The Harvard Sustainability Plan is the University’s roadmap for building and operating a healthier, more sustainable campus community. The Plan aligns Harvard’s decentralized campus around a holistic vision and sets clear University-wide goals and priorities based on the innovations and solutions that have been developed at our individual Schools and departments.

Build on progress with a holistic vision for a more sustainable campus by fostering interdisciplinary connections to drive innovation, student/faculty connection with on-campus challenges, and partnerships with external institutions (2015 and forward)
FOREWORD
President DREW GILPIN FAUST

Worldwide scientific consensus has clearly established that climate change and the challenges of environmental sustainability pose a serious threat to our future—and, increasingly, to our present. Harvard has long recognized its responsibility to confront these challenges as part of its special accountability to the future. Fulfilling these obligations must be our common purpose and our shared commitment.

Each member of our community has a role to play in this effort.

We must continue to generate new ideas and spur exciting innovations by collaborating across disciplines as we develop solutions to pressing global challenges. From creating new materials that revolutionize solar energy production, to probing the human influences on climate change, to providing analysis to policy-makers, faculty and students are making important contributions and helping to ensure a more sustainable future. Our teaching and research across Harvard—in climate science, engineering, law, public health, policy, design, and business—has an unparalleled capacity to accelerate the progression from nonrenewable to renewable sources of energy.

Harvard must also be committed to modeling an institutional pathway to a more sustainable campus. Our goal to reduce greenhouse gas emissions is the University’s most ambitious effort to date, but our students, faculty, and staff have also harnessed their creativity to build a healthier campus in which to learn, work, and live. Harvard’s commitment to sustainability has united individuals across our Schools around common goals and a strong vision for a more vibrant community.

The Harvard Sustainability Plan, developed in consultation with a wide range of University stakeholders, seeks to build on our progress. It considers the University’s role in the world and recognizes our shared responsibility to build and operate a campus that contributes to the well-being of every member of our community—and ultimately to the health of the planet. It recognizes that creating a sustainable campus strengthens our core research and teaching mission, and it acknowledges that the challenges before us are complex and interconnected, demanding an ever-developing approach to sustainability.”
before us are complex and interconnected, demanding an ever-developing approach to sustainability.

The Harvard Sustainability Plan is a critical and necessary step forward in building a more sustainable future, a future in which our research and teaching inform solutions to problems on our campus and far beyond it; in which ideas, innovation, and discovery are considered indispensable elements in combating global challenges; and in which actions related to energy and the environment are complemented by efforts to improve human health and well-being. Students arriving today ought to leave Harvard with a deeper understanding of the complexity of sustainability challenges and be ready to address them no matter where their lives may lead.

Together, we must create that future. I want to extend my deep appreciation to Executive Vice President Katie Lapp and the Office for Sustainability for leading the development of this Plan. I also want to thank the hundreds of faculty, students, and staff in facilities, Campus Services, and elsewhere who contributed to the creation of the Plan. Their work across disciplines and Schools speaks to the power of collaboration and teamwork, and it embodies the perennial goal of using the great talent that exists throughout the University to achieve something even greater together.

President Drew Gilpin Faust
The United Nation’s Brundtland Commission Report of 1987 concluded that humanity has the ability to make development sustainable if it meets “the needs of the present without compromising the ability of future generations to meet their own needs.”

The Brundtland Report was the catalyst that helped focus humanity on our obligations to future generations as well as to the importance of developing people, not just protecting the environment. However, there is a growing consensus among scholars and leaders around the world that we must now build on the Brundtland Report by incorporating a deeper consideration of human well-being into the evolving approach to sustainable development on local, regional, and global levels.

That consensus argues that when governments, firms, and other organizations consider their possible paths toward sustainable development, they should focus on implications for the well-being of individual people aggregated within and across generations.

Well-being depends, of course, on conservation of natural resources and the environment. But there are also other assets from which a society can draw to shape its own well-being to pass on to successive generations. A systematic approach to the challenges of sustainable development must appreciate the contributions to our intergenerational...
The creation of Harvard’s first University-wide Sustainability Plan is much more than an exercise in strategic planning. It is an opportunity for every member of our community to reflect on what role they can play in enhancing our collective well-being for a more sustainable future.
Harvard College's House renewal initiative seeks to reinvigorate the historic undergraduate House system, enhancing the student experience for generations to come. In addition to creating program and healthy living spaces to meet the changing needs of learning in the 21st century, sustainability is another goal that is helping guide all renewal projects.
ROADMAP TO A SUSTAINABLE COMMUNITY

Climate change and environmental degradation are global problems that require a bold, clear response from organizations, governments, and businesses. Harvard University is confronting these challenges through research and teaching, and by turning research into action in order to model an institutional pathway to a more sustainable future.

The University’s network of campuses is a living, breathing ecosystem set within an urban environment that includes 12 Schools, dozens of administrative and operational groups, a broad range of building types and land uses, and a diverse group of tens of thousands of faculty, students, and staff. From an institutional standpoint, we aim to transform the University into a sustainable community that contributes positive social, economic, and environmental benefits. We are dedicated to institutionalizing best practices in sustainable operations and translating research and teaching into practice by using our campus to pilot innovative solutions that can be widely replicated. We also have a deeper mandate that goes to the heart of Harvard’s research and teaching mission: to educate and empower our students while on campus to become leaders who will use their knowledge to create sustainable impact in service to the world.

Harvard’s commitment is driven by Sustainability Principles, adopted in 2004, which provide a broad vision to guide University-wide sustainability initiatives. In 2008, President Faust and the Deans approved Harvard’s most ambitious sustainability commitment to date: a long-term commitment to reduce the University’s greenhouse gas emissions by the maximum practicable rate aligned with the best available science, and a short-term goal to reduce greenhouse gas emissions 30% by 2016, including growth, from a 2006 baseline. This goal mobilized the University community and allowed the Office for Sustainability to establish a framework for

Harvard must model an institutional pathway toward a more sustainable future.”

PRESIDENT
DREW GILPIN FAUST
creating, scaling, and achieving University-wide goals by facilitating teamwork across disciplines and sectors. In addition, the University has achieved significant progress in areas beyond energy and emissions including sustainable transportation, healthy operations and maintenance, employee engagement, and student green living.

The centerpiece of Harvard’s strategy is scaling sustainable change for maximum impact. We empower our community to innovate on the local level and then identify those solutions that can be replicated and scaled up across the University. These replicable models are also shared with our peers in the business, government, and higher education sectors to scale change beyond the boundaries of our campus.

The Harvard Sustainability Plan builds off of this framework and is the next step in the University’s evolving commitment to sustainability. It is our roadmap for building and operating a healthier, more sustainable campus community. The Harvard Office for Sustainability led the development of the Plan with extensive feedback from hundreds of faculty, students, and facilities and operational experts across the University.

The Plan aligns our decentralized campus around a holistic vision and sets clear University-wide goals and priorities based on the innovations and solutions that have been developed at our individual Schools and departments. It is intended to be practical and operational from Fiscal Year 2015 through Fiscal Year 2020 and covers the entirety of Harvard’s campus in North America, spanning all Schools, administrative departments, and properties.

The existing short-term goal to reduce greenhouse gas emissions is integrated into this Plan and will be revisited in 2016 when a Task Force is scheduled to recommend new greenhouse gas and energy reduction goals as part of a quadrennial review process. We fully expect that, in many cases, Harvard’s Schools and departments will exceed these goals and continue to innovate and push for the next generation of sustainability solutions.

“ We tap into the creative ideas that our students, faculty, and staff are generating and then work to replicate them University-wide for greater impact.”

HEATHER HENRIKSEN, DIRECTOR, HARVARD OFFICE FOR SUSTAINABILITY
The Harvard Sustainability Plan is organized around the five core topics of Emissions and Energy, Campus Operations, Nature and Ecosystems, Health and Well-Being, and Culture and Learning. Each topic includes areas of focus with specific actions that are organized within three categories:

1. **GOAL** | University-wide resource reduction goals with a specific target within a set timeframe.

2. **STANDARD** | Operational standards to facilitate alignment across the University, ensuring that a consistent approach is being implemented. Standards are designed to allow flexibility for how they are implemented by individual Schools and administrative departments.

3. **COMMITMENT** | A statement of commitment or recommendation for future research in areas where there was not enough information to set a specific numeric goal or standard.

This Plan should be seen as a living document. It sets a University-wide baseline from which we can continue to innovate and explore new ideas for the greater good. By providing a foundation for improved reporting and accountability, it also helps us create a stronger platform for better assessing our true University-wide impacts and results. We expect it to evolve and change over time, with a formal process to review and set new goals every five years.

“Helping students access the tools to live more sustainably at Harvard is one of our core priorities and we hope they’ll take those tools with them in the classroom to explore the next generation of solutions that will lead to a healthier planet.”

JASMINE WADDELL, RESIDENT DEAN OF FRESHMEN, ELM YARD
The Common Spaces Program is exploring how the physical environment can enhance and sustain the vitality of the University community. The initiative has sponsored a wide variety of programs and events, including colorful chairs in Harvard Yard, Wellness Wednesdays, and pop-up creative art performances.
EMISSIONS AND ENERGY

We have a special role and a special responsibility to confront the challenge of climate change by reducing campus greenhouse gas emissions by the maximum practicable rate. Reducing energy and emissions remains one of the University’s top priorities, and we will continue to meet this challenge through best-in-class innovations in energy efficiency, energy management, and renewable energy.

In 2008, Harvard established a long-term commitment to reduce greenhouse gas emissions based on the best available science and set a short-term goal to reduce University-wide emissions 30% by 2016. In 2016, the University will develop new greenhouse gas emissions and energy reduction goals based on the recommendations of a planned Task Force composed of students, faculty, and staff. This Plan will be updated at that time to reflect the University’s new goals.

GREENHOUSE GAS EMISSIONS

GOAL | Reduce University-wide greenhouse gas emissions 30% by 2016 from a 2006 baseline, including growth. (Adopted in 2008)

COMMITMENT | Maintain a long-term commitment to reduce greenhouse gas emissions by the maximum practicable rate, aligned with the United Nations Intergovernmental Panel on Climate Change’s recommendations to reduce emissions 80% by 2050. (Adopted in 2008)

COMMITMENT | Track and report Scope 3 greenhouse gas emissions.

The University has developed a comprehensive community-driven implementation strategy focused on energy efficient buildings and cleaner energy supply that has resulted in a net 21% reduction in emissions through 2014 (31% reduction excluding growth in square footage).
As a result of an energy management planning strategy in place since 2008, all energy intensive space in the University has been audited and over 1,300 energy efficiency measures have been implemented, saving an estimated $9 million a year.

**ENERGY REDUCTION**

**COMMITMENT** | Identify and implement net present value positive energy conservation measures in our buildings as part of the five-year capital planning process.

**COMMITMENT** | Assess energy use by building and space type to inform goal setting by the 2016 Greenhouse Gas Reduction Goal Review Task Force.

**RENEWABLE ENERGY**

**COMMITMENT** | Conduct a University-wide on-site renewable energy study to inform goal setting by the 2016 Greenhouse Gas Reduction Goal Review Task Force.

**COMMITMENT** | Recommend that the 2016 Greenhouse Gas Reduction Goal Review Task Force consider setting a renewable energy purchasing goal.

Harvard has over 1MW of installed solar capacity on campus. In 2009, Harvard became the largest purchaser of wind energy by a higher education institution in New England when it purchased half the energy generated at a wind facility in Maine.
CAMPUS OPERATIONS

We will aim to have a restorative impact on the surrounding environment and our community of students, faculty, and staff by developing and operating Harvard’s campuses to conserve resources, reduce pollution, and enhance personal well-being.

NEW CONSTRUCTION

**STANDARD** | Maintain University-wide compliance with the Harvard University Green Building Standards, reviewed annually and revised every four years.

**GREEN BUILDING STANDARDS 2009+**

BUILDING OPERATIONS

**GOAL** | Reduce waste per capita 50% by 2020 from a 2006 baseline, with the aspirational goal of becoming a zero-waste campus.

**50% REDUCTION BY 2020**

**GOAL** | Reduce University-wide water use 30% by 2020 from a 2006 baseline, including process, irrigation, and potable water usage.

**30% REDUCTION BY 2020**

In 2009, Harvard formally established Green Building Standards that apply to all capital projects. The Standards were last updated in 2014.

Our commitment to reducing waste starts first with freecycles and reuse programs, then focuses on recycling and composting.
STANDARD | Achieve University-wide compliance with the Harvard University Green Cleaning Standards by 2020.

GREEN CLEANING STANDARDS 2020

STANDARD | Achieve University-wide compliance with the Harvard University Sustainable IT Standards by 2017.

GREEN IT STANDARDS 2017

COMMITMENT | Recycle or dispose of hazardous and electronic materials in a responsible and ethical manner, with a priority to minimize the use of hazardous materials, as appropriate.

COMMITMENT | Develop a best practices guide for managing and operating buildings in a sustainable and energy-efficient manner in order to assist facilities teams in meeting sustainability-related goals, standards, and commitments.

Approximately 75% of the University is already compliant with the University’s Green Cleaning Standards that were informed by Green Seal 42.

Harvard was one of five research institutions to support the construction of the Massachusetts Green High Performance Computing Center—the first higher education research data center to achieve LEED Platinum certification.
TRANSPORTATION

**COMMITMENT** | Develop a University-wide plan by 2016 for reducing campus fleet and shuttle emissions.

**COMMITMENT** | Maintain and continuously improve sustainable transportation opportunities, programs, and incentives for Harvard affiliates.

Over 85% of Harvard commuters use alternative transportation options. The CommuterChoice Program and Longwood campus provide award-winning sustainable transportation initiatives that encourage walking, biking, transit use, and carpooling.

**COMMITMENT** | Increase the bikeability and safety of the streets in and around Harvard’s campuses, and seek to achieve gold-level Bicycle Friendly University status from the League of American Bicyclists by 2020.

CLIMATE PREPAREDNESS AND CAMPUS RESILIENCE

**STANDARD** | Develop standards for climate preparedness and campus resilience that apply to new and existing building design and critical infrastructure by 2016.

**2016** 

**CLIMATE PREPAREDNESS STANDARDS**

**STANDARD** | Develop a University-wide Climate Preparedness and Campus Resilience Plan by 2020.

**2020** 

**UNIVERSITY-WIDE CLIMATE PREPAREDNESS PLAN**

In 2013, the Harvard University Police Department used the Green Revolving Fund to convert their entire fleet of patrol cars to hybrid vehicles.
PROCUREMENT

**STANDARD** | Develop University-wide standards for targeted environmentally preferred products by 2018.

**2018 ENVIRONMENTALLY PREFERRED PRODUCTS**

**COMMITMENT** | Require all major vendors to report on progress in meeting Harvard standards and specified third-party environmental certifications, and demonstrate their commitment to sustainability through corporate responsibility reporting, by 2016.

**COMMITMENT** | Require all vendors, as appropriate, to comply with applicable Harvard sustainability goals and standards by 2020, and encourage vendors to align their practices with all sustainability commitments.

**COMMITMENT** | Reduce the amount of electronic waste generated per capita by 2020.

*Harvard has supported the installation of 12 Hubway bike share stations throughout Cambridge and Boston, making it the largest supporter of stations in the network. In 2013, Harvard achieved the League of American Bicyclists’ silver-level Bicycle Friendly University recognition.*
NATURE AND ECOSYSTEMS

Our campuses are part of a larger, interconnected ecosystem, and the actions we take will have ripple effects through the natural environment. Harvard will protect and enhance the ecosystems and green spaces our University owns, manages, or impacts, in order to enhance regional biodiversity and personal well-being.

LANDSCAPE OPERATIONS

GOAL | Maintain at least 75% of the University’s landscaped areas with an organic landscaping program by 2020.

75% ORGANIC BY 2020

STANDARD | Achieve University-wide compliance with the Harvard University Sustainable Landscaping Standards by 2020.

2020 SUSTAINABLE LANDSCAPING STANDARDS

Harvard’s organic landscaping program is implemented on over 90 acres, including Harvard Yard.
An undergraduate beekeeping group provides students with the opportunity to be active beekeepers and to learn about the role and importance of bees in the local ecosystem.

**CAMPUS DESIGN**

**COMMITMENT** | Continue to incorporate sustainability goals into facility, district, and campus planning.

**COMMITMENT** | Design landscapes and choose plant species that are likely to be robust to future environmental change, ensure appropriate levels of biodiversity and green or open space, and support stormwater reduction and passive stormwater filtration.

**CONSERVATION AND EDUCATION**

**COMMITMENT** | Continue to prioritize conservation, research, and education at Harvard-owned green spaces including the Harvard Forest and the Arnold Arboretum.
HEALTH AND WELL-BEING

The vitality of our University depends on the health of our people. We will strive to enhance the health, productivity, and quality of life of our students, faculty, and staff through the design and maintenance of the built environment and the development and implementation of cutting-edge programs that contribute to well-being.

PERSONAL WELL-BEING

**COMMITMENT** | Reduce the Harvard community’s exposure to toxic chemicals with a special focus on the natural and built environment, indoor air quality, furnishings, and cleaning products.

**COMMITMENT** | Identify and track high-risk chemicals in targeted building materials used on campus, informed by the latest research and LEED v.4 standards, through the Harvard Green Building Standards.

**COMMITMENT** | Identify and target at least two significant chemicals of concern for which viable alternatives exist, and develop a plan for eliminating exposure to those chemicals on campus.

**COMMITMENT** | Increase participation in, and access to, wellness programs through the Healthy Harvard Initiative by 2020.

**COMMITMENT** | Continue to develop and implement tobacco-free campus policies.
Harvard manages two weekly Farmers’ Markets that feature locally-grown food and locally-made products. Students and staff manage four community gardens across Harvard’s campuses that provide hands-on opportunities to grow food.

FOOD

STANDARD | Develop Sustainable and Healthful Food Standards that include Green Restaurant Association certification, and achieve University-wide compliance by 2020.

2020 SUSTAINABLE AND HEALTHFUL FOOD STANDARDS

The Food Literacy Project at Harvard University Dining Services cultivates an understanding of food from the ground up. Education and events across Harvard’s undergraduate and graduate Schools focus on four integrated areas of food and society: agriculture, nutrition, food preparation, and community.
CULTURE AND LEARNING

Harnessing the power of collaboration and integrated knowledge across disciplines leads to more powerful and effective solutions to our most pressing problems. We will use our campus as a living laboratory for developing the next generation of sustainability solutions, and we will strengthen and cultivate a “One Harvard” culture across our Schools and departments that embraces environmental sustainability as an integral part of our academic work, our institutional practices, and our daily lives.

RESEARCH AND TEACHING

**COMMITMENT** | Translate research and teaching into practice on Harvard’s campuses by facilitating collaborations to pilot and launch innovative solutions to sustainability challenges.

**COMMITMENT** | Foster a new generation of environmental leaders by providing mentoring, networking, and professional development opportunities that prepare undergraduate and graduate students with the insight and foresight to safeguard our environment in the years and decades to come.

To catalyze the research specifically focused on shaping and accelerating the transition to a sustainable energy system, President Drew Faust launched a $20 million Climate Change Solutions Fund to seed and spur innovative approaches to confronting climate change.
COMMITMENT | Support the creation of new sustainability-related curricula, programming, and cross-disciplinary opportunities by fostering collaboration with the Harvard University Center for the Environment, Center for Global Health and the Environment, and other environmental initiatives on campus.

GOVERNANCE

COMMITMENT | Facilitate strong governance structures to ensure integration of sustainability into business practices at all levels of the University.

Senior facilities and administrative leaders from across campus meet regularly as part of the Sustainability and Energy Management Council to inform the development of new policies and share innovations in operational practices.
EXTERNAL PARTNERSHIPS

**COMMITMENT** | Cultivate and lead external partnerships, in higher education and beyond, that help inform Harvard’s efforts and **amplify our local and global impact**.

COMMUNICATIONS

**COMMITMENT** | Communicate the “One Harvard” sustainability story to educate, engage, and motivate the Harvard community.

**COMMITMENT** | Engage senior leaders to communicate to their community of students, faculty, and staff on an annual basis about Harvard’s commitment to sustainability.

**COMMITMENT** | Develop an alumni engagement strategy by 2016 to strengthen involvement of alumni in sustainability efforts at Harvard.

COMMUNITY ACTION

**COMMITMENT** | Increase staff participation in the Harvard Green Office Program by at least 30% by 2020 from a 2014 baseline.

**COMMITMENT** | Maintain and continuously improve programs and resources that drive sustainability action among students, faculty, staff, and alumni.

**COMMITMENT** | Recognize and reward sustainability accomplishments University-wide and at all Schools annually, including at the Harvard Heroes ceremony and the Harvard Green Carpet Awards.
Green Living Programs and Green Teams engage students and employees in peer-to-peer education and outreach, giving them the tools to act for a more sustainable future on campus and beyond.
GOALS

- Reduce University-wide greenhouse gas emissions 30% by 2016 from a 2006 baseline, including growth. (Adopted in 2008)
- Reduce waste per capita 50% by 2020 from a 2006 baseline, with the aspirational goal of becoming a zero-waste campus.
- Reduce University-wide water use 30% by 2020 from a 2006 baseline, including process, irrigation, and potable water usage.
- Maintain at least 75% of the University’s landscaped areas with an organic landscaping program by 2020.

STANDARDS

- Maintain University-wide compliance with the Harvard University Green Building Standards, reviewed annually and revised every four years.
- Achieve University-wide compliance with the Harvard University Green Cleaning Standards by 2020.
- Achieve University-wide compliance with the Harvard University Sustainable IT Standards by 2017.
- Develop standards for climate preparedness and campus resilience that apply to new and existing building design and critical infrastructure by 2016.
- Develop a University-wide Climate Preparedness and Campus Resilience Plan by 2020.
- Develop University-wide standards for targeted environmentally preferred products by 2018.
- Achieve University-wide compliance with the Harvard University Sustainable Landscaping Standards by 2020.
- Develop Sustainable and Healthful Food Standards that include Green Restaurant Association certification, and achieve University-wide compliance by 2020.

COMMITMENTS

- Maintain a long-term commitment to reduce greenhouse gas emissions by the maximum practicable rate, aligned with the United Nations Intergovernmental Panel on Climate Change’s recommendations to reduce emissions 80% by 2050. (Adopted in 2008)
- Track Scope 3 greenhouse gas emissions.
- Identify and implement net present value positive energy conservation measures in our buildings as part of the five-year capital planning process.
- Assess energy use by building and space type to inform goal setting by the 2016 Greenhouse Gas Reduction Goal Review Task Force.
- Conduct a University-wide on-site renewable energy study to inform goal setting by the 2016 Greenhouse Gas Reduction Goal Review Task Force.
- Recommend that the 2016 Greenhouse Gas Reduction Goal Review Task Force consider setting a renewable energy purchasing goal.
- Recycle or dispose of hazardous and electronic materials in a responsible and ethical manner, with a priority to minimize the use of hazardous materials, as appropriate.
- Develop a best practices guide for managing and operating buildings in a sustainable and energy-efficient manner in order to assist facilities teams in meeting sustainability-related goals, standards, and commitments.
- Develop a University-wide plan by 2016 for reducing campus fleet and shuttle emissions.
- Maintain and continuously improve sustainable transportation opportunities, programs, and incentives for Harvard affiliates.
- Increase the bikeability and safety of the streets in and around Harvard’s campuses, and seek to achieve gold-level Bicycle Friendly University status from the League of American Bicyclists by 2020.
Require all major vendors to report on progress in meeting Harvard standards and specified third-party environmental certifications, and demonstrate their commitment to sustainability through corporate responsibility reporting, by 2016.

Require all vendors, as appropriate, to comply with applicable Harvard sustainability goals and standards by 2020, and encourage vendors to align their practices with all sustainability commitments.

