Sustainability Plan
Part I: Strategy and Goals

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Sustainability Facilities Committee

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Introduction

1.1 Purpose and Overview

The Oregon State University (OSU) Sustainable Facilities Committee (SFC) was established in November, 2004 by the OSU Facilities Services Department to develop guiding principles, policies and procedures that move campus infrastructure and operations toward sustainability. Additionally, the group serves as a discussion forum for the various operations groups on the OSU Corvallis campus.

The SFC's primary initial duty is collaboratively creating this strategic and goal setting segment of this two part plan. The second part, comprised of more detailed implementation and guidance documents, will be developed following adoption of this strategic Part I.

The SFC will develop this plan in accordance with its vision to ultimately transform OSU into a sustainable institute of higher education. This includes becoming more environmentally responsible and economically stable as it strives to become one of America's top 10 land grant universities. At the heart of this movement is a transformation of OSU into an institution guided by sustainable practices.

The SFC will embrace the efforts of campus operations groups and proactively address specific barriers to achieving campus sustainability at OSU. These actions will serve the campus community as well as the people of Oregon by safeguarding quality of life, enhancing the natural environment, maximizing taxpayer investment and, ultimately, better preparing students for the social, environmental and economic challenges of the future.

2.2 Plan Framework and Compatibility

The Sustainable Facilities Committee is dedicated to recommending and fostering development consistent with the State of Oregon's sustainability initiatives, the Oregon University System Sustainability Plan, the OSU Strategic Plan, and the OSU Campus Master Plan. In accordance with these documents, the SFC will provide strategic direction in order to institutionalize and expand efforts in sustainability, giving particular attention to human health and safety protection, zero net environmental impact, and long term cost reduction. The SFC will make recommendations within the framework of this plan.

2.2.1 Statewide Sustainability Initiatives

Led by two executive orders from Oregon's two most recent Governors, the state government has embarked on multiple sustainability initiatives, many of which impact and involve higher education institutions and state agencies. Ten objectives have been identified to help guide decision making in state government and agencies.

Additionally, the executive orders require state agencies to designate sustainability coordinators and to develop sustainability plans. The Oregon University System plan, discussed below, provides general system-wide guidance and meets state reporting requirements. Information about these and other initiatives can be found on the Internet at www.sustainableoregon.net.

In November 2004, the Oregon Department of Administrative Services issued Sustainable Facilities Standards and Guidelines. These guidelines require all new construction and renovation of state buildings to meet US Green Building Council's LEED Silver equivalents.

2.2.2 Oregon University System Sustainability Plan

In response to Governor Kulongoski's 2000 Executive Order, the Oregon University System has created a sustainability plan for higher education in Oregon. The OUS Sustainability Plan provides guiding principles for sustainable development at Oregon's seven public universities. In particular, three areas of focus are:

- On-going reporting, as required by the state;
- Collaboration with the campuses in creating a more detailed version of the OUS plan; and
- A web presence to support the reporting and collaboration

While the Oregon University System Sustainability Plan meets state reporting needs, it does not currently contain specific binding requirements for individual universities. Oregon State University's SFC strategic document, and subsequent guidance documents and policies, will be in alignment with the OUS Plan, and will strive to exceed and anticipate future requirements from revisions to the OUS Plan.

2.2.3 Oregon State University Strategic Plan

The Oregon State University Strategic Plan recognizes that OSU has strengths in five multidisciplinary thematic areas. Those areas integrate the primary missions of teaching, research and outreach, and are essential to meeting the goal of becoming a top 10 land grant institution. Accordingly, while OSU will progress in many areas, it will focus academic resources and investments on five themes. The SFC has attempted to develop this plan in accordance with these five thematic areas:

1. Advancing the arts and sciences as the foundation for scientific discovery, social and cultural enhancement, and progress in the applied professions.
2. Understanding the origin, dynamics, and sustainability of the Earth and its resources.
3. Optimizing enterprise, innovation, and economic development.
4. Realizing fundamental contributions in the life sciences and optimizing the health and well-being of the public.
5. Managing natural resources that contribute to Oregon's quality of life, and growing and sustaining natural resources-based industries.

Although the OSU Strategic Plan does not directly address operational issues, there are clear advantages to linking these five thematic areas with excellence in operations. Advantages include increased, diverse student internship opportunities, research and technology testing and improved working and learning environments. Outside universities, few other organizations can boast such diversity, so many intellectual resources and such broad operational requirements. Furthermore, if campus operations do not mirror stated university values, the entire university looses credibility.

2.2.4 Campus Master Plan

The Campus Master Plan (CMP) recognizes the need for facilities and services to support the academic and research communities of OSU. Through the implementation of the CMP, the University will respond to the intellectual, economic, and technological advancement needs of the campus community while visually and physically reinforcing the campus organization and unity.

The CMP includes a series of polices that promote sustainability. For ease of reference, these policies are described below as they appear in the CMP:

Development, Operations, and Management *(CMP Chapter 2, page2-6)*

CMP Policy 2.5.4: Incorporate sustainability concepts in decision-making with regard to construction, operations, and maintenance.

2.8 Environmental Stewardship and Natural Features *(CMP Chapter 2, page 2-12)*

CMP Policy 2.8.5: Continue to support and expand whenever practicable reduction, reuse, and recycling programs on campus, including salvage of buildings due to be demolished.

CMP Policy 2.8.6: Encourage the use of sustainable materials and design principles that preserve natural resources and minimize negative impacts to the environment.

CMP Policy 2.8.10: Promote sustainability when setting policies and making administrative decisions.

CMP Policy 2.8.11: Seek and implement efficiencies in resource consumption. Consider incorporating energy conservation techniques, such as siting of buildings for energy savings, integration of natural lighting, installation of passive heating and ventilation systems, and other improvements that increase energy efficiency.

CMP Policy 2.8.15: OSU shall proactively and strategically incorporate sustainable design and techniques in its planning and construction projects.

2.3 SFC Sustainability Plan Guiding Principles

In developing its guiding principles the SFC reviewed The Natural Step framework. The Natural Step is a science-based approach to understanding and measuring sustainability and associated activities. If we are to meet its "System Conditions" we must:

1 Not extract substances from the earth's crust faster than they are deposited;
2 Not increase concentrations of synthetic and toxic substances produced by society;
3 Not over harvest or degrade nature by physical means and;
4 Ensure that human needs are met worldwide.

The Natural Step takes an "upstream approach" to sustainability and addresses problems at the source. According to the Natural Step, "the practice of sustainability is about creating new ways to live and prosper while ensuring an equitable, healthy future for all people and the planet." *http://www.naturalstep.org/learn/understand_sust.php*

For the purposes of this plan, the SFC defines sustainability as meeting our current needs in ways that ensures future generations can also meet theirs. Based on this definition, the SFC has developed the following guiding principles:

1. When developing local (i.e., campus or building) solutions to problems, understand the broader systems or subsystems (environmental, social and economic) of which they are a part. Look "upstream" to solve "downstream" problems, look for interconnection, and try to understand a solution's impact on the community at large.

2. Recommendations should promote long lasting, cost effective, and socially and environmentally responsible solutions. To be sustainable, solutions need to meet all four of the System Conditions, not just one.

3. Sustainability programs should foster awareness of and demonstrate the business case of sustainable practices on the planning, construction, maintenance and operation of university facilities.

4. Realize it is a journey and it takes time to become more sustainable.

5. Acknowledge accomplishments along the path toward sustainability, externally as well as internally, giving life to programs through publicly that celebrates accomplishments.

6. Recognize that solutions often come from the passion and creativity of our people.

2.4 SFC Strategic Goals

These goals are a first step towards transforming OSU's operations into an enterprise guided by sustainable practices. As noted earlier, the Natural Step has been adopted as a framework to guide goals and eventual objectives and actions. In general, these goals are relatively unchanging, long term and, serve as a platform for more detailed work in the future. Objectives, actions and timelines will be developed in response to goals and will be "living" implementation documents that will change from time to time. The creation of implementation documents should begin not long after the acceptance of the goals below.

