra Magazine's Cool Schools List, Princeton Review's Green Honor Roll and the Association for the Advancement of Sustainability in Higher Education's Sustainability Tracking & Rating System (STARS).	Action completed or not	President, Chief Business Officer, Office of Development
Research costs & benefits of signing Second Nature's Climate Resiliency Commitment	FY 2020	A climate resiliency effort may tie in to USM's recent focus on the North Atlantic.	Action completed or not	Rebecca Nisetich (Honor's Program) & Tracy Michaud Stutzman (Tourism & Hospitality)
Earn national award/recognition for energy project/improvements	FY 2022	Awards may come from national organizations like the US Environmental Protection Agency.	Action completed or not	President's Office, Nancy Griffin, Danielle Vayenas (Public Affairs)
Earn national award/recognition for sustainable food initiatives	FY 2020	Sustainable food stories have the potential to gain recognition from national media outlets.	Number of awards won	President's Office, Nancy Griffin, Danielle Vayenas (Public Affairs)

<b>Transform Campus into a Living Laboratory to Increase Campus Body's Sustainability Literacy</b>	<b>FY 2020</b>		<b>Sustainability Literacy Survey ("Sulitest")</b>	<b>See partners listed below</b>
Publish weekly article in the Free Press	FY 2017	Continue partnership with the Free Press to maintain the column "Sustainability & ME"	Number of articles published	Free Press student staff
In partnership with Community Engagement Office, communicate curricular & co-curricular sustainability projects to faculty and provide support for faculty who carry them out.	FY 2018	Many sustainability projects are well suited to be service learning projects or smaller class projects.	Number of classes taking on sustainability projects	Engagement & Career Development), Meghan Cadwallader- Director of Educational Partnerships (Provost's Office), Tourism & Hospitality Department, School of Business (especially Richard Bilodeau), Communication & Media Studies Department, Food Studies Department, Environmental Science & Policy Department, Michelle Vazquez Jacobus (LAC's Coordinator of Community Service Learning), Muskie School (especially
Create cartoon sustainability map of campus focused on student action for publication in the Free Press.	FY 2018	An artistic map outlining sustainability at USM from a student perspective with enough detail to contribute to sustainability literacy on campus.	Action completed or not	President, Nancy Martin, art department
Expand sustainability programming into the Residence Halls & Brooks Dining Center in Gorham	FY 2018	Eco-reps can lead these peer-to-peer education and outreach efforts.	Estimated number of students reached	WELL (Campus Life)
Build a significant partnership with the ESP club	FY 2018	The partnership may include the Hemlock Forest, shared workshop space, or other venues.	Action completed or not	Co-presidents of ESP Club Emma Sawyer & Matt Duff
Build a significant partnership with Food Studies program	FY 2018	Conduct annual service learning project that will give Food Studies students hands-on experience and will help the campus itself become a destination for those students.	Number of classes engaged in a sustainable food project benefitting campus	Michael Hillard & Mary-Elizabeth Simms (Food Studies Program), Meghan Cadwallader- Director of Educational Partnerships (Provost's Office)
Establish venues where sustainable food is the gateway for engaging students, staff, and faculty in our sustainability initiatives	FY 2018	Venues include the Brooks' Greenhouse, the Community Garden in Portland, the Food Network Recovery Program, "The Well" food pantry, and more. These projects not only have the potential to address food insecurity, but to ground USM in the socio-economic landscape of Maine, which has a rich history and promising future in local food production.	Action completed or not	Mary-Elizabeth Simms (Food Studies Program), the Well & Campus Life (Sarah Holmes), Sodexo (Tadd Stone & Olivia Doucette)
Publish monthly short videos with Public Affairs Office	FY 2018	Each one minute video addresses a different sustainability initiative or issue on campus.	Number of videos produced	Bryan Roche (Public Affairs)
Interact with 1,000 students per year, using community-based social marketing as a core strategy	FY 2019	Increase number of class presentations and engage Eco-reps in carefully planned community-based social marketing campaigns.	Numbers of students interacted with	Department Chairs, Christina Smith (Campus Life)
Create a significant engagement program for commuters in order to increase their involvement in USM	FY 2019	Research and implement methods of engaging commuters in on and off campus sustainability services, initiatives, and service learning opportunities.	Estimated number of commuting students participating	(Sarah Holmes (Campus Life) & Student Senate
Explore option of hosting 1-2 graduate assistants	FY 2019	Graduate students could carry-out research projects to advance our campus sustainability initiatives.	Action completed or not	Muskie School of Public Service, Cutler Institute