Reduce the amount of electronic waste generated per capita by 2020.

Continue to incorporate sustainability goals into facility, district, and campus planning.

Design landscapes and choose plant species that are likely to be robust to future environmental change, ensure appropriate levels of biodiversity and green or open space, and support stormwater reduction and passive stormwater filtration.

Continue to prioritize conservation, research, and education at Harvard-owned green spaces including the Harvard Forest and the Arnold Arboretum.

Reduce the Harvard community’s exposure to toxic chemicals with a special focus on the natural and built environment, indoor air quality, furnishings, and cleaning products.

Identify and track high-risk chemicals in targeted building materials used on campus, informed by the latest research and LEED v.4 standards, through the Harvard Green Building Standards.

Identify and target at least two significant chemicals of concern for which viable alternatives exist, and develop a plan for eliminating exposure to those chemicals on campus.

Increase participation in, and access to, wellness programs through the Healthy Harvard Initiative by 2020.

Continue to develop and implement tobacco-free campus policies.

Translate research and teaching into practice on Harvard’s campuses by facilitating collaborations to pilot and launch innovative solutions to sustainability challenges.

Foster a new generation of environmental leaders by providing mentoring, networking, and professional development opportunities that prepare undergraduate and graduate students with the insight and foresight to safeguard our environment in the years and decades to come.

Support the creation of new sustainability-related curricula, programming, and cross-disciplinary opportunities by fostering collaboration with the Harvard University Center for the Environment, Center for Global Health and the Environment, and other environmental initiatives on campus.

Facilitate strong governance structures to ensure integration of sustainability into business practices at all levels of the University.

Cultivate and lead external partnerships, in higher education and beyond, that help inform Harvard’s efforts and amplify our local and global impact.

Communicate the “One Harvard” sustainability story to educate, engage, and motivate the Harvard community.

Engage senior leaders to communicate to their community of students, faculty, and staff on an annual basis about Harvard’s commitment to sustainability.

Develop an alumni engagement strategy by 2016 to strengthen involvement of alumni in sustainability efforts at Harvard.

Increase staff participation in the Harvard Green Office Program by at least 30% by 2020 from a 2014 baseline.

Maintain and continuously improve programs and resources that drive sustainability action among students, faculty, staff, and alumni.

Recognize and reward sustainability accomplishments University-wide and at all Schools annually, including at the Harvard Heroes ceremony and the Harvard Green Carpet Awards.
Aligning Harvard’s network of decentralized Schools and Central Administration departments around shared goals and policies for sustainable change requires extensive stakeholder engagement with our diverse community of tens of thousands of students, faculty, and staff.

University-wide committees involve senior administrators, facilities and operations teams, student leaders, and faculty advisors in policy development to ensure everyone has a voice in decision-making and producing results. Adopted policies reflect feedback from multiple stakeholders and can be tailored to the individual culture of each School and department.

The governance structure and organizational framework created and managed by the Office for Sustainability (OFS) to achieve the University’s Greenhouse Gas Reduction Goal serves as the foundation for this collaborative effort. As a result, the Harvard Sustainability Plan is a true University-wide initiative that our entire community is invested in making successful.
STEP 1 | Benchmarking Working Groups: Campus Services and Central Administration working groups, representing teams responsible for implementing sustainable operations across campus, provided baseline reports on current efforts, as well as drafted proposed goals, strategies, and opportunities for improvement. (For a full list of working groups and leaders see Appendix 2.)

STEP 2 | Faculty, Student, and School Engagement: Faculty in over ten disciplines, 100 students representing more than 12 student groups, and key stakeholders from each School provided insight and comment on the draft goals, based on their fields of expertise.

STEP 3 | OFS Drafts Plan: OFS created the draft University-wide Sustainability Plan with goals, standards, and commitments based on student, faculty, and staff feedback, and the Campus Services working group reports.

STEP 4 | Review Committee: OFS convened the Sustainability Plan Review Committee composed of senior-level School operational leaders, Central Administration departments, and students who were tasked with assessing the draft Plan, identifying implementation barriers or School-specific concerns, and making specific recommendations on the proposed goals. (For a full list of Committee Members see Appendix 1.) OFS revised the Sustainability Plan based on Review Committee recommendations.

STEP 5 | All Community Meeting: Harvard Kennedy School Professor William Clark and the Office for Sustainability hosted a broad community review meeting for facilities leaders, Green Teams, Strategic Procurement, Human Resources, and other key stakeholders.

STEP 6 | School Review and Sign Off: Individual meetings were held with each School and Central Administration department leadership to review and sign off on the final draft of the Plan.
Harvard’s Office for Sustainability provides micro-grants to fund undergraduate and graduate student projects that tackle real world and on-campus sustainability challenges. Over 45 projects have been funded including these modular rooftop planters at Gund Hall. Developed by Harvard Graduate School of Design students, the project is designed as a flexible social space that reduces the quantity and speed of stormwater running off the building’s roof.
IMPLEMENTATION AND REPORTING

Harvard’s institutional sustainability initiatives are overseen by an Executive Committee co-chaired by the Executive Vice President Katie Lapp and two senior faculty members: Professor Jeremy Bloxham, Dean of Science in the Faculty of Arts and Sciences, and Robert S. Kaplan, Senior Associate Dean and Professor of Management Practice at Harvard Business School. The Harvard Office for Sustainability (OFS), under the oversight of the Executive Vice President and the Vice President for Campus Services, leads the development and the implementation of Harvard’s sustainability goals and initiatives.

OFS is responsible for developing and managing the University-wide implementation strategy and reporting for the Harvard Sustainability Plan, working in close collaboration with Campus Services, Central Administration, and the Schools. Implementation of the goals, standards, and commitments in this Plan will take place through Fiscal Year 2020. This Plan should be viewed as a living document: it will evolve and change over time, with a formal process to review, update, or establish new goals, standards, and commitments every five years.

Harvard’s Schools and Central Administration departments that oversee specific operational or administrative areas will be responsible for managing implementation of specific portions of the Plan that relate to their individual area of expertise. Guidance on how to reach each goal, standard, or commitment will be provided by OFS, but local implementation strategies remain with the individual Schools. Schools will be supported with resources from OFS, Campus Services, and other Central Administration departments, including, but not limited to, tracking methods, case studies, resource guides, and communications strategies.

The Harvard Sustainability Plan applies to the entirety of Harvard’s campus in North America, spanning all Schools, administrative departments, and properties (mirroring the scope of the University’s greenhouse gas emissions inventory). However, due to limited resources, the initial phase of data collection and reporting on the Sustainability Plan will be limited to the Longwood, Allston, and Cambridge campuses. OFS will release an annual University-wide report and update on the Sustainability Plan progress via the online Sustainability Impact Report (green.harvard.edu/report).
APPENDIX 1: SUSTAINABILITY PLAN REVIEW COMMITTEE MEMBERSHIP

**CO-CHAIR: Mary Power**, Managing Director, Campus Services Initiatives

**CO-CHAIR: Geoffrey Swift**, former Associate Dean and Chief Financial Officer, Harvard Law School

**Allen Aloise**, Director of Laboratories, Faculty of Arts and Sciences

**Mary Ann Bradley**, Associate Dean for Administrative Operations, Faculty of Arts and Sciences

**Willard Donham**, Senior Manager for Regulatory Approvals, Harvard Planning & Project Management

**Diane Gray**, Senior Campus Planner, Harvard Planning & Project Management

**Alicia Harley**, Ph.D. Student, Harvard Kennedy School

**Heather Henriksen**, Director, Office for Sustainability

**Elizabeth Langdon-Gray**, Assistant Provost for Research Development and Planning, Office of the Vice President for Research

**Jeanne Mahon**, Director, Center for Wellness, University Health Services

**Steven Nason**, Managing Director, Harvard University Housing

**Andrew O’Brien**, Chief of Operations, Harvard Business School

**Michael Popejoy**, Ph.D. Fellow, Graduate School of Arts and Sciences

**Richard Shea**, Associate Dean for Campus Planning and Facilities, Harvard Medical School

**Daniel Wilson**, Harvard College 2014

APPENDIX 2: SUSTAINABILITY PLAN WORKING GROUP MEMBERSHIP

**Climate Preparedness/Risk Management**

**GROUP LEAD: Heather Henriksen**, Director, Office for Sustainability

**GROUP LEAD: Gary Kassabian**, Managing Director of Environmental Health, Safety & Emergency Management, Environmental Health & Safety

**Merle Bicknell**, Assistant Dean, Faculty of Arts and Sciences

**Douglas Garron**, Managing Director, Energy & Facilities

**Nicholas Hambridge**, Associate Director, Director of Emergency Management, Environmental Health & Safety

**Michael Macrae**, Senior Environmental & GHG Officer, Environmental Health & Safety

**Robert Manning**, Director, Engineering & Utilities

**Gail McDermott**, Director, Risk Management & Audit Services


**Jaclyn Olsen**, Assistant Director, Office for Sustainability

**Walter Pizzano**, Director of Risk Strategy & Insurance, Risk Management & Audit Services

**Douglas Scatterday**, Director of Facilities, Harvard Business School

**Elizabeth Sisam**, Associate Vice President for Planning, Harvard Planning & Project Management

**Jeffrey Smith**, Director, Facilities Maintenance Operations

**Peter Stroup**, Director of Facilities, Harvard Medical School

**Susan Walsh**, Managing Director, Information Technology Infrastructure, Harvard University Information Technology

**Community Engagement**

**GROUP LEAD: Kerry Ann Beirne**, Director of Human Resources and Administration for Campus Services, Human Resources

**Elizabeth Cooney**, Director, Human Resources Consulting, Human Resources

**Jaclyn Olsen**, Assistant Director, Office for Sustainability

**Elaine Strunk**, Senior Sustainability Manager, Office for Sustainability
## Energy

**GROUP LEAD:** **Mary Smith**, Associate Director of Energy Supply & Utility Administration, Engineering & Utilities  
**Donald Gillis**, Energy Specialist, Harvard Medical School  
**Geri Kantor**, former Manager for Energy and GHG Analytics, Engineering & Utilities  
**Robert Manning**, Director, Engineering & Utilities  
**Joel McKellar**, Associate Director, Green Building Services  
**Gosia Sklodowska**, former Senior Manager (FAS Green Program), Office for Sustainability

## Food

**GROUP LEAD:** **Crista Martin**, Director for Marketing & Communications, Dining Services  
**John Aiken**, Procurement Manager, Campus Services  
**David Davidson**, Managing Director, Dining Services  
**Louisa Denison**, former Food Literacy Project (FLP) Coordinator, Dining Services  
**Samantha Houston**, former Resource Efficiency Program Coordinator (FAS Green Program), Office for Sustainability  
**Robert Leandro**, Director for Operations and Facilities, Dining Services

## Green Buildings

**GROUP LEAD:** **Jason Carlson**, Chief of Operations, Graduate School of Education  
**GROUP LEAD:** **Pamela Choi Redfern**, Director of Space Planning and Design, School of Engineering and Applied Sciences  
**John Arciprete**, Director, Facilities Maintenance, Harvard Law School  
**Craig Bradford**, Director of Renewal, Infrastructure and Sustainability, Faculty of Arts and Sciences  
**Meghan Duggan**, former Assistant Director of Sustainability, Harvard Business School  
**Douglas Garron**, Managing Director, Energy & Facilities  
**Heather Henriksen**, Director, Office for Sustainability  
**Kenneth Johnson**, former Senior Director of Project Management, Harvard Planning & Project Management  
**Bruce MacIntyre**, Project Manager, Harvard Medical School  
**Joel McKellar**, Associate Director, Green Building Services  
**Steven Nason**, Managing Director, Harvard University Housing  
**Douglas Scatterday**, Director of Facilities, Harvard Business School  
**Jennifer Stacy**, Senior Manager, Office for Sustainability  
**Andrea Trimble**, former Senior Manager, Green Building Services

## Health & Wellness

**GROUP LEAD:** **Jeanne Mahon**, Director, Center for Wellness, University Health Services  
**GROUP LEAD:** **Gordon Reynolds**, former Director of Environmental Affairs and Project Support Services, Environmental Health & Safety  
**Natalie Beaumont-Smith**, Work/Life Program Manager, Office of Work/Life, Human Resources  
**Nancy Costikyan**, Director, Office of Work/Life; Lecturer on Psychiatry, Human Resources  
**Valerie Nelson**, Manager of Environmental Public Health, Environmental Health & Safety  
**Jaclyn Olsen**, Assistant Director, Office for Sustainability  
**Elaine Strunk**, Senior Sustainability Manager, Office for Sustainability

## Information Technology

**GROUP LEAD:** **James Cuff**, Assistant Dean for Research Computing, Faculty of Arts and Sciences  
**GROUP LEAD:** **Eric D’Souza**, Senior Project Manager, Information Technology Planning Initiatives, Harvard University Information Technology  
**GROUP LEAD:** **Douglas Scatterday**, Director of Facilities, Harvard Business School
Operations & Maintenance

**GROUP LEAD:** Jason Luke, Associate Director, Custodial & Support Services, Facilities Maintenance Operations

**GROUP LEAD:** Paul Smith, Associate Manager, Landscape Services, Facilities Maintenance Operations

**Angela Birnbaum,** Senior Biosafety Program Manager, Environmental Health & Safety

**Eric Fleisher,** Organic Landscape Program Director, Facilities Maintenance Operations

**Prabhitha Forbes,** Strategic Sourcing Manager, Strategic Procurement

**Zachary Gingo,** Senior Director of Facilities Operations, Faculty of Arts and Sciences

**John Holleran,** Assistant Director of Facilities Management, Harvard Law School

**Nicole Messuri,** Manager of Custodial Services, Harvard Business School

**Carina Myteveli,** Manager of Administrative Operations, Faculty of Arts and Sciences

**Elaine Strunk,** Senior Sustainability Manager, Office for Sustainability

**Timothy Troville,** Associate Director of Athletics, Faculty of Arts and Sciences

**Jason Waldron,** Manager, Operations and Facilities, Athletics, Faculty of Arts and Sciences

Procurement

**GROUP LEAD:** James McQuaide, Director, Strategic Procurement

**Kelly Viola,** Associate Director, Contracts, Strategic Procurement

**GROUP LEAD:** Kris Locke, Assistant Director, Office for Sustainability (former Associate Director, CommuterChoice Program, Transportation Services)

Transportation

**GROUP LEAD:** David Harris, Director, Transit and Fleet Management, Transportation Services

**GROUP LEAD:** Kris Locke, Assistant Director, Office for Sustainability (former Associate Director, CommuterChoice Program, Transportation Services)

Waste Reduction

**GROUP LEAD:** Wayne Carbone, Manager of Landscape Services and Business Support, Facility Maintenance Operations

**GROUP LEAD:** Robert Gogan, Associate Manager, Recycling & Solid Waste Services, Facility Maintenance Operations

**GROUP LEAD:** Jeffrey Smith, Director, Facilities Maintenance Operations

**Daniel Beaudoin,** Deputy Director, Harvard T.H. Chan School of Public Health

**Christine Benoit,** Procurement Manager, Faculty of Arts and Sciences

**Jennifer Doleva Bowser,** former Endowment, Gift & Chart Of Accounts Administrator, Harvard T.H. Chan School of Public Health

**Susan Burgess,** Director for Procurement, Campus Services

**Brandon Geller,** Sustainability Manager (FAS Green Program), Office for Sustainability

**Dan Hart,** Strategic Sourcing Manager, Strategic Procurement

Water

**GROUP LEAD:** Justin Stratman, Director, Property Operations, Harvard University Housing

**GROUP LEAD:** Robert Manning, Director, Engineering & Utilities

**Kelly McQueeny,** Associate Director, Environmental Project Support Services, Environmental Health & Safety

**Valerie Nelson,** Manager of Environmental Public Health, Environmental Health & Safety

**Olivia Percy,** Sustainability Engagement Program Manager (Harvard University Housing and Harvard Real Estate), Office for Sustainability

**Nick Peters,** Chief Engineer & Plant Manager, Engineering & Utilities
APPENDIX 3: FACULTY ADVISORS

CO-CHAIR: William Clark, Harvey Brooks Professor of International Science, Public Policy and Human Development, Harvard Kennedy School

CO-CHAIR: John Spengler, Akira Yamaguchi Professor of Environmental Health and Human Habitation, Harvard T.H. Chan School of Public Health

Jeremy Bloxham, Dean of Science and Mallinckrodt Professor of Geophysics, Department of Earth and Planetary Sciences, Faculty of Arts and Sciences

Ann Forsyth, Professor of Urban Planning; Director, Master in Urban Planning Program, Graduate School of Design

Russ Hauser, Frederick Lee Hisaw Professor of Reproductive Physiology, Harvard School of Public Health; Professor of Obstetrics, Gynecology and Reproductive Biology, Harvard Medical School

Rebecca Henderson, John and Natty McArthur University Professor, Harvard Business School

Wendy Jacobs, Clinical Professor of Law; Director, Emmett Environmental Law and Policy Clinic, Harvard Law School

Robert Kaplan, Martin Marshall Professor of Management Practice in Business Administration and Senior Associate Dean for External Relations, Harvard Business School

Niall Kirkwood, Professor of Landscape Architecture, Graduate School of Design

Ali Malkawi, Professor of Architectural Technology and Founding Director, Harvard Center for Green Buildings and Cities, Graduate School of Design

James McCarthy, Professor, Biological Oceanography; Alexander Agassiz Professor of Biological Oceanography; Acting Curator of the Malacology Department in the Museum of Comparative Zoology, Faculty of Arts and Sciences

Joyce Rosenthal, Assistant Professor of Urban Planning, Graduate School of Design

Walter Willett, Fredrick John Stare Professor of Epidemiology and Nutrition; Chair, Department of Nutrition, Harvard T.H. Chan School of Public Health; Professor of Medicine, Harvard Medical School