GOAL 1: ATTAIN UNIVERSITY-WIDE ZERO NET ENVIRONMENTAL IMPACT
This means zero OSU-induced degradation of air, water and soil quality; toxic emissions from campus and; reliance upon non-renewable material and energy. (Natural Step System Conditions 1, 2, and 3)

Moving toward this most ambitious of our goals means mitigating *unavoidable* practices and phasing out environmentally damaging activities. In an ecological footprint model, OSU's acreage of forest, farm and urban land is large enough to provide the ecological services necessary to operate the campus. These services include provision of clean air, water and energy, and biodegradation and waste water filtration. Facilities and operations groups must make every effort to protect nature's ability to furnish these natural services; they are irreplaceable and provided free of charge.

Steps to reduce solid waste and improve energy efficiency might be easy first moves toward reducing OSU's ecological footprint. Additionally, protecting wetland, riparian and other service-rich areas is an investment in securing future natural services, and benefits the entire community. Eventually reducing landfill-bound waste to zero can start with selection of materials that can continuously be recycled, composted, or reused, rather than downcycled and ultimately landfilled.

GOAL 2: ENHANCE HUMAN WELL-BEING

This means that employees, students and visitors can access comfortable healthy and productive workplaces, learning and meeting space. (Natural Step System Condition 4)

Human resources are the university's single largest financial expense, but they are also the single best asset. Ensuring employees, students and visitors are in a healthy and comfortable environment benefits not only the university, but also strengthens the community and local economy. Stability and sick day reduction are a few of the many benefits reaped by well being enhancement.

Monitoring indoor air quality, ergonomic standards, and selecting building materials and furnishings that are low emitting, non-toxic and made from renewable, local sources are each relatively small investments that can have quick returns in reduction of labor expenses and lost time.

Stability is often necessary before sustainability can be achieved. In times of crisis, it's essential to minimize loss of life and property. Assuring OSU operations groups can resume and sustain essential business operations following a disaster is one step toward emergency preparedness.

GOAL 3: PROVIDE LONG TERM COST REDUCTIONS

Oregon taxpayer investments are protected by reducing OSU's operating costs through strategic expenditures and long term cost avoidance.

Through true cost accounting and long-term strategic investments, the University can minimize the impacts of the traditional volatile economic market. Alternatives to unsustainable goods can be sourced as they become available, adding value to and supporting an emerging natural-capital-based economy.

Additionally, locally harvested and manufactured foods, goods and services drive reinvestment in the University community, and reduce impacts of national and international market instability. Procurement standards can move OSU to supporting vendors and service providers that contribute to a service-based economy with closed loop product lifecycles, and that move away from take-make-waste product flow. Procurement can be based on sustainability principles. An OSU sustainable procurement policy is an important piece of our local and regional economic development strategies and will drive more sustainable solutions in the private sector.

GOAL 4: FOSTER A CULTURE OF SUSTAINABILITY

Faculty, staff and students are aware of their impact on OSU's sustainability performance and why it is critical to the success of OSU. Their passion and enthusiasm changes the culture.

Improve awareness of OSU's sustainability efforts and inform faculty, staff and students on how their actions impact OSU's ability to be sustainable. Develop tools like a campus-wide survey, training events, tours, news releases, and improved environmental metrics for communication packages. Empowering people to be part of this process is critical to the success of this plan, as is ensuring students and employees are free to be creative and innovative.

GOAL 5: DRIVE AND SUPPORT INNOVATION

Tap into OSU's strong innovation, research and development capabilities to establish new thresholds for sustainability performance, new technologies and better application of existing technologies.

OSU can move into the forefront of environmental protection by delineating areas where research and development is needed to provide new technologies, innovative practices and strategies to improve sustainability performance. Partnerships with research faculty can be created to identify potential breakthrough areas. Similarly, alliances with industry sponsors and vendors to field test and study new products, technologies and methods create controlled feedback and testing opportunities for the private sector.

Projects and programs already underway should be packaged and communicated internally and externally to drive innovation beyond the authority of OSU operations groups (e.g., The Natural Step and Facilities Paint Shop). Additionally, the OSU statewide public services (Extension Service, Forest Research Lab, and Agricultural Experiment Station) can take part in information sharing about innovations in sustainable operations and business practices.

Sustainable research and development supports Corvallis and regional economies, similar to the way sustainable purchasing strategies can enhance the university's impact on the local economy and support a closer community connection.