

## **MIAMI UNIVERSITY SUSTAINABILITY COMMITMENTS AND GOALS**

Miami University is firmly committed to an ambitious path leading to environmental sustainability. By embracing the goals outlined in this document, we will create a culture in which responsible and sensible decisions will consistently contribute to a higher quality environment, reduce our carbon footprint, and lessen our dependence on carbon-based energy supplies. We will act with awareness, intention, and commitment. Moving towards sustainability will require continuous, innovative thinking in a world of changing possibilities and challenges. Given the significant budget constraints facing higher education, we must make economically prudent decisions that anticipate and take into account long-term costs so we can maximize the impact of our decisions.

We recognize that to be successful, we must engage the campus as widely as possible, from our choices around energy use to the opportunities in our curriculum, from the maintenance of our landscapes to the choices we make in travel. We have set out ambitious, achievable goals across the campus that will focus our thinking and inspire our actions. The goals outlined in this document provide a critical starting point. They will evolve with the changing world of possibilities, reflecting and deepening our commitment to an environmentally sustainable future.

### **Towards a Reduced Carbon and Cleaner Energy Future**

#### *Miami Commitment:*

*Campuses that emit significantly less carbon in pursuit of carbon neutrality, through energy management, efficiency, awareness, and investments in renewable sources*

#### *Goals and Strategies*

We at Miami recognize the seriousness of the global climate crisis, and our responsibility to show leadership. Miami is working hard to comply with Ohio House Bill 251's goal of 20% reduction in energy consumption by 2014 based on 2004 baseline data. But we believe our obligation should not merely be limited to a reduction in energy consumption. We will therefore seek to also reduce our overall greenhouse gas emissions at least 20% by 2020 over 2008 baseline data. We will develop and adopt a detailed Carbon Action Plan for achieving this overall target, as well as a 20% reduction in CO<sub>2</sub> emissions per gross square foot, in collaboration with units across the university, identifying longer-term targets for even greater reductions where financially feasible. We will integrate the goals and strategies of this plan throughout our decision-making and track implementation and emissions trends on an annual basis.

We must begin with greater conservation of energy resources. Our Physical Facilities Department is responsible for building automation enhancements and energy efficient projects, and has made many improvements in the past year. But to make energy efficiency a more central part of Miami's operations and planning, we have developed and will formally adopt a Sustainability Energy Mandate. We will develop a set of guidelines to assist project planners when making decisions that affect campus energy infrastructure, pursuing efficiencies and renewable sources whenever feasible in the context of long-term

energy forecasts, supply contracts, fuel flexibility, changing regulatory contexts, financial incentives, campus expansion plans, and technical capacity. As individuals we must continually explore energy reduction strategies in our work places and ways to travel more efficiently. Efficiency and carbon emissions must become important factors in our individual and collective decisions.

We will produce or purchase at least 17% of our electrical power from renewable sources by 2020, helping reduce Miami's overall carbon footprint by 12% in that same time period. While our ability as an institution to meet these goals is limited by our reliance on outside utilities for electricity, investor-owned utilities are required by Ohio Senate Bill 221 (Renewable Portfolio Standards) to generate 25% of their power with renewable sources by 2025. Through such purchases and on-campus power generation we will significantly shift our electrical usage to renewable sources over the next decade.

Miami University has more control over how it heats the Oxford campus. While the coal fired steam plant is highly efficient, it has a large carbon footprint. We will therefore begin immediately to seek to reduce our consumption of coal, and we will fully displace coal as an on-campus energy source by 2025, through a phased plan that evaluates and invests in cost-effective and more environmentally sustainable energy alternatives, which could include ground source heat pumps, natural gas, biomass, and other proven technologies or renewable energy sources. We will identify some combination of such technologies and others changes to meet our goal of reducing carbon emissions per gross square foot 20% by the year 2020 and 50% by 2030.

## **Engaging Sustainability in the Classroom**

### *Miami Commitment:*

*A curriculum that engages students and every faculty member in sustainability issues reaching across all disciplines*

### *Goals and Strategies*

By enhancing the programmatic options within the curriculum we may engage students in the timely and integrative challenge of environmental sustainability. We will start by expanding opportunities for students to complement their primary major with a co-major focused on different aspects of environmental sustainability: environmental science, sustainability, and energy. We have recently approved a new Sustainability Co-Major that is not only inter-disciplinary, but spans across the College of Arts and Science, Fine Arts, and the Farmer School of Business. At the same time, a proposal is underway in the School of Engineering and Applied Science to create a new and inter-disciplinary co-major on Energy.

We will propose curricular changes that encourage students to take one of Miami's many courses that engage environmental sustainability issues. Collaborative discussions are already underway with the Office of Liberal Education.

Ultimately, Miami must raise the profile of its already strong environmental courses and programs at the graduate and undergraduate levels, and become internationally recognized as leader in educating future generations about sustainability. A newly revised Institute for the Environment and Sustainability will bring together graduate and undergraduate programs, research and outreach activities, taking the lead in exploring new opportunities for the entire university community to collaboratively engage in a key challenge of our time.

## **A Campus Culture of Sustainability**

### *Miami Commitment*

*A culture in which the entire community shares and coordinates in sustainability-related challenges, opportunities, efforts, and accomplishments*

### *Goals and Strategies*

Individual members of the Miami family should be motivated and rewarded for building sustainability behaviors into their everyday actions. The power of an individual action may seem small, but multiplied by thousands it has enormous significance for the university community. The whole of our sustainability actions should be greater than the sum of its parts, and recognize Miami's place in the wider community.

Effective communication between students, faculty, staff, and administration is central to this challenge. Miami needs an ongoing, long-term and consistent strategy for communicating the importance of sustainability: from the prospective student through to the veteran staffer. We have appointed a Sustainability Coordinator to cultivate relationships across campus, and a Sustainability Committee to avoid duplication of efforts and magnify collaborative opportunities. But we must measure our success by completion of specific campus initiatives that develop and reinforce a culture of sustainability.

Below are just some initiatives for building a culture of sustainability at Miami. We will make sustainability a part of the orientation process for new students, faculty, and staff, from the campus tour onwards. We will maintain and expand our new sustainability web site to be a central place for highlighting issues, opportunities, stories, and people. We will better inform campus users – particularly building users -- of relative costs and impacts of everyday practices, continuously track trends, and recognize improvements. We must avoid practices that discourage more sustainable behaviors: Recycling should never be less convenient than throwing trash away and walking/biking should be as safe and convenient as driving short distances. Building a culture of sustainability will require visible actions and participation from the entire campus community. We will promote sustainability events so members of the Miami community can learn about the diverse sustainability activities on campus and how they can get involved.

## **A Sustainable Campus Landscape**

### *Miami Commitment:*

*Planning and growth that emphasize sustainability in our built and natural environments*

### *Goals and Strategies*

The various master plans that guide future development at Miami must incorporate sustainability goals and issues in a coordinated manner. We will charge staff and relevant committees to incorporate sustainability as they update existing master planning documents. We will contribute planning expertise to the development of a Climate Action Master Plan to guide long-term energy reduction targets and possible changes to energy production and distribution systems.

We will ensure that Miami University's new and existing buildings are built and renovated to be as environmentally responsible as is financially achievable within average industry-wide cost parameters for high-performance sustainable buildings. We will set a goal of constructing all new buildings and major renovations to achieve a minimum LEED Silver certification. Beyond this goal, our buildings will be innovative in balancing our traditional architectural values and the highest standards of efficiency and environmental quality.

We will seek a landscape on all of Miami's campuses that maintains our aesthetic values while maximizing native landscaping, reducing our carbon footprint, promoting ecological diversity, reducing runoff and promoting aquifer recharge, and supporting opportunities for outdoor learning. Native and low-maintenance landscaping can promote cost-savings and ecological diversity, so we will make it a specific element in our campus Landscape Master Plan.

