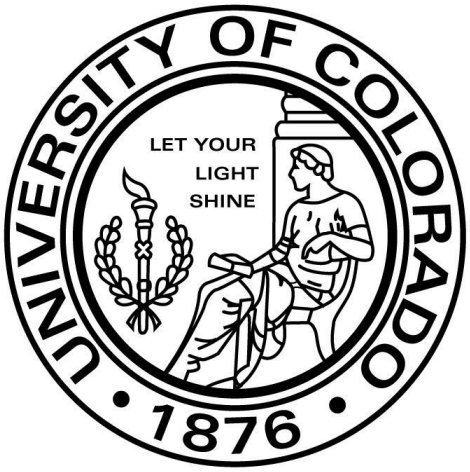
# Sustainability Strategic Plan

# University of Colorado at Colorado Springs




**The UCCS Sustainability Task Force**

**Spring 2007**

# Sustainability: What does it mean?

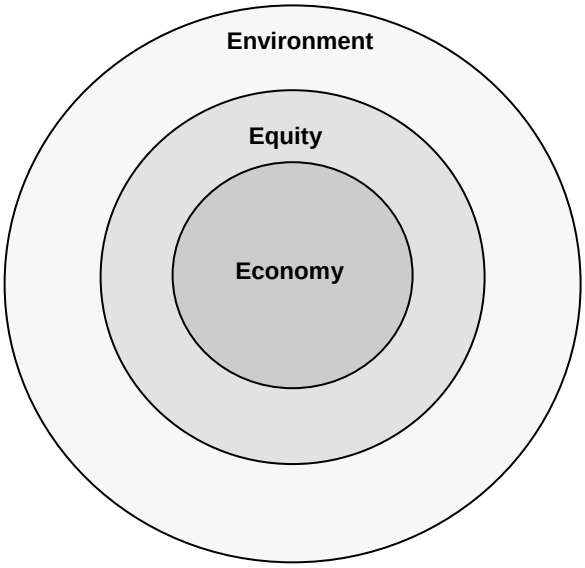
*[Sustainability is] development that meets the needs of the present without compromising the ability of future generations to meet their own needs.*

Brundtland Commission

*Sustainability is the need to ensure a better quality of life for all, now and into the future, in a just and equitable manner, while living within the limits of supporting ecosystems.*

Julian Agyeman

**Sustainability is action toward……**




*Our goal is a delightfully diverse, safe, healthy and just world, with clean air, water, soil and power -- economically, equitably, ecologically and elegantly enjoyed.*

William McDonough

*It is today we must create the world of the future.*

Eleanor Roosevelt

*Sustainability takes forever and that's the point.*

William McDonough

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# Executive Summary

This blueprint describes how to put into action the University of Colorado at Colorado Springs' commitment to sustainability. The plan is in response to a charge from Chancellor Shockley-Zalabak to bring together broad participation to develop a clear sustainability strategy for the University's Strategic Plan. In an eight-month process, more than forty faculty, staff and student stakeholders, from almost every department and governance group on campus, participated in preparing this plan, designed to expand the campus' environmental, social and economic performance over the next five years.

Comprehensive action plans for the next five years in the areas of Leadership, Education and Operations are outlined along with a broader long range vision of sustainability. Key elements of this plan include **specific action steps**, **performance indicators**, and **identification of campus agents** to pursue these goals.

Where data exist, the plan provides a baseline from which to measure our future progress. From reducing our ecological footprint to increasing sustainability education on campus, this approach emphasizes the interdependent nature of these action plans. The success of this plan will require the participation of the entire UCCS community.

**Why a sustainability plan for UCCS?** No university operates in a vacuum and the vitality of the greater community of Colorado Springs and southern Colorado is essential for the success of UCCS. The University can make an important contribution to our community by modeling and teaching sustainable practices, engaging in community wide efforts to increase sustainability in the region and finally, by providing high caliber graduates who are prepared to creatively meet the challenges of a rapidly changing world.

The **overall goal** of this plan is to institutionalize sustainability by *integrating sustainability in all aspects of the University including leadership, education and operations.* Full integration of sustainability will affect all of our professional and personal decisions providing an environmental, social, and economic framework to inform these decisions.

The following targets are selected highlights provided to give a short overview. A full list of targets is provided in each narrative section and is accompanied by comprehensive action plans.

**Leadership**

- Add sustainability to the campus core values
- Achieve approval of an official campus sustainability policy
- Institute a permanent Sustainability Advisory Committee of faculty, staff, and students

**Education**

- Strengthen and expand the Sustainable Development Minor
- Significantly increase the percent of students, faculty, and staff who have a basic awareness of sustainability
- Institute a measurement of sustainability within a UCCS General Education Goal

**Operations**

- Commit to high performance building as represented by LEED silver or higher
- Ensure the reduction of greenhouse gas emissions through energy efficiency measures, the use of renewable energy, and transportation demand management strategies
- Institute a comprehensive recycling program to decrease waste going to the landfill
- Establish water conservation practices and planning throughout the campus
- Increase sustainable food choices on campus that emphasize organic and local foods

# UCCS Sustainability Vision and Mission

## Vision

The University of Colorado at Colorado Springs will be a recognized leader in sustainability, integrating social justice, economic, and ecological values into institutional policies, programs and practices.

## Mission

Recognizing that institutions of higher learning have a responsibility to exercise leadership and create the future, UCCS actively pursues sustainability as a way to address the University's focus on increased student recruitment and retention through courses which address contemporary and global issues, effective and efficient resource usage, and fiscal responsibility.

*UCCS seeks to be a campus where:*

- Committed campus administrators, in partnership with a dedicated faculty, staff, and student body, provide leadership and expertise to local, regional, and global sustainability efforts;
- We recognize our obligation to educate the University community about the importance of individual and institutional environmental and social responsibility, and prepare our students by integrating sustainability literacy into academic learning and research across the curriculum and between the colleges;
- Sustainability is integrated into all aspects of University functioning, including buildings, operations, planning, and purchasing, in a way that we minimize the impact of our growing, dynamic campus upon the earth.

In accomplishing this vision and mission, we will foster a culture of sustainability throughout our campus and also our extended community.

# Sustainability at UCCS: The Thirty Thousand Foot View

The current global situation is one that requires all universities to take a leadership role in encouraging and implementing solutions to lessen ecological impact, pioneer restorative practices and contribute to increasing equity in both our local communities and the world at large. The University of Colorado at Colorado Springs envisions becoming a recognized leader in integrating social, economic and ecological values into institutional policies, programs and practices.

