# THE FUTURE OF SUSTAINABILITY AT MISSOURI STATE UNIVERSITY

## INTERIM REPORT

## NOVEMBER 2007

Missouri State™

UNIVERSITY

PREPARED BY:

SUSTAINABILITY SUBCOMMITTEE

PREPARED FOR:

ENVIRONMENTAL MANAGEMENT POLICY PANEL

MISSOURI STATE UNIVERSITY

SPRINGFIELD, MISSOURI

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# I. EXECUTIVE SUMMARY

Recognition of the potential far-reaching impacts of our society on the natural environment is fueling a growing movement within higher education communities to reduce their environmental footprint and create an environmentally sustainable system. Because of their unique position in society, colleges and universities are well-positioned to take appropriate actions, including direct actions that reduce waste, modeling these actions to the surrounding communities, and educating students in life-long strategies for sustainable living.

This interim report contains the findings of the Sustainability Subcommittee with regard to environmental sustainability at Missouri State University. The basic principle guiding the subcommittee consisted of the initial charge to determine a recommended initial focus which will allow Missouri State University to most appropriately and effectively participate and show leadership in environmental sustainability, weighing all relevant factors including cost. To accomplish this goal, the subcommittee looked at actions taken by our benchmark institutions, reviewed the steps toward sustainability that Missouri State University has already taken, and weighed suggestions made by the stakeholders represented within the Subcommittee: students, faculty, and staff.

Recognizing that "sustainability" encompasses a broad range of issues and potential actions, the Subcommittee has developed several broad recommendations for this report. These recommendations are intended to be the foundational building blocks of a program that will place Missouri State University in the forefront of environmentally sustainable practices for the southwest Missouri community.

# II. INTRODUCTION & OVERVIEW

*Environmental sustainability* is a term currently in use to describe the relatively simple idea of providing for the needs of people today without compromising the needs of people in the future. Common use of the term began with the publication of the World Commission on Environment and Development report, *Our Common Future* (1987, also known as the Brundtland Report), which defined sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." (www.sustainability-ed.org/pages/what1-4brundt.htm)

The United States Environmental Protection Agency (USEPA) defines s*ustainable development* as the combination of two important themes: that environmental protection does not preclude economic development and that economic development must be ecologically viable now and in the long run. This concept of sustainability is intended to inspire public and private organizations to become better stewards of the environment *and* to promote positive economic growth and social objectives (USEPA Sustainability webpage).

According to University Leaders for a Sustainable Future (ULSF, Washington, DC), use of the term *sustainability* at higher education institutions implies that critical activities are ecologically sound, socially just and economically viable, and that they will continue to be so for future generations. Emphasis of these concepts should be present in the curriculum, research, and service activities of the

university, preparing students to contribute as working citizens to an environmentally sound and socially just society. As a sustainable community, a higher education institution would embody responsible consumption of food, energy, water and other resources, while supporting these values in the surrounding community (University Leaders for a Sustainable Future).

The movement to integrate sustainable practices is being adopted by both private and public sector organizations. Colleges and universities are beginning to recognize that as they prepare most of the professionals who develop, manage and teach in society's public, private and non-governmental institutions, they are uniquely positioned to influence the direction we choose to take as a society, and that they have a fundamental responsibility to teach and model sustainability.

The idea of sustainability in higher education is promoted by national membership-based organizations including the afore-mentioned ULSF and the Association for the Advancement of Sustainability in Higher Education (AASHE, Lexington, KY). The stated mission of the ULSF is to make sustainability "a major focus of teaching, research, operations and outreach at colleges and universities worldwide", and the mission of AASHE is to "promote sustainability in *all* sectors of higher education - from governance and operations to curriculum and outreach - through education, communication, research and professional development."

Sustainability practices are also being addressed at the federal level. On September 25, 2007, Congressman Earl Blumenauer (D-OR) and Congressman Vernon Ehlers (R-MI) introduced the Higher Education Sustainability Act of 2007, H.R. 3637, which would authorize a $50 million competitive grant program to universities and institutions of higher education to develop, implement and evaluate sustainability curricula, practices, and academic programs. The legislation (an amendment to Title VII of the Higher Education Act) encourages partnerships with non-profits, business alliances, and associations for developing best practices, engaging students in real-world experiences, and ensuring that sustainability programs remain current. The legislation would also establish a national Higher Education Summit on Sustainability to highlight programs and practices of national distinction and identify partnership opportunities for the US Government.

The integration of sustainable practices fits well with Missouri State University's Public Affairs Mission, which encompasses public education and modeling of environmental issues. While the basic idea of sustainability may seem relatively straightforward and simple, implementation of this concept encompasses a broad range of issues, including energy use, "green" buildings, storm water management, landscape restoration, "green" purchasing, and waste reduction and recycling, just to list a few. It also has critical implications for such broader issues as global climate change, deforestation, biodiversity loss, and global hunger. The purpose of this report is to provide some ideas and recommendations for Missouri State University to move toward becoming a community leader in promoting and implementing sustainable practices.

## III. SUBCOMMITTEE STRUCTURE/MEMBERS/CHARGE

The Sustainability Subcommittee was formed on July 18, 2007, as a subcommittee to Missouri State University's Environmental Management Policy Panel (EMPP). The subcommittee was charged by Ken McClure, Associate Vice President of Administrative Services, to "address the topic of 'sustainability' and how Missouri State University can most appropriately, effectively, and efficiently be a strong leader and participant." Specifically, the subcommittee was asked to determine a recommended initial focus for sustainability at Missouri State University, and develop a general set of goals for that focus, with the initial phase of the subcommittee's work to be completed by the November 2007 meeting of the EMPP.

Initial members of the Sustainability Subcommittee consisted of:

Mr. David Vaughan, Director of Environmental Management, Chair
Mr. Bob Eckels, Director of Facilities Management
Mr. Andrew Garton, Student
Mr. Jeffrey Brown, Student
Dr. Tamera Jahnke, Dean, College of Natural and Applied Sciences
Dr. Inno Onwueme, Associate Dean, College of Natural and Applied Sciences

Mrs. Teresa Steele, Executive Assistant to the Associate Vice President for Administrative Services, provided staff support to the subcommittee.

Additional members invited to be a part of this subcommittee after the initial organizational meeting included:

Ms. Kelly Barnts, Staff Senate
Dr. Charles Rovey, Faculty Senate
Ms. Lindsey Berger, Students for a Sustainable Future

The subcommittee's initial meeting was held on Thursday, August 2, 2007. Subsequent meetings were held on August 30, September 27, and October 30, 2007.

# IV. SUSTAINABILITY AT MSU BENCHMARK INSTITUTIONS

The Missouri State University Long-Range Plan (Imagining and Making Missouri's Future webpage) identifies 11 benchmark institutions that the University uses to compare performance measures. A brief survey of sustainability activity at some of these institutions reveals a very high level of commitment to the practice and promotion of sustainability at the institutional level. In all cases, institutional structures, programs or activities are complemented by a whole series of student-driven volunteer initiatives which depend on the institutional structure for coherence. Examples of institutional commitment to sustainability at the Missouri State University benchmark universities are as follows:

- Ball State University has offices, officials, websites and programs that deal specifically with sustainability and how to foster it in the university community. In addition, Ball State University has a university-wide sustainability statement and many community programs that promote sustainability (Ball State University Sustainability webpage).
- Grand Valley State University has offices, programs and initiatives that are specifically dedicated to sustainability (Grand Valley State University Sustainability webpage).
- The University of Montana has similar programs, and has signed the Talloires Declaration on sustainability (Greening UM webpage).
- Illinois State University had a university environmental task force in 2001 that recommended, among other things, the signing of the Talloires Declaration (to date, ISU has not signed the Declaration), the establishment of a campus sustainability website, the performance of regular environmental audits and the awarding of a prize for environmental sustainability on campus (Illinois State University Green Team webpage).
- James Madison University has a Center for Energy and Environmental Sustainability in addition to other activities in support of sustainability (Center for Energy and Environmental Sustainability webpage).
- The University of North Carolina- Charlotte sponsors the Keep Charlotte Green partnership of on- and off-campus stakeholders to promote sustainability, has a multi-page website, operates electric vehicles on campus, students recently approved a referendum to seek a fee increase for 'green' projects, Office of Waste Reduction and Recycling, publish a Sustainability Newsletter (UNCC Keep Charlotte Green website).
- The University of Texas- Arlington has a university-wide President's Sustainability Committee that monitors and promotes sustainability on campus (UTA Sustainability webpage).
- The University of Northern Iowa has a Recycling and Reuse Technology Transfer Center that promotes recycling and other sustainability initiatives (UNI Sustainability webpage). They have also formed an Energy Conservation Committee charged with identifying and recommending strategies to enhance environmental awareness and energy conservation efforts on campus (UNI Energy Awareness website).
- Towson University has a whole set of "Go Green" programs which serve as the platform for university-wide sustainability activities (Towson "Go Green" webpage).

Five of these institutions (Ball State, Grand Valley, University of Montana, James Madison, and Towson University) have signed the American College & University Presidents Climate Commitment (ACUPCC).

It is clear from the survey that a majority of our chosen benchmark institutions are exhibiting a real commitment to environmental sustainability, and that Missouri State University can benefit from the ideas generated and lessons learned by these institutions to accelerate the implementation of proven sustainability practices. Copies of website information for some of these universities are attached in Appendix A.

Closer to home, Drury University in Springfield has appointed a Sustainability Coordinator at the university, has signed the ACUPCC, and recently devoted an entire convocation series to the theme of sustainability.

# V. CURRENT SUSTAINABILITY PRACTICES AT MISSOURI STATE

**Energy conservation**

In the last decade, the University has taken several major steps in an ongoing energy conservation initiative. These steps include (but are not limited to) replacement of old light fixtures with more efficient newer generation fixtures, installing automated systems in numerous buildings to allow temperature setbacks while unoccupied, placing motion sensor controls on building lighting, replacing 16 old, inefficient chiller units with five highly efficient chiller units, and the installation of a chilled water loop across campus. These combined actions are calculated to result in roughly $2M in annual energy savings as compared to the previous operating systems. Prior to these actions Missouri State was Springfield City Utilities' largest consumer of natural gas; since completion the University has dropped to the fifth largest position.

**Recycling**

Material recycling - Recycling programs for selected waste products are currently in place, although these programs are somewhat fragmented, being operated autonomously through Facilities Management (Custodial), Environmental Management, the Print Shop, and Residence Life and Services departments. Materials currently being recycled include office/mixed paper, cardboard, aluminum cans, plastic bottles, electronic waste (e-waste), metal, toner cartridges, fluorescent bulbs, batteries, smoke detectors, silver from photographic processing, and tires. A telephone directory recycling event is also held annually. All yard wastes are composted by the Grounds Department and reused on the University grounds.

A Solid Waste Audit was completed at Missouri State University by Waste Reduction Strategies in 2005. The audit reviewed solid waste generation and handling practices at the University, and provided some basic recommendations on reducing the volume of waste generated on campus. These recommendations included:

- Completion of a longer term review of dumpster use to better match the frequency of pickup to need, as the audit showed that nearly half of campus dumpsters were emptied before they were half full, and a significant majority were emptied prior to reaching the optimum fill level of 80%,
- Expansion of the cardboard recycling program to include on-site baling and subsequent selling of the baled cardboard, and
- Implementation of a program to promote increased recycling on campus, including a signage campaign spearheaded by marketing students or other student groups.

Chemical Exchange Program – Environmental Management maintains a chemical exchange program by collecting and storing chemicals determined to be surplus by the original purchaser and making them available to other departments at no cost.

In addition, office paper purchased by the University contains 30% recycled fiber content.

**Purchasing Practices**
While there is currently no specific campus-wide policy, several departments have implemented purchasing strategies to minimize chemical inventories and to replace traditionally used products with more environmentally friendly products.

**Curricular and Co-Curricular Aspects of Sustainability at the University**
Numerous courses and academic programs exist at Missouri State University that have a bearing on sustainability. A partial list of such courses and programs is attached (Appendix B). Most of these are courses/programs whose themes are overtly related to sustainability or the environment.

Co-curricular activity in the area of sustainability has spawned several student groups and initiatives to promote sustainability on campus. Most of these groups and initiatives have centered around recycling practices. Some of the student organizations with commitment to promoting sustainability include the Sierra Club, 2020 Vision, and the Students for a Sustainable Future.

**Alternative Transportation**
The university has a shuttle service to connect the main campus with off-campus buildings and locations to minimize the number of cars driven and subsequent need for additional parking, and has established specific bike paths and racks across campus to facilitate and promote bicycle usage.

The University has four electric vehicles used on campus (Receiving and Maintenance Depts.) and is preparing to acquire an additional electric vehicle.

**Other Related Developments in Support of Sustainability:**

- The University's Public Affairs theme for the 2008/2009 year will be "Sustainability", culminating in the Public Affairs Conference on the theme in the spring of 2009.
- Missouri State University faculty and units are collaborating with other community groups to plan for the Ozarks New Energy Conference (ONE Conference) slated for February 2008.
- Sustainability was the theme of President Nietzel's radio phone-in program on Friday, October 19, 2007.
- Three student organizations (Students for a Sustainable Future, the Sierra Club, and 2020 Vision), all involved in sustainability issues, have recently banded together to form the "Campus Coalition for our Environment" in order to undertake joint initiatives. Recent and upcoming events include the "Eco-Palooza" concert and sustainability fair on November 6, 2007 and "Focus the Nation" on January 31, 2008.

# VI. RECOMMENDATIONS – MAKING "SUSTAINABILITY" SUSTAINABLE

The Committee recommends that Missouri State University should:

1. **Adopt a University Sustainability Statement:** The following is a proposed Sustainability Statement for adoption by the University. This statement would serve to provide guiding principles and a policy framework for our approach to environmental sustainability, and to inform the campus and external communities of Missouri State University's commitment to environmental sustainability.

   *Missouri State University is committed to environmental sustainability and stewardship. By working to create a cleaner environment through community service efforts, the application of earth-friendly technology and practices, research projects, and responsible development planning, we will strive to work for a better tomorrow. Through education and community outreach, we will provide students with the knowledge and skills to be environmentally responsible citizens and consider the global ramifications of their actions and the actions of others around them. To that end, Missouri State University is committed to continuous improvement in:*

   - ***Incorporation of environmentally responsible concerns*** *in University decision making.*
   - ***Demonstration of institutional practices that promote sustainability,*** *including energy savings measures, increasing the use of renewable resources, and decreasing production of waste materials.*
   - ***Providing educational programs and encouraging environmental inquiry*** *for students and the community concerning positive environmental practices.*
   - ***Establishment of sustainability indicators*** *to enable monitoring, reporting and improvement measures.*
   - ***Enhancing the health of campus ecosystems*** *and increasing the diversity of native species whenever possible.*
   - ***Promotion of health, productivity and safety practices*** *on campus through education, maintenance and design of campus buildings.*

   *Our decisions and actions will be guided by the University's Public Affairs Mission, will be reflective of the University's resources, and informed by the University's Strategic Plan. As a learning institution, we recognize that planning for sustainability will be an evolving and iterative practice.*

   The subcommittee does not intend that this be a statement that is dictated to the campus, but that it would be supported and embraced by the campus community. To that effect, the subcommittee recommends that an open forum be held to allow feedback and input by campus stakeholders such as the Student Government Association, Staff/Faculty Senate, Administrative Council, and others. This should be easily completed by the May 2008 Board of Governor's meeting.