## **More Efficient and Sustainable Campus Practices**

### *Miami Commitment:*

*Miami must reinforce its mission through responsible purchasing, operations, and waste reduction strategies*

### *Goals and Strategies*

To reduce the environmental impact of our procurement, our Purchasing Department will promote green purchasing by making information about sustainability a standard feature in our e-procurement system, on-line catalogs, and other information shared with departments. Factors that determine whether a product is environmentally preferable will include: use of recycled or recyclable materials, minimal packaging, environmental and financial costs over the product's life, toxicity of materials or application, ability to reduce energy or water consumption, durability and product life, maintenance needs, and environmental impact of product disposal. We will annually evaluate our progress in green purchasing and set new targets each year. Housing, Dining, Business and Recreation Services will seek to procure food locally whenever financially and practically feasible.

Office equipment and appliances we purchase will be Energy Star rated, whenever available.

A key part of sustainability is using and operating our campus buildings more efficiently. We will promote awareness and conservation by encouraging people to close fume hood sashes and educate building users about utility use through the building points of contact program. We will continue optimizing the scheduling of evening and weekend activities in most energy-efficient buildings to reduce university energy costs.

To reduce the amount of waste we send to the landfill, we must reenergize and expand the Miami recycling program to divert the majority Miami's waste from the landfill by 2017. To meet this goal, we will also plan and begin phased implementation of a bio-waste recycling or composting program for food, yard waste, grey water, and horse manure no later than December 2013. We will establish a university-wide E-waste program by May 2012. We will develop a strategy to achieve 2005 water consumption levels by December 2015.

### **A Sustainable Transportation Network**

#### *Miami Commitment:*

*A transportation system that prioritizes walking, biking, and public transport for on-campus and short-distance travel, and offers commuters viable alternatives to driving alone*

#### *Goals and Strategies*

We will ensure that campus planning takes a fully holistic approach to circulation within and between Miami's campuses, using urban design, parking policies, and incentives to make alternative modes the preferable choice for short distance travel. We will develop a circulation master plan that integrates and emphasizes walking, biking, bus transportation, and vehicular travel. As part of this plan we will collaborate with the City of Oxford to plan and begin phased implementation of a bike lane network and conveniently-located bicycle storage by 2012, a process that is already underway. We will integrate campus circulation and hardscape planning to ensure that all modes of transportation are accommodated in University planning. Through these and other measures we will increase the mode share for walking, bicycling, and transit, helping significantly reduce vehicular use for short distance commutes.

Our parking policies must be designed to encourage sustainable transportation behaviors. By 2012 we will review and revise parking policies for a greater focus on transportation demand management, ensuring that permitting and pricing policies manage existing parking supplies more efficiently and cost-effectively, and discourage unnecessary vehicular travel (particularly on the central campus). We will pursue more options for students to arrive in campus without their cars. We will begin in 2012 by giving preferential parking and reduced permit costs for car-pools, park-and-ride commuters, and low-emissions vehicles. We will double carpooling by 2020.

More efficient and expanded transit service is an essential part of transportation on and between Miami campuses, and throughout our local communities. We will offer to local jurisdictions to integrate Miami Metro service into a fully public, regional transportation system. Through enhanced service and strengthened parking policies we will expand

ridership to and from the Oxford campus significantly by 2015. In the interim, we will make a more efficient bus fleet a priority of contract negotiations with our transit providers. As part of wider cost-savings strategies, Miami University will assess the size and efficiency of our fleet of vehicles, reducing unnecessary vehicles and adopting fuel efficiency standards for new purchases. Through the above measures we will seek to reduce our transportation-related carbon footprint 20-30% by 2020.

## **Responsible Investments and Endowments**

### *Miami Commitment:*

*An institution whose financial transparency and investing reflect the highest aspirations of our mission as a public university*

### *Goals and Strategies*

Because sustainability comes not only through what we do, but how we invest our money, Miami University and the Miami University Foundation will work to bring more transparency and social responsibility to investment decisions. We will promote endowment transparency by making a list of external managers, mutual funds, and equity holdings available online to all members of the university community by 2012. Additional information about endowment holdings is available to trustees, senior administrators, and select members of the university community. A list of endowment holdings and proxy voting records will be available upon request.

Next we will provide our investment managers with broad guidance to ensure that investment and proxy voting decisions reflect our values as a public institution of higher learning, working with the committees that guide University investment strategies and practices to be more socially responsible in these investment practices while not negatively impacting the performance of these investments and the fiduciary responsibility to the donors who made these investments possible.