APPENDIX 4: HARVARD COUNCIL OF STUDENT SUSTAINABILITY LEADERS

CO-CHAIR: Austin Blackmon, Harvard Business School 2013

CO-CHAIR: Thomas Ferguson, Harvard Business School 2014

CO-CHAIR: Emma Lucken, Harvard College 2014

CO-CHAIR: Michael McMahon, Harvard Kennedy School 2013

CO-CHAIR: Daniel Wilson, Harvard College 2014

Kanika Arora, Harvard Graduate School of Design 2015

David Bicknell, Harvard College 2013

Memo Cedeno, Harvard T.H. Chan School of Public Health, Ph.D. 2014

Carlos Cerezo, Harvard Graduate School of Design 2013

Rahul Daswani, Harvard Kennedy School 2013

Sachin Desai, Harvard Law School 2013

Jeramia Garcia, Harvard Kennedy School 2013

Basma Hashmi, School of Engineering and Applied Sciences, Ph.D. 2014

Ida Hempel, Harvard College 2014

Margaret Holden, Harvard Law School 2014

Manuel Jiminez, Harvard Business School 2015

Lacey Klingensmith, Harvard Division of Continuing Education 2016

Christie Lee, Harvard Business School 2014

Mary Light, Harvard Division of Continuing Education 2014

Chloe Maxmin, Harvard College 2015

Adekunle Ogunseye, Harvard Divinity School 2014

Okan Okutgen, Harvard Business School 2015

Krista Palen, Harvard Graduate School of Design 2013

Jisung Park, Harvard Graduate School of Arts and Sciences, Ph.D.

Cali Pfaff, Harvard Graduate School of Design 2014

Michael Popejoy, Fellow, Harvard Graduate School of Arts and Sciences, Ph.D.

Abhinay Sharma, Harvard Graduate School of Design 2013

Rebecca Walker, Harvard Division of Continuing Education 2013

Kristen Wraith, Harvard College 2014
APPENDIX 5: STUDENT GROUPS

Harvard Business School, Energy & Environment Group
Harvard Business School, Student Sustainability Associates
Harvard College, Council on Business & Environment
Harvard College, Resource Efficiency Program (REP)
Harvard College, Undergraduate Council
Harvard Extension School, Environmental Club
Harvard Graduate School of Design, GSD Bees
Harvard Graduate School of Design, GSD Green Design
Harvard Law School, Environmental Law Review
Harvard Law School, Green Living Representatives
Harvard University, Council of Student Sustainability Leaders (CSSL)
Harvard University, Harvard Graduate Student Government

APPENDIX 6: OFFICE FOR SUSTAINABILITY PROJECT TEAM

Heather Henriksen, Director
Jaclyn Olsen, Assistant Director
Kris Locke, Assistant Director
Elaine Strunk, Senior Sustainability Manager
Colin Durrant, Sustainability Communications Director
Katie Hammer, Digital Communications Specialist
Christian Cole, Sustainability Coordinator
Saad Amer, Sustainability Intern, Harvard College 2016
CREATING HARVARD’S SUSTAINABLE COMMUNITY: FY13 SNAPSHOT

CONFRONTING CLIMATE CHANGE

- 21% REDUCTION in greenhouse gas emissions including growth and renovation (FY06-FY13)
- 31% REDUCTION in greenhouse gas emissions excluding growth (FY06-FY13)
- 1,300 ENERGY CONSERVATION MEASURES implemented (FY06-MARCH 2014) saving an estimated $9 million annually
- $12 million GREEN REVOLVING FUND that accelerates cost-effective projects with nearly $5.4 MILLION PROJECTED ANNUAL UTILITY SAVINGS and 14,000 ANNUAL METRIC TONS OF CARBON DIOXIDE EQUIVALENT REDUCTION
- 116 LEED CERTIFIED AND REGISTERED PROJECTS, more than any higher education institution in the world
- GHG EMISSIONS/ENERGY integrated into 5-year capital project planning
- 17% ELECTRICITY from RENEWABLE ENERGY sources
- 21% REDUCTION in greenhouse gas emissions including growth and renovation (FY06-FY13)
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- 17% ELECTRICITY from RENEWABLE ENERGY sources

IMPROVED HEALTH AND WELL-BEING

- SUSTAINABLE SEAFOOD program in dining halls
- 4 COMMUNITY GARDENS
- 2 student BEEKEEPING groups
  “Being able to connect my design work on urban biodiversity directly with our campus through beekeeping has been one of the most exciting opportunities provided to me at Harvard.”
  —CALI PFAFF, GSD STUDENT
- 5 Harvard academic centers focused on HEALTH
- Harvard’s River Houses integrated into a study looking at ENVIRONMENTAL FACTORS that impact health, comfort, and sleep
- HARVARD ON THE MOVE and HEALTHY HARVARD mindfulness programs promote healthy lifestyles

CULTURE CHANGE & COMMUNITY

- 34 leaders on the SUSTAINABILITY AND ENERGY MANAGEMENT COUNCIL collaborate to reduce our impact
- 40 students run PEER-TO-PEER RESOURCE REDUCTION CAMPAIGNS in dorms
- 183 on-campus innovators recognized with GREEN CARPET AWARDS since 2010
- $240,000 SAVED through the SHUT THE SASH competition in the chemistry department alone
- 200+ GREEN OFFICES: over 3,500 staff engaged

HEALTHY OPERATIONS & MAINTENANCE

- CERTIFIED GREEN CLEANING on more than 10 million sq. ft. of campus = 4 Empire State Buildings
- 53% of total University waste RECYCLED OR COMPOSTED in FY13
- FOOD WASTE DECREASED 54% in dining halls, thanks to student-led campaigns
- ORGANIC LANDSCAPING on over 90 acres, including Harvard Yard
- SUSTAINABLE TRANSPORTATION
  - Over 85% of commuters use ALTERNATIVE TRANSPORTATION
  - 60,000 miles traveled by the Harvard community through HUBWAY BIKE SHARE PROGRAM
  - All Harvard University Police Department patrol cars are HYBRIDS
Students arriving today ought to leave Harvard with a deeper understanding of the complexity of sustainability challenges and be ready to address them no matter where their lives may lead.”

PRESIDENT DREW GILPIN FAUST