2. **Create a Recycling/Sustainability Coordinator position** whose responsibility will be the coordination and promotion of effective sustainability efforts on campus, to highlight Missouri State University as a community leader in environmental sustainability. Basic duties would include energizing and coordinating the currently fragmented campus recycling efforts, promotion of sustainability knowledge and consciousness on campus, liaising with faculty to encourage curricular and co-curricular infusion of sustainability, etc. Duties of this position would also include practicality determination and potential implementation of the recommendations of the 2005 Solid Waste Audit. The Coordinator position would serve to harness and focus student enthusiasm and energy towards sustainability.

   Funding for this position may not be readily available within the University administrative budget, and additional sources may need to be considered. One option that may be explored is the utilization of an existing position to perform this function. Strategies utilized by our benchmark (as well as other) institutions may provide some insight into alternate funding options.

3. **Continue to support the current energy management and conservation initiative.** Missouri State University is a major user of energy. Most energy is obtained from the combustion of fossil fuels, which directly affects air quality and indirectly affects the sites from which the fuels are extracted. Furthermore, energy is a significant cost item in the University budget, amounting to about $6 million in expenditures each year. Because energy use is a major budget item, efficiency improvements can not only reduce the University's environmental impact, but can provide significant cost savings as well. Missouri State University's Director of Facilities Management is fully aware of both the environmental and the economic implications of an effective energy management and conservation program and has already initiated some important steps toward developing such a program. We recommend that the University administration support continued efficiency improvements.

4. **Increase Communication Efforts - Develop a Sustainability Website**
   One hurdle associated with encouraging sustainable practices is a lack of knowledge on the part of the general public. Advancements in green technology and practices, increases in the types of materials that can be recycled, and opportunities for communities and individuals to help the environment aren't always clearly understood and may not even be common knowledge. It is also important for students and the surrounding community to understand what Missouri State University is doing to promote environmental sustainability.

   As a first step in increasing awareness, a dedicated 'Sustainability' webpage on the University website can provide an excellent opportunity to provide information to the campus and surrounding community, such as recycling programs and locations, information on energy conservation, and opportunities for 'green' alternatives to traditional products. Through this medium, we as a University can help the community become better environmental stewards.

   The website can also serve to display the University's dedication to sustainability practices by showcasing our efforts to become more environmentally friendly, provide information on current and future sustainability programs, and listing ways that others may help or even copy

programs we have in place. Such displays will show Missouri State University in a positive light and may not only encourage some prospective students to choose our University, but may also encourage other universities or public entities and companies to contact us with new program ideas or assistance.

5. **Make a public commitment to environmental sustainability.**

   A number of higher education institutions have recently adopted the American College & University Presidents Climate Commitment (ACUPCC) as a way to show their commitment to the reduction of their greenhouse gas emissions in particular, and sustainability in general. Springfield's Drury University is one of the signatories to this document. At least five of Missouri State University's eleven benchmark institutions have already signed the ACUPCC. Student organizations at Missouri State University, including the Sierra Club, Students for a Sustainable Future, and 2020 Vision, have put forth an initiative encouraging Missouri State University to become a signatory to the ACUPCC.

   By signing the ACUPCC, an institution commits to develop plans and take actions that will result in measurable reductions in energy use and greenhouse gas emissions within a specified time period, and to publicly report these plans and progress made. The goal of the Commitment is to achieve "climate neutrality" as soon as possible, accounting for all greenhouse gas emissions including those from electricity, heating, commuting, and air travel. A copy of the Commitment document, including the list of specific commitments associated with it, is included in Appendix C (The Commitment, 2007).

   While over 400 institutions across the country have signed the ACUPCC to date, there are many universities that, while having made public commitments to environmental sustainability, are not actively planning to become signatories. Yale University, which is seen as a leader in environmental sustainability, is one of those institutions that are not planning to sign the ACUPCC (Inside Higher Education News: Signing (or Not) a Green Pledge, 2007).