Survey campus on sustainability literacy	FY 2019	Send Sulitest survey to entire campus in order to capture a baseline on sustainability literacy that can measure the impact our initiatives have over time.	% response rate	President, Institutional Research, Campus Life, Deans, Staff Senate, Faculty Senate
Develop a sustainability-themed residence floor	FY 2020	A first step can be working with an existing themed floor to adopt a sustainability project	Action completed or not	Provost's Office, Campus Life (including Residence Life)
Explore option of creating financial incentives for students living in the residence halls to reduce energy and waste.	FY 2020	Students can research models to accomplish this and pilot it on one floor to start.	Action completed or not	Campus Life, Eco-reps, ESP Club, Student Senate
Support faculty interested in creating sustainability units or courses in certain majors or creating a general education sustainability requirement for the institution	FY 2023	Support an increase in sustainability curriculum development at USM led by faculty, which may include development of a sustainability faculty fellows program.	Action completed or not	Robert Sanford, Michael Hillard, other key faculty members, ESP Club, Food Studies Club, Eco-reps, Meghan Cadwallader-Director of Educational Partnerships (Provost's Office), the Community-based Learning Committee
<b>Inspire Staff to take Ownership over Sustainability in their Departments</b>	<b>FY 2021</b>		<b>Multiple metrics (see below)</b>	<b>See partners listed below</b>
Develop an educational campaign for campus departments about office of sustainability's projects and services	FY 2018	Initiatives may includes sessions at existing meetings, coffee hours, email tips, and one-on-one meet-ups.	Number of departments reached	Dean Joyce Gibson (LAC), attendees of LAC's weekly department meetings, Mary Holt (Special Collections)
Develop an orientation training for new staff	FY 2019	Short training covering basic sustainability principles and explaining USM's sustainability initiatives	Number of staff participating	Human Resources, Rodney Mondor (Transitional Programs)
Create an award for staff sustainability achievement across campus	FY 2019	Award would aim to incentivize individual efforts to advance sustainability across diverse departments.	Action completed or not	President's Office
Develop a professional development sustainability training for faculty & staff	FY 2020	Training could consist of a module offered by Human Resources or a workshop led by the office of sustainability.	Number of staff participating	Christie Anderson (Professional Development Programs), Human Resources
Explore option of having departments create two-page sustainability goals	FY 2021	Departments create annual goals in consultation with sustainability director.	Number of departments participating	Professional Staff Senate, Classified Staff Senate & Faculty Senate

## Implementation

The University of Southern Maine is a fertile place for sustainability. The City of Portland is one of the pioneer cities to sign on to a 100% renewable energy goal<sup>17</sup>. The University is situated in a state with a thriving local, sustainable food network, which is now being aided by the University's dining contractor, Sodexo, through their Maine Course program<sup>18</sup>. Maine also has a rich history of relying on natural resources, such as lumber and fisheries, to power its economy. Finally, the University is situated at a strategic location along the North Atlantic trade route and will become a key player in sustainability challenges arising from increased trade due to the opening of the north west passage from climate change<sup>19</sup>.

<sup>17</sup> The goal was pledged by Mayor Strimling in his State of the City address in January of 2017.

<sup>18</sup> Maine Course is a program designed to build the local, sustainable food network while supporting Maine's economy.

<sup>19</sup> Mooney (2015)



Beyond the University's unique location, it is also comprised of a thriving group of students, faculty, and staff who value sustainability and have been working in the field for years. Students in nursing, tourism and hospitality, business administration, engineering and other majors have taken on sustainability projects in recent years alongside the usual suspects from environmental science and policy. Staff in grounds, trades, custodial, information technology, the library, and many other departments have participated in sustainability projects ranging from green cleaning to composting to computer recycling. Even President Cummings has earned sustainability stripes by writing his PhD dissertation on campus sustainability and by serving as the chair of the U.S. Department of Education's Green Initiative when he was Deputy Assistant Secretary.

USM is primed and ready to take big steps toward sustainability infrastructure and education on its three campuses. The Office of Sustainability's full-time staff and student Eco-rep program has already begun implementation of this strategic plan. Students, staff, and faculty from across the University from any major or department are encouraged to get involved in any way that is suitable to their professional goals and schedules. Interested people can reach out to the Office of Sustainability anytime to find out which project might best suit their needs. The primary office is located in the facilities management building at 25 Bedford Street and is open most of the time between 8 am-4:30 pm, Monday through Friday. A satellite office in Gorham at 19 College Avenue (The Energy Lab) is staffed certain days a week on a rotating basis, and sustainability employees can travel to the Lewiston-Auburn campus upon request. The sustainability website<sup>20</sup> offers the most up-to-date phone numbers and email addresses of office employees.

If we work together, we can make the University of Southern Maine a model campus for sustainability and prepare our students to thrive in a changing world.

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<sup>20</sup> <https://usm.maine.edu/sustainability>

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