UCCS is the fastest growing selective-admission university in Colorado. To serve the growing number of citizens, businesses, and governmental agencies located in the region, UCCS expects to expand from a current population of 7,500 students to 30,000 students by 2050. It is imperative that the University develop in a manner that optimizes sustainability strategies.

Sustainability initiatives for UCCS began in 2002 with the creation of the faculty and staff Campus Sustainability Committee and the student organization, Students for Environmental Awareness and Sustainability, SEAS. In 2005 UCCS hired the first sustainability officer in the University of Colorado System and created the Office of Sustainability. This office manages a $1.3 million Energy Performance Bond to pursue energy conservation projects, coordinates LEED and high performance building efforts, and works with students, faculty and staff to coordinate campus sustainability initiatives. Savings from sustainability projects in 2006 have already provided over $80,000 of savings for the University.

UCCS is committed to high performance building and is just beginning its journey to emphasize ecological impact and employ life-cycle cost analyses in design, construction, renovation and maintenance. In 2006, UCCS began construction of two new buildings, a student-funded Recreation Center and the Science Engineering Building, both pursuing LEED certification.

We recognize our obligation to educate the University community about the importance of individual and institutional environmental responsibility and to prepare our students for future leadership endeavors. Our commitment to increasing sustainability literacy and to incorporate sustainability into our curriculum is reflected in our new multidisciplinary Sustainable Development Minor added in 2006.

In 2005, the UCCS Sustainability Task Force developed a vision and set of goals for the UCCS campus. Their final report communicates an overall sustainability vision for UCCS and identifies broad objectives in the areas of operations, curriculum, and leadership. The Task Force recently initiated a six-month planning effort to produce the Sustainability Strategic Plan including measurable five-year targets and processes that will be incorporated into the University's overall strategic plan.

Our sustainability journey will require innovation as well as comprehensive individual and organizational culture change to navigate and overcome substantial challenges. We look forward to building on our current successes and utilizing our talents to create a legacy for future generations.

*A community is like a ship; everyone ought to be prepared to take the helm.*

Henrik Ibsen

# Leadership Narrative

**Vision:** ***The University of Colorado at Colorado Springs will be a recognized leader in sustainability by integrating social, economic, and ecological values into institutional policies, programs, and practices.***

Sustainability strategies are an important way to address the University's focus on increased student recruitment and retention, effective and efficient resource usage, and fiscal responsibility. Sustainability at UCCS will ultimately be a process of comprehensive collaboration between administrative teams, faculty, staff and students. Leadership in this effort, both at executive levels and throughout the University will be a critical driver. A clear and consistent leadership commitment will be crucial to develop a campus culture of sustainability and to create and maintain our identity within the greater Colorado Springs community as a sustainability leader.

Within the realm of leadership, we envision two strategic approaches in order to achieve the sustainability goals for the campus. The first, institutionalizing sustainability, is grounded in the recognition that sustainability must be clearly envisioned and articulated through the University's stated values and overall goals. This is critical in order for sustainability initiatives that are started today to survive future changes in students, faculty, staff, and especially, leadership. The second, supporting structures, identifies the critical sustainability infrastructure needed to ensure the success of this plan and to further sustainability initiatives throughout the campus.

Strategic planning and stated values are visible signs of a campus leadership commitment to embracing a long term vision of sustainability, and also to putting this vision into tangible actions. Values, policies and goals provide the foundation that helps to determine whether the University will choose to build a "green" building, invest in conservation measures, provide comprehensive recycling, or ensure a baseline knowledge of sustainability for students, faculty, and staff. The Sustainability Vision and Mission, provided in this report, should be used to inform this strategic planning. Additionally, a draft sustainability policy for the University has been provided in this plan (Appendix A).

**I. Institutionalizing sustainability objective:** The University will increasingly integrate sustainability in the University's values, guiding documents, and priorities for current practices and future development.

Five-year institutionalizing sustainability targets:

1. **Add sustainability to the list of campus core values**
2. **Achieve approval of an official campus sustainability policy**
3. **Make sustainability one of the overall strategic goals of the University**

**II. Supporting structures objective:** Leadership will develop the infrastructure necessary to support campus sustainability priorities and to ensure the success of sustainability efforts.

The success of this Sustainability Strategic Plan (SSP) depends in large part on the strength and effectiveness of a newly created Sustainability Advisory Committee (SAC) of faculty, staff, students, and community members. This permanent committee will rely upon the SSP to **develop reporting mechanisms** for all of the responsible persons, **provide support for responsible persons and**

**departments,** and finally, **complete a yearly SSP progress report.** We strongly recommend that this committee also serve as an advisory body to the executive committee on sustainability issues and decisions on campus.

A commitment to funding sustainability efforts on campus is equally critical to the success of the Strategic Sustainability Plan. This will require both a life cycle cost approach regarding budget allocation for longer term sustainability initiatives, as well as a prioritization of sustainability as a stand alone goal that merits financial support because it is consistent with the overall vision of the University. Significant savings from resource use reduction and rebates can accrue from well planned sustainability initiatives. We need to examine the potential for directing savings from energy, water, and resource initiatives to further sustainability projects or to be distributed to building users to provide greater incentive to conserve. Finally, savings from conservation should be measured and considered for allocation to expanding the Sustainability Office, improving the Sustainable Development Minor, and advancing sustainability literacy throughout the campus community.

Five-year supporting structures targets:

1. **Institute a permanent Sustainability Advisory Committee of faculty, staff, and students**
2. **Establish a revolving conservation/sustainability fund**
3. **Strengthen the campus Sustainability Office**
4. **Develop communication plan to share sustainability progress and initiatives to the entire campus**

**Action Steps** to meet targets:

- Create dedicated budget to implement sustainability strategies on campus
- Develop 5-year strategic plan for the Sustainability Office
- Increase staffing of Sustainability Office to allow for further focus on energy management, recycling, grants, and research projects
- Devise plan for conservation savings to be reinvested in sustainability initiatives
- Develop bi-annual UCCS Sustainability Report
- Have a quarterly “sustainability spotlight” at the campus forum

*A learning organization is a group of people who are continually enhancing their capabilities to create what they want to create.* Peter Senge, The Fifth Discipline

# Education Narrative

**Vision: UCCS will be an educational environment where the emphasis on sustainability informs, enables, and engages on- and off-campus communities through knowledge, involvement opportunities, and outreach. The goal is to translate sustainable concepts into action.**

As an institute of higher education and learning, it is critical that education be a core part of UCCS's sustainability initiatives. Our goal is to be a leader in the community and nation as we develop distinctive programs and research related to sustainability. To translate sustainable concepts into action we have developed four core objectives to be achieved by 2012:

**I. Awareness objective:** Increase the percentage of students with baseline awareness of sustainability.

Currently, according to an informal survey, roughly only 5% of UCCS students can provide a coherent definition of sustainability. Students at UCCS should be aware of what it means to live more sustainably and responsibly on campus as well as off. Without this awareness, students will graduate without a concern for the environment and without knowledge of how to act responsibly. By explicitly listing sustainability awareness as a first objective, UCCS is taking an initial step to increase the number of our graduates who will consider more sustainable actions in their future careers and lives.