   A preferred alternative to a generalized national commitment would perhaps be for the University to commit to working with the *Partnership for Sustainability*, an organization representing local and regional stakeholders, to develop goals and plans toward a sustainable community. The *Partnership for Sustainability* is made up of governmental (City of Springfield, Greene County), educational institution (Drury, Springfield Public Schools, Ozarks Technical Community College), health system (St. Johns, Cox Health), and business representatives, with a mission to facilitate the achievement of "excellence in sustainability" for Springfield and the surrounding region. This approach would allow the University to publicly participate in and provide leadership for the establishment of a local sustainability culture, and it embodies the commonly quoted 'think globally, act locally' philosophy that encourages local action to implement environmental sustainability on a global scale.

6. **Promote the infusion of Sustainability principles** into appropriate areas of the curriculum while encouraging and coordinating co-curricular activity in the area of Sustainability. Policy and information support for faculty will be needed for this to occur.

The Sustainability Subcommittee believes that these six recommendations, implemented individually or collectively, will be important initial steps toward sensitizing faculty, staff, and students to the issue of environmental sustainability and to encouraging a lifelong commitment to this important issue. These basic initiatives are in line with actions taken by many of our benchmark institutions, and will provide the framework from which to move Missouri State University toward becoming a fully sustainable campus.

# VII. REFERENCES / BIBLIOGRAPHY

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# Appendix A

# Selected Sustainability Website Information From MSU Benchmark Institutions

# Sustainability Website Information from MSU Benchmark Institutions

Ball State University

http://www.bsu.edu/ceres/sustainability/

Grand Valley State University

http://www.gvsu.edu/sustainability/

James Madison University

http://www.cisat.jmu.edu/cees/

University of Montana – Missoula

http://www.umt.edu/greeningum/

University of North Carolina – Charlotte

http://facilities.uncc.edu/49ergreen/default.htm

University of Northern Iowa

http://www.vpaf.uni.edu/energy/

# Appendix B

# Sustainability Courses and Programs at MSU

## Sustainability Courses and Programs at MSU

Courses and programs offered at MSU which relate to Sustainability include an Environmental Sciences and Policy Minor program, as well as research projects conducted through the College of Natural and Applied Sciences, including the Ozarks Environmental and Water Resources Institute.

The course listing for the Environmental Sciences and Policy Minor includes:

**Natural Science Component**:

**1. CHEMISTRY 225 PRINCIPLES OF ENVIRONMENTAL CHEMISTRY** An introduction to chemical processes occurring in the atmosphere, natural waters and soil. Sources of pollution, effects and remediation strategies are emphasized.

**2. CHEMISTRY 425 ENVIRONMENTAL CHEMISTRY** Chemistry of pollution, including sources, effects, detection and abatement of pollutants in air, water and soil.

**3. GEOGRAPHY 351 CONSERVATION OF NATURAL RESOURCES** Conservation issues and problems that occur in response to human use of the natural environment

**4. BIOLOGY 369 GENERAL ECOLOGY** Introduction to basic principles of ecology, emphasizing the relationship of organisms to their environment and each other.

**5. GEOLOGY 171 ENVIRONMENTAL GEOLOGY** Exploration of geological hazards, such as volcanoes, earthquakes, flooding, and related environmental health problems; and the consequences of human dependence on mineral and energy resources.

**6. GEOGRAPHY 108 ECOLOGY & SOCIETY** Study of populations and discussion of social and political repercussions of population pressures, environmental degradation and environmental problems in a multi-disciplinary context.

**Environmental Policy Component**:

**1. RIL 537 ENVIRONMENTAL REGULATION** Examination of legal standards for air and water quality; labeling, storage and disposal of toxic substances; land use, toxic torts, endangered species and implications of business decisions on the environment.

**2. ECONOMICS 540 ECONOMICS OF THE ENVIRONMENT (**Assessment of environmental problems and alternative solutions from the viewpoint of economic costs.

**3. PHILOSOPHY 302 ENVIRONMENTAL ETHICS** Inquiry into the value of nature and the ethical responsibilities of human beings for the natural environment.

**4. POLITICAL SCIENCE 555 PUBLIC POLICY FOR A GLOBAL ENVIRONMENT** Consideration of critical environmental problems on the public agenda and exploration of ways in which the U.S. government and the international community try to resolve these issues.

# Appendix C

# American College & University Presidents Climate Commitment

## American College & University Presidents Climate Commitment

We, the undersigned presidents and chancellors of colleges and universities, are deeply concerned about the unprecedented scale and speed of global warming and its potential for large-scale, adverse health, social, economic and ecological effects. We recognize the scientific consensus that global warming is real and is largely being caused by humans. We further recognize the need to reduce the global emission of greenhouse gases by 80% by mid-century at the latest, in order to avert the worst impacts of global warming and to reestablish the more stable climatic conditions that have made human progress over the last 10,000 years possible.

While we understand that there might be short-term challenges associated with this effort, we believe that there will be great short-, medium-, and long-term economic, health, social and environmental benefits, including achieving energy independence for the U.S. as quickly as possible.

We believe colleges and universities must exercise leadership in their communities and throughout society by modeling ways to minimize global warming emissions, and by providing the knowledge and the educated graduates to achieve climate neutrality. Campuses that address the climate challenge by reducing global warming emissions and by integrating sustainability into their curriculum will better serve their students and meet their social mandate to help create a thriving, ethical and civil society. These colleges and universities will be providing students with the knowledge and skills needed to address the critical, systemic challenges faced by the world in this new century and enable them to benefit from the economic opportunities that will arise as a result of solutions they develop.

We further believe that colleges and universities that exert leadership in addressing climate change will stabilize and reduce their long-term energy costs, attract excellent students and faculty, attract new sources of funding, and increase the support of alumni and local communities.

**Accordingly, we commit our institutions to taking the following steps in pursuit of climate neutrality:**

1. Initiate the development of a comprehensive plan to achieve climate neutrality as soon as possible.
    a. Within two months of signing this document, create institutional structures to guide the development and implementation of the plan.
    b. Within one year of signing this document, complete a comprehensive inventory of all greenhouse gas emissions (including emissions from electricity, heating, commuting, and air travel) and update the inventory every other year thereafter.
    c. Within two years of signing this document, develop an institutional action plan for becoming climate neutral, which will include:
        i. A target date for achieving climate neutrality as soon as possible.
        ii. Interim targets for goals and actions that will lead to climate neutrality.
        iii. Actions to make climate neutrality and sustainability a part of the curriculum and other educational experience for all students.
        iv. Actions to expand research or other efforts necessary to achieve climate neutrality.
        v. Mechanisms for tracking progress on goals and actions.
2. Initiate two or more of the following tangible actions to reduce greenhouse gases while the morecomprehensive plan is being developed.
    a. Establish a policy that all new campus construction will be built to at least the U.S. Green Building Council's LEED Silver standard or equivalent.

   b. Adopt an energy-efficient appliance purchasing policy requiring purchase of ENERGY STAR certified products in all areas for which such ratings exist.
   c. Establish a policy of offsetting all greenhouse gas emissions generated by air travel paid for by our institution.
   d. Encourage use of and provide access to public transportation for all faculty, staff, students and visitors at our institution.
   e. Within one year of signing this document, begin purchasing or producing at least 15% of our institution's electricity consumption from renewable sources.
   f. Establish a policy or a committee that supports climate and sustainability shareholder proposals at companies where our institution's endowment is invested.
   g. Participate in the Waste Minimization component of the national RecycleMania competition, and adopt 3 or more associated measures to reduce waste.
3. Make the action plan, inventory, and periodic progress reports publicly available by providing them to the Association for the Advancement of Sustainability in Higher Education (AASHE) for posting and dissemination.

In recognition of the need to build support for this effort among college and university administrations across America, we will encourage other presidents to join this effort and become signatories to this commitment.

Signed,

_____
President/ Chancellor Signature

_____
President/ Chancellor Name

_____
College or University

_____
Date

Please send the signed commitment document to:
Mary Reilly
Second Nature
18 Tremont St., Suite 1120
Boston, MA 02108
or fax to: 320-451-1612
or scan & email to: mreilly@secondnature.org