Five-year awareness targets:

1. **Increase percent of students, faculty, and staff with a basic awareness of sustainability to 50%**
2. **Include Sustainability in LAS General Education Requirements**
3. **Incorporate specific sustainability language into the measurement of the fourth UCCS General Education Core Goal, "Students will be prepared to participate as responsible members of a pluralistic society – locally, nationally, and globally."**

**Action Steps** to meet targets:

- Develop Transforming the Curriculum Workshop to further incorporation of sustainability in courses
- Work with Freshman Seminar (FS) program to include sustainability in all FS courses and to have one course that focuses specifically on sustainability
- Sponsor faculty, staff, students, and guest speaker presentations on sustainability topics
- Work with Residence Life and Housing to encourage sustainable living options

**II. Sustainable Development Minor objective:** Strengthen the quality of our Sustainable Development Minor program

The Campus Sustainability Committee formed in October 2002 to affirm a commitment to protect and enhance the environment through teaching, research, service, and administrative operations. In March 2005, Chancellor Shockley directed this committee to work with the Task Force on Inventing

the Future to develop a vision of sustainability for the campus that is consistent with the campus vision and values statement. An outcome of this charge was to focus on integrating sustainability into the curriculum. The committee worked through the summer 2005 to write a proposal for a Sustainable Development Minor. The College of LAS approved the Minor in fall of 2005. At this juncture, there is no formal identification or assessment of learning objectives in the Sustainable Development Minor and no formal mechanism for the inclusion of courses to the Minor.

By encouraging faculty teaching within the Minor to participate in developing the learning objectives, we expect greater "buy in" and continuity among classes within the Minor. Additionally, a formalized mechanism for adding courses to (or removing courses from) the Minor will allow students to have confidence that the courses they select have been evaluated as contributing significantly to their knowledge and understanding of sustainability.

The extent of work required to ensure excellence in the Sustainable Development Minor is significant and continual. Adequate financial support for the Minor and course off-loads to the Minor Director will further the potential of a cutting edge program that provides both applicable knowledge and active engagement in community projects for our students.

With the base of a strong Sustainable Development Minor, UCCS can, in the future, consider establishing certificate programs, graduate programs, and other educational programs related to sustainability and in service to the Colorado Springs community.

Five-year Sustainable Development Minor targets:

1. **Strengthen the Sustainable Development Minor to provide graduates with comprehensive sustainability knowledge and applicable skills**
2. **Increase visibility and marketing of Sustainable Development Minor**

**Action Steps** to meet target:

- Establish an introductory or capstone course within the Minor
- Establish formal communication method between faculty teaching in the Minor
- Design and conduct exit interview of graduates within the Sustainable Development Minor
- Develop assessment plan
- Develop and maintain website for Minor
- Publicize sustainability education events to campus and greater community

**III. Involvement Objective:** Increase involvement of faculty, staff, and students in sustainability initiatives on and off campus.

There are staff and faculty who include sustainability in daily practice and research yet these activities are not highlighted on campus, nor is specific funding or recognition available for this aspect of people's work. Establishing UCCS as a focal point for sustainability projects and research will open new doors for research funding, while increasing campus visibility and leadership.
Partnerships between students, faculty, and the greater community on sustainability projects will improve UCCS's image as "cutting edge" in sustainability across the private and public sectors, increase literacy in the subject on and off campus, and serve our campus mission to build and maintain linkages with business, government, and the public.

Five-year involvement targets:

1. **Increase research on sustainability**
2. **Increase number of staff, faculty, and students involved in sustainability projects on campus**
3. **Increase collaboration and learning opportunities with Colorado Springs community regarding sustainability**

**Action Steps** to meet targets:

- Publicize ongoing research incorporating sustainability on the campus
- Publicize sustainable research opportunities
- Create partnerships between faculty and operations staff to conduct sustainability projects with students
- Create awards program for sustainability initiatives
- Identify faculty members interested in setting up internships or projects with local businesses
- Market and invite community to sustainability lectures and events on UCCS campus

**IV. Health and Wellness objective:** Promote healthy lifestyles and behaviors to the campus community.

As we address the awareness of risk and the education of students, campus, and community in relation to the integrity of ecological systems, it is also imperative to address the sustainability of *our* species. The current conditions of our physical, social, and emotional climate affect the well being of individuals. The task in sustainability and health is to counteract harmful activities, such as poor nutrition, smoking, and unhealthy living conditions, and to reorient health services and health benefits towards the promotion of health and wellness.

We need to develop and implement a wellness program by providing a structure for the provision of health promotion services on campus. This structure would provide programs that increase the opportunity of students and faculty to participate in wellness activities. Mission and budget would need to address the development, implementation and evaluation of programming. Multidisciplinary community partnerships need to be developed to address the commitment to health promotion and health maintenance as a major social investment and challenge. A leadership role in coordinating ideas from health, science, economics, and environmentalism to impact community poverty and affirm access to health care, education and economic opportunity will be a partial outcome.

The planning and operations goals for promoting alternative transportation and providing an improved and better connected system of trails and sidewalks on campus will promote walking and cycling, which in term should improve the health of the UCCS community. Additionally, reductions in emissions from vehicles will improve air quality.

Five-year health and wellness target:

1. **Increase percentage of people who participate in preventive health services and practices**

**Action steps** to meet target:

- Develop programs and education linking sustainability and wellness
- Develop safety and wellness indicators
- Provide facilities and time for faculty, staff, and students to become healthier people

*Linear practices must be reproduced by cyclical ones. That's nature's way. In nature there is no waste.* Ray Anderson, Interface Corporation, Inc.

# Operations Narrative

***Operations Vision:*** **UCCS will be a living laboratory where the infrastructure and operations exemplify sustainable practices and serve as teaching tools for the entire campus community.**

Sustainability programs across the nation are reaping significant financial benefits for universities. As detailed in the University of Colorado at Boulder 2004 publication, *Green Investment, Green Return*, U.S. campus environmental efforts on individual campuses can return more than five million dollars per year in direct avoided costs and future opportunity costs. It is likely that soon it will be considered fiscally irresponsible not to implement sustainability strategies.

Institutional sustainability will require the restructuring of our universities: We need to break down barriers between those who operate our universities and those who teach and learn in this system in order to provide a collaborative learning relationship among staff, students, and faculty. Increased opportunities for educational exchange and implementation of applied sustainability research throughout all facets of university life and operations will benefit the entire campus.

Capitalizing on fiscally responsible sustainability strategies will require formalized incentives and procedures to make decisions based on an analysis beyond capital costs. A life cycle cost approach has created significant savings at numerous universities and businesses and has allowed these entities to pursue otherwise unachievable sustainability goals. Finally, to create incentives for sustainable behavior on campus, a portion of the savings need to be allowed to accrue to the savers.

Within Operations, the Sustainability Strategic Plan focuses on nine main areas: Energy, Water, Transportation, Waste/Recycling, Infrastructure, Paper, Health and Safety, Food, Green Purchasing. Specific objectives for each operating area, five-year targets associated with each objective, and some key actions steps necessary in order to meet these targets, follow. Additionally, anticipated benefits, both qualitative and quantitative are included. A full examination of the Operations action plan, including performance indicators, responsible persons, and resources needed follows this narrative.

**I. Energy objective:** Significantly reduce our contribution of greenhouse gas emissions by reducing our energy use and increasing the use of renewable energy.

UCCS recognizes the seriousness of global climate change and the corresponding potential threat to all species, from anticipated rising sea levels to increased heat waves and tropical storms. The greater than thirty percent increase in atmospheric carbon dioxide since the advent of the industrial era is a major contributor to greenhouse gasses and something that the University can address to significantly decrease its own emissions.

In 2007, Chancellor Shockley-Zalabak signed the American College and University Presidents Climate Commitment, which requires the University to establish an infrastructure and plan to achieve carbon neutrality by a date to be determined by the University. [Appendix B]. This commitment also requires the University to achieve several immediate specific emissions reduction strategies.

Pursuing the outlined energy strategy will not only reduce our greenhouse gas emissions, but will provide significant savings and avoided costs for the University. Other benefits include creating a

leadership and educational role in our community regarding energy conservation practices, contributing to improved air quality for the Pikes Peak region, and providing potential research opportunities in renewable energy.

Five-year energy targets:

1. **Decrease Energy Use Intensity, EUI, (per square foot) of the campus to 20% below the 2006 level**
2. **Increase energy efficiency of new buildings to 20% better than ASHRAE (American Society of Heating, Refrigerating, and Air-Conditioning Engineers) standards**
3. **Meet 10% of campus energy use through renewable energy**
4. **Develop a UCCS Energy Policy to communicate and encourage conservation**
5. **Meet the requirements of the American College and University Presidents Climate Commitment**
6. **Implement the Sustainable Energy Management Program {Appendix C}**

**Actions steps** to meet targets:

- Create an Energy and Conservation Engineer position within the Facilities Services Department. This position currently does not exist and is essential to developing and pursuing strategies to implement energy savings technologies both in new and existing buildings
- Dedicate the current $1.3 million Energy Performance Bond to pursue energy retrofits and efficiency projects
- Establish a revolving sustainability fund to implement future energy and cost saving projects
- Develop and maintain an energy management website to communicate building energy and water usage to the entire campus community
- Adopt an Energy Star appliance purchasing policy
- Develop a consistent and streamlined inventory method to measure greenhouse gas emissions

**II. Water Objective:** Institute water conservation practices and planning throughout the campus to reduce both domestic and outdoor water use, decrease utility costs, and provide a model of effective storm water management.

UCCS is located in a semi-arid climate that averages only 16 inches of precipitation per year. All water used on the campus for both domestic and irrigation is potable water brought to Colorado Springs primarily from mountain reservoirs located several hours away. The rapid growth rate of the Colorado Springs region necessitates elaborate water schemes and significantly increasing water costs to supply the growing population. The University can lower demand on the water system, create conservation savings, and model responsible water use though adoption of the following targets.

Five-year water targets:

1. **Decrease outdoor (irrigation) water use intensity (per square foot) on campus by 10%**
2. **Decrease indoor water use in existing buildings by 10%**
3. **Commit to a standard of 20% water use reduction over conventional buildings for all new construction projects**

4. **Develop a comprehensive storm water plan that mitigates storm water runoff and decreases impervious surfaces**

**Actions steps** to meet these targets:

- Identify potential turf areas to be converted to native or xeriscape vegetation
- Upgrade to a more efficient automated irrigation system
- Emphasize native and low water vegetation for all new buildings and in the Facilities Strategic Plan
- Schedule retrofit water saving devices and equipment for all existing buildings
- Require a standard of at least 20% water use reduction over conventional buildings in all new construction
- Conduct water conservation education for the campus, especially in the residence halls
- Pursue innovative methods for storm water mitigation including pervious pavement and green roofs

**III. Transportation Objective:** Create a pedestrian and bicycle oriented campus that provides alternative transportation options and reduces the overall greenhouse gas emissions from trips to and from the University.

UCCS has historically been a commuter campus inadequately served by public transportation. As we continue to grow, more on-site student housing is being added and the nature of transportation to the campus will change as well. Currently, eighty-seven percent of our community arrives to the campus in single occupancy vehicles. Transportation is the largest component of our environmental footprint and a significant contributor to the University's greenhouse gas emissions.

Adoption of comprehensive transportation planning and transportation demand management strategies will ensure that future growth creates and preserves an attractive pedestrian and bicycle friendly campus. Considerable cost avoidance can be achieved by reducing the number of parking spaces and subsequent parking structures that will need to be built as a result of greater reliance on alternate means of travel. Other benefits include the reduction of greenhouse gas emissions, higher air quality around the campus, reduced traffic congestion, and increased safety from reduced pedestrian-car interaction.

Five-year transportation targets:

1. **Develop Transportation Demand Management (TDM) strategies to reduce Single Occupancy Vehicle (SOV) travel to the campus**
2. **Develop a Comprehensive Transportation Plan for incorporation into the 2012 Facilities Strategic Plan**
3. **Significantly improve pedestrian and bicycle infrastructure both on campus and from connecting neighborhoods**
4. **Decrease fuel emissions from university vehicles and university business related travel**

**Action steps** to meet targets:

- Create a UCCS Sustainable Transportation Committee comprised of faculty, staff and students as well as city transportation planners and bike and pedestrian advocates
- Create an Alternative Transportation Coordinator position within Public Safety who will work closely with the Sustainability Officer
- Improve transit convenience and increase access of bus passes to the campus community

- Convert appropriate campus vehicles to biodiesel or high fuel efficiency vehicles
- Develop, support and track teleconferencing program

**IV. Infrastructure Objective:** Implement comprehensive building and land use planning that ensures energy and water conservation, efficient transportation, sustainable building materials, occupant health, and serves as a continuing applied learning opportunity for the university community.

UCCS is currently pursuing, for the first time, Leadership in Energy and Environmental Design (LEED™) certification for two new buildings, the student Recreation Center and the Science Engineering Building. The 2007 Facilities Strategic Plan significantly emphasizes sustainable design principles and is based on the LEED™ for Neighborhood Development model. As the University continues to grow, this document needs to increasingly incorporate sustainable design principles and serve as ***the*** guiding document for the University's development plans.

Pursuant to Colorado Senate Bill 07-051, state institutions are required to target USGBC LEED™ - NC Gold as a standard of the High-Performance Certification Program (HPCP). This certification level is attainable if the increased initial cost of substantial renovation, design, or new construction, including the time value of money, can be recouped from decreased operational cost within 15 years.[1]

High performance buildings reduce operating costs from energy and water efficiencies, and provide for healthier work environments. Since the workforce is the greatest ongoing expense of any building, reduced sick days and increased productivity can result in significant savings for the University. LEED™ certified buildings will also provide recognition for the University as a leader in sustainability and serve as a model for the Colorado Springs community. A Facilities Strategic Plan that integrates comprehensive Energy, Transportation, and Utility Plans, as well as sustainable design features, is one that helps to ensure a high quality, efficient and healthy campus for future generations to enjoy.

Five-year infrastructure targets:

1. **Meet highest possible certification level of LEED™, as per Senate Bill 07-51, for new construction**
2. **Follow LEED™ for Existing Buildings (LEED™-EB) standards for all renovations**
3. **Incorporate sustainable design standards in all future UCCS Facilities Strategic Plans**

**Action Steps** to meet targets:

- Develop UCCS Facilities Guidelines and Standards and Campus Design Guidelines to provide and guide all contractors working on the campus
- Incorporate high performance building cost allowance up to 5% in new building and renovation projects
- Use Life Cycle Costing to guide new construction, renovations and mechanical purchases
- Commit to commissioning all new buildings and retro-commissioning existing buildings as needed
- Pursue green building grants and rebates during design and construction process
- Develop and incorporate Energy, Utilities, and Transportation Plans into Facilities Strategic Plan

[1] SB07-051 applies to state-assisted facilities of more than 5000 square feet. The bill specifies that if the increased costs of construction are greater than 5%, the legislature's capitol development committee shall examine the estimate prior to approving any appropriation.

**V. Waste/Recycling Objective:** Institute comprehensive recycling program at UCCS to reduce material waste, divert waste from the landfill, and provide recycling education to the UCCS community.

UCCS currently has no comprehensive recycling program and participation in current recycling initiatives is low. A proposal is being developed for a comprehensive recycling program to be implemented in 2007. Two new buildings under construction, the Recreation Center and the Science Engineering Building, are currently pursuing seventy-five percent construction waste recycling, the first such projects to do so on the campus.

Recycling is the most visible sign that a campus is committed to sustainability. It provides educational opportunities for students and the campus community to extend recycling practices in their personal lives. As tipping fees to landfills increase, recycling will provide for increased savings to the University.

Five-year waste/recycling targets:

1. **Recycle at least 26% of waste**
2. **Achieve at least 75% construction waste recycling on all new projects and renovations**
3. **Develop campus-wide program for recycling or refilling printer toner cartridges**

**Action steps** to meet these targets:

- Create a permanent Recycling Coordinator position
- Conduct a Request For Proposal (RFP) process to determine scope, select service provider(s), and develop recycling plan
- Develop an education campaign to achieve full participation of the campus
- Ensure that construction waste recycling is a permanent part of the Facilities Guidelines and Specifications
- Collaborate with the CU Procurement Service Center to determine potential contracts for toner cartridge provision and refill, or recycling

**VI. Paper Objective:** Significantly reduce paper consumption per person and utilize a greater percentage of recycled paper products.

Despite the advent of the computer, universities are huge consumers of paper and paper products. Estimated paper use for the campus is over 400,000 pounds per year, which equates to roughly 47 pounds of paper per person on the campus every year. There is double side-printing in some labs, but this practice is not consistently used across the campus. Pay for printing will begin in the computer labs in July 2007. Recycled paper use on the campus is limited.

Reducing paper use significantly decreases both purchasing and waste/recycling costs to the University. It also preserves an important resource of carbon sequestration: trees. With one acre of trees removing up to 2.6 tons of carbon dioxide each year, decreasing our paper use is an important contribution the University can make toward reducing greenhouse gasses in the atmosphere.

Five-year paper consumption targets:

1. **Reduce paper consumption on campus by 40% per campus headcount**
2. **Increase purchase of recycled paper (at least 30% recycled) on campus in all departments**

**Action steps** to meet targets:

- Encourage and increase use of double-sided printing across campus
- Institute pay for printing in all labs
- Institute campus standard of 30% recycled content paper

**VII. Health and Safety Objective:** Provide a safe and healthy environment for the campus community by ensuring high indoor air quality, minimizing hazardous waste, and limiting exposure to toxic chemicals and pesticides.

Pest control, building maintenance, renovations and construction projects including paint and adhesives, chemical cleaners, and laboratory chemicals are a sample of the potential threats to the University community health and safety. Acute and chronic illness, diminished student performance and employee productivity are all potential effects of poor air quality. More than $75 million are spent each year on medical expenses and lost time wages for custodial staff due to chemical-related illnesses in the U.S.

According to the U.S. EPA, "Good indoor air quality contributes to a favorable learning environment for students, performance of teachers and staff, and a sense of comfort, health and well-being." Ensuring indoor air quality as well as a reduction in the use of toxic chemicals will reduced health risks for the entire University community and especially for custodial and facilities staff. Making certain that safe chemicals are used for the UCCS landscape will ensure that our wildlife on the campus continues to thrive.

Five-year health and safety targets:

1. **Reduce campus exposure to harmful pesticides through development of an integrated pest management plan**
2. **Institute a standard of green cleaning products campus-wide**
3. **Ensure the use of low volatile organic compounds (VOC) paints in all new construction, renovations, and maintenance projects**
4. **Reduce the amounts of hazardous waste generated by the campus and ensure proper disposal**

**Action steps** to meet targets:

- Explore biological, mechanical and cultural methods for pest and weed management
- Require Low-VOC products in Facilities Guidelines and Specifications for all new buildings and renovations
- Hold training for custodial staff on green cleaning products
- Advance "Best Management Practices" adopted by many laboratories to maximize safety and minimize waste

**VIII. Green Purchasing Objective:** Institute an environmentally responsible purchasing (ERP) program that facilitates the purchase of cost-competitive products and services.

Environmentally responsible purchasing (ERP) is an effective and highly visible, educational tool to lessen our environmental footprint and to reduce costs. As a major purchaser in our region, the University can help to drive price competitiveness with ERP products and services and achieve savings, as prices for natural resources and disposal costs increase. Energy Star appliances are a great example of a green purchasing strategy that will ultimately provide savings for the University.

Additionally, pursuing a CU system-wide green purchasing strategy may present further cost savings through aggregating purchases.

Structural barriers such as first-cost accounting and widely distributed purchasing across the campus must be overcome in order to capture the opportunity of linking environmentally responsible behavior and resultant benefits. Purchasing agents across the campus can become not only educated ambassadors of ERP products and services, but will likely also incorporate these practices in their personal lives.

Five-year purchasing targets:

1. **Collaborate with CU system to identify ERP products and services**
2. **Work with CU Procurement Service Center to facilitate green purchasing options**
3. **Train campus purchasers to apply an environmentally responsible purchasing framework in purchasing decisions**

**Action steps** to meet targets:

- Identify all of the purchasing agents on campus
- Establish a committee on campus to coordinate and research ERP opportunities
- Educate the campus community about ERP programs and policies

**IX. Food Objective:** Provide high quality food options for people on campus that is healthfully prepared, features organic and locally produced food, serves to educate the campus community about sustainable food choices, and produces minimal food and material waste.

Food production, processing, and transportation have a significant environmental impact. In America, the average one-way distance from farm to table for our produce is over 1500 miles. On average, our typical meals contain on average ingredients from at least five countries outside the United States. These food miles require significant petroleum, a non-renewable resource, and contribute to increasing greenhouse gasses. Additionally, food grown on large conventional farms that practice mono-cropping are contributing to increasing fertilizer and pesticide pollution and decreasing biodiversity.

Food waste is also a significant issue. In a one-day study conducted in 2004 at the Lodge at UCCS, more than one third of all food (by weight) went unconsumed and was thrown away. Further, since there is currently no composting system on campus, this represents a lost cost savings opportunity for the University as this waste goes to the landfill. Developing a composting system on campus would provide cost savings through reduced waste processing costs and would also provide a rich source of fertilizer for the campus landscapes.

Benefits of decreasing our food miles and supporting organic agriculture are many. Purchasing local foods helps to support local farming communities and regional economies. Organic smaller scale farms don't contribute nitrogen pollution from fertilizers or pesticide runoff to our water sources. Providing sustainable food options and education at the University will lesson our environmental impact and will help our community to make healthy and more informed food choices.

Five-year food targets:

1. **Encourage the campus food service provider to purchase 5-10% locally-grown food products throughout the course of the year**
2. **Encourage the campus food service provider to purchase 5-10% organic products throughout the course of the year**
3. **Implement an educational program designed to increase awareness of sustainable food practices for the entire campus community**
4. **Develop a food waste plan to research and implement comprehensive composting on campus**

**Action steps** to meet targets:

- Include desired percentage of local products in vendor RFP
- Work with vendor to develop network of approved local food and beverage distributors
- Include desired organic percentage in vendor RFPs
- Work with vendor to develop network of approved organic distributors
- Develop sustainability representation on the Food Advisory Board (FAB)
- Develop and implement educational campaign about sustainable food choices
- Research and implement composting program on campus for all food service locations

# Action Plans

# Leadership Action Plans

Leadership Vision

***The University of Colorado at Colorado Springs will be a recognized leader in sustainability, integrating social, economic, and ecological values into institutional policies, programs, and practices.***

## Leadership – Institutionalizing Sustainability

Leadership Objective 1

**UCCS will increasingly integrate sustainability in the University's values, guiding documents, and priorities for current practices and future development.**

Current Situation/Baseline

UCCS leadership's commitment to sustainability is evidenced by the recent creation of the Office of Sustainability. Currently sustainability is not a core value of the University and the University does not have an approved sustainability policy statement. Collaboration with the external community on sustainability initiatives has just started, mainly through a Memorandum of Understanding between UCCS and Fort Carson to share sustainability strategies. A UCCS sustainability website was established in 2007, but there is no consistent form of communication such as a newsletter.

Benefits of Meeting Objective

By establishing sustainability as one of our fundamental, long-term core values for campus progress, we will optimize savings from sustainability initiatives, encourage students to practice sustainability in their lives and careers, create a stronger connection within the community, and attract and retain students, faculty, and staff.

| Five-year Targets | Performance Indicators | Action Steps | Responsible Persons | Resources Needed |
|---|---|---|---|---|
| **1. Make sustainability one of the overall strategic goals of the University (less than one year)** | ▪Formalized dialogue between campus leadership team, deans, and directors regarding sustainability issues<br>▪Vice-Chancellors and provost share sustainability progress reports with Leadership Team each semester<br>▪Dedicated budget committed to campus sustainability strategies<br>▪Clear support and resources are provided to Facilities to pursue sustainability initiatives | ▪Incorporate Sustainability goal and Sustainability Strategic Plan into strategic plan for University<br>▪Create dedicated budget to implement sustainability strategies on campus<br>▪Articulate sustainability goals to entire campus<br>▪Follow sustainability guidelines of Facilities Strategic Plan and commit to adding Transportation and Energy plans<br>▪Train Facilities staff to use sustainability framework to inform decisions<br>▪Commit to high performance building for all new construction and renovations | **Chancellor**<br>▪Leadership Team<br>▪Vice Chancellors and Provost<br>▪Deans and directors<br>▪Sustainability Task Force | ▪Funds to support sustainability initiatives that are pursued |

## Leadership – Institutionalizing Sustainability

| Five-year Targets | Performance Indicators | Action Steps | Responsible Persons | Resources Needed |
|---|---|---|---|---|
| **2. Obtain Leadership endorsement of campus sustainability policy statement (less than 1 year)** | ▪Approval and communication of UCCS Sustainability Policy | ▪Draft sustainability policy to be reviewed by UCCS Leadership<br><br>▪Include sustainability mission/vision in the sustainability policy | **Chancellor**<br><br>▪Sustainability Leadership Team of Task Force<br><br>▪Sustainability Officer<br><br>▪Governance bodies<br><br>▪Deans and Directors | Staff Time |
| **3. Add sustainability to the list of campus core values (1-year)** | ▪Sustainability becomes a core value | ▪Draft core value of sustainability<br><br>▪Achieve approval of addition of sustainability to core values | ▪**Chancellor/Campus Leadership Team**<br><br>▪Sustainability Task Force<br><br>▪Governance bodies | Staff Time |

## Leadership – Supporting Structures

Leadership Objective 2

**Leadership will develop the infrastructure necessary to support campus sustainability priorities and to ensure the success of sustainability efforts.**

Current Situation/Baseline

There have been several major planning efforts with regard to sustainability including this strategic plan. There is an Office of Sustainability, a faculty associated Campus Sustainability Committee, and a student group. The Taskforce charged with creating the Sustainability Strategic Plan is not a permanent group and does not have any official standing with regard to advising on sustainability issues. An official permanent committee is needed to pursue the recommendations of this plan, coordinate sustainability initiatives on campus, and serve as an advisory body as needed for sustainable development decisions.

Benefits of Meeting Objective

The University can become a sustainability leader in the community with a cohesive dedicated approach. Appropriate infrastructure with regard to people, resources, and empowerment will help to ensure that these strategic plans are acted upon and that the University can demonstrate measurable progress toward sustainability.

| Five-year Targets | Performance Indicators | Action Steps | Responsible Persons | Resources Needed |
|---|---|---|---|---|
| **1. Establish Sustainability Advisory Committee(SAC) of faculty, staff, and students to ensure progress of Sustainability Action Plan and to serve as advisory board to leadership (1 year)** | ▪Creation of Sustainability Advisory Committee<br><br>▪Preparation of progress reports on the Sustainability Strategic Plan | ▪Sustainability Advisory Committee will meet (quarterly) to review progress by the various agents responsible for Sustainability Strategic Plan Targets<br><br>▪SAC will serve as a permanent advisory committee to UCCS leadership<br><br>▪SAC will create SSP progress report form for agents to complete to streamline process<br><br>▪SAC will provide advice regarding sustainable options to fiscal principals and decision makers (including UBAC) | **Chancellor**<br>▪Sustainability Officer<br><br>▪Faculty, staff and students<br><br>▪Vice chancellors and provost<br><br>▪Appointed member of the Colorado Springs community | ▪Staff time<br><br>▪SAC members will serve 2 year terms with a staggered 3 year starting term |
| **2. Strengthen the Sustainability Office (ongoing)** | Sustainability Office grows and is able to address a larger range of leadership, evaluation, and operations issues | ▪Develop 5-year strategic plan for the Sustainability Office<br><br>▪Determine and provide necessary budget for office projects and staff<br><br>▪Increase staffing to allow for further focus on energy management, recycling, grants, and research projects<br><br>▪Maintain consistent communication avenues between executive leadership and Sustainability Officer | **Chancellor and VCAF**<br><br>▪Facilities Director<br><br>▪Sustainability Officer | ▪Budget based on Sustainability Office strategic plan |

## Leadership – Supporting Structures

| Five-year Targets | Performance Indicators | Action Steps | Responsible Persons | Resources Needed |
|---|---|---|---|---|
| **3. Develop communication plan to share sustainability progress and initiatives with the entire campus (1-2 year)** | Development of following:<br>▪Sustainability newsletter<br>▪Sustainability web site<br>▪UCCS Sustainability Report | ▪Produce newsletter that outlines campus sustainability initiatives and savings<br>▪Develop and maintain a campus sustainability website<br>▪Host a quarterly "sustainability spotlight" at the campus forum<br>▪Develop bi-annual UCCS Sustainability Report<br>▪Contribute regular sustainability articles to the Scribe | **Sustainability Officer**<br>▪University Relations<br>▪Chancellor<br>▪Faculty, staff, and student contributors | ▪Funds for work study students |
| **4. Ensure that the campus community embraces a culture of sustainability (3-5 years)** | Develop and administer campus survey to measure campus support and involvement | ▪Provide ongoing sustainability education to campus community through symposiums, newsletters, awareness campaigns<br>▪Develop a departmentally based award system for sustainability efforts<br>▪Initiate a quarterly "sustainability spotlight" at the campus forum | **Chancellor**<br>▪Sustainability Committee<br>▪Chancellor<br>▪Vice Chancellors and Provost<br>▪Deans and Directors<br>▪SEAS, student groups<br>▪Sustainability Officer<br>▪Director of Facilities<br>▪Sustainability Development Minor faculty<br>▪Faculty and staff | ▪Staff Time |

## Leadership – Supporting Structures

| Five-year Targets | Performance Indicators | Action Steps | Responsible Persons | Resources Needed |
|---|---|---|---|---|
| **5. Become a sustainability leader in the Colorado Springs community** | ▪Increased number of community entities who work with UCCS on campus and community sustainability efforts<br><br>▪Increased community connectivity to the campus through metropolitan area bus services and pedestrian friendly access | ▪ Identify concrete examples of campus actions that contribute to our sustainability identity<br><br>▪Incorporate sustainability in all University-city-developer planning efforts<br><br>▪Develop and distribute news releases about efforts<br><br>▪Pursue media exposure<br><br>▪Develop partnerships with local businesses and organizations to share sustainability practices, research, and student learning opportunities<br><br>▪Partner with Colorado Springs Metro to enhance transportation services to the campus | **Chancellor**<br><br>▪Sustainability Officer<br><br>▪University relations<br><br>▪Vice Chancellors and Provost<br><br>▪Deans<br><br>▪Faculty Assembly<br><br>▪Sustainability Committee | ▪Staff time<br><br>▪Marketing materials |

# Education Action Plans

Education Vision

***UCCS will be an educational environment where the emphasis on sustainability informs, enables, and engages on- and off-campus communities through knowledge, involvement opportunities, and outreach. The goal is to translate sustainable concepts into action.***

## Education – Awareness

Education Objective 1

**Increase the percentage of students with baseline awareness of sustainability.**

Current Situation/Baseline

Only a small percentage of UCCS students have basic knowledge of what sustainability means, its key principles, and sustainable practices. Courses that address sustainability are primarily in Letters Arts and Sciences.

Benefits of Meeting Objective

Our students will increase their awareness of and ability to implement sustainability practices here on campus. Our graduates will have a baseline knowledge of sustainability that will enable them to incorporate sustainability principles and practices into their personal lives and careers. Additionally, our staff and faculty will increase their knowledge and practice of sustainability.

| Five-year Targets | Performance Indicators | Action Steps | Responsible Persons | Resources Needed |
|---|---|---|---|---|
| **1. Increase percent of students, faculty, and staff with basic awareness of sustainability to 50% (it is estimated that less than 5% of students currently have this awareness)** | ▪Increase in awareness through surveys and other instruments<br><br>▪ Increase in number of faculty addressing sustainability topics in their courses<br><br>▪Annual increase in number of faculty who have attended Transforming the Curriculum Workshop | ▪Develop Transforming the Curriculum Workshop to further incorporation of sustainability in courses<br><br>▪Sponsor faculty, staff, students, and guest speaker presentations on sustainability topics.<br><br>▪Encourage students to raise sustainability issues in their courses<br><br>▪Work with Residence Life and Housing to encourage sustainable living options.<br><br>▪Work with Freshman Seminar (FS) program to include sustainability in all FS courses and to have one course that focuses specifically on sustainability<br><br>▪Encourage faculty to include sustainability topics in their courses<br><br>▪Install signage that educates about sustainable habits and practices<br><br>▪Speakers and educational events focused on sustainable practices<br><br>▪Consider Ecological Footprint tables at University events | **Sustainable Development Minor Director/Campus Sustainability Committee**<br><br>▪Sustainable Development Minor faculty group<br><br>▪Chancellor<br><br>▪VC's and Provost<br><br>▪Deans and directors<br><br>▪UCCS faculty and interested staff<br><br>▪Residence Life Staff/RAs etc.<br><br>▪Freshman Seminar staff and instructors | ▪Funding for Transforming the Curriculum Workshop<br><br>▪Marketing expenses for sustainability courses and events<br><br>▪Financial support to bring guest speakers on campus<br><br>▪Course off-load for development of Transforming the Curriculum<br><br>▪Service time provided<br><br>▪staff for committee work |

## Education – Awareness

| Five-year Targets | Performance Indicators | Action Steps | Responsible Persons | Resources Needed |
|---|---|---|---|---|
| **2. Include Sustainability in LAS General Education Requirements** | Fall 2012 Schedule of Courses includes the LAS Sustainability Requirement. | ▪Determine list of courses that would meet the new LAS requirement.<br>▪Research sustainability requirements at other schools<br>▪Write synopsis supporting inclusion of sustainability in the LAS requirements<br>▪Meet with appropriate governance persons, organizations, and students, to achieve support<br>▪When approved, ensure changes are included in the Bulletin | **Sustainable Development Minor Director**<br>▪ Sustainable Development Minor faculty<br>▪Leadership Team<br>▪Provost<br>▪SEAS<br>▪Student Government Association<br>▪LAS administrators<br>▪Student Success | Service time provided to staff for committee work |
| **3. Incorporate specific sustainability language into the measurement of the UCCS General Education Core Goal #4, "Students will be prepared to participate as responsible members of a pluralistic society – locally, nationally, and globally."** | Sustainability language is changed and approved | ▪Elicit support for inclusion of sustainability measurement in Core Goal #4 from Student Achievement Assessment Committee (SAAC) and Faculty Assembly<br>▪Work with SAAC to develop appropriate measurement instrument | **Campus Sustainability Committee**<br>▪Sustainable Development Minor Director<br>▪SAAC<br>▪Deans Council<br>▪Faculty Assembly<br>▪Leadership Team<br>▪SEAS<br>▪Institutional research | Service time provided to staff for committee work |

## Education – Sustainable Development Minor

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|---|---|
| Education Objective 2 | **Provide excellent in-depth sustainability education through an exemplary Sustainable Development Minor** |
| Current Situation/Baseline | The Sustainable Development Minor was approved in January 2006. There is currently no assessment method to ensure the quality or nature of sustainability material within the Minor courses or to measure learning outcomes. Expanded cooperation between faculty teaching in the Minor is needed. |
| Benefits of meeting objective | Strengthening the Sustainable Development Minor will solidify learning objectives and assessment and provide a more cohesive education experience for graduates. Additionally, faculty teaching courses linked to the Minor will benefit from shared educational materials, closer connections to other faculty in the Minor, and collaborative opportunities on sustainability projects and research. |

| Five-year Targets | Performance Indicators | Action Steps | Responsible Persons | Resources Needed |
|---|---|---|---|---|
| **1. Strengthen the Sustainable Development Minor to increase knowledge, skills, and attitude of graduating students** | ▪Assessment plan for the Sustainable Development Minor meets SAAC criteria<br>▪The number of students awarded the Minor in 2012 increases by 20%<br>▪Survey of graduates indicates expectations of Minor are met<br>▪Development of a Minor committee<br>▪Formalization of the oversight of the Minor and communication pathways of the involved faculty<br>▪Minor website is complete and current | ▪Establish an introductory or capstone course within the Minor<br>▪Establish formal communication method between faculty teaching in the Minor<br>▪Increase sustainable development courses in all disciplines<br>▪Develop and maintain website for the Minor<br>▪Design and conduct exit interview of graduates within the Minor<br>▪Develop assessment plan | **Sustainable Development Minor Director**<br>▪Campus Sustainability Committee<br>▪Sustainable Development Minor team<br>▪Faculty teaching courses in the Minor<br>▪Teaching and Learning Center<br>▪Institutional Research | ▪Course buy-out for Minor director<br>▪Service time provided to faculty for course development<br>▪Resource support for sponsoring workshop with faculty from the Sustainable Development Minor<br>▪Student worker for Minor |
| **2. Increase visibility and marketing of Sustainable Development Minor** | ▪Sustainability courses/Minor are advertised on website<br>▪Student Success Advisors are aware of the Minor | ▪Update sustainability courses and Minor on Student Success and sustainability websites<br>▪Keep student advisors informed on the Minor<br>▪Publicize sustainability education events to campus and greater community<br>▪Distribute information about the Sustainable Development Minor to all faculty<br>▪Market the Minor to the Colorado Springs community<br>▪Connect students within the Minor via gatherings, lectures, and sustainability website | **Sustainable Development Minor Director**<br>▪Academic advising<br>▪Student Success<br>▪Campus Sustainability Committee<br>▪Sustainability Officer<br>▪Public relations | Materials for signage and advertising |

## Education – Involvement

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|---|---|
| Education Objective 3 | **Increase number of faculty, staff, and students involved in sustainability initiatives on and off campus.** |
| Current Situation/Baseline | Numerous sustainability projects and research opportunities are possible, many with a direct focus on improving the UCCS campus. While there is increasing interest on the campus in sustainable projects, including our new buildings, renewable energy, food production and disposal, and greenhouse gas emissions, there is no formal organization or publicizing of these projects or research opportunities. |
| Benefits of meeting objective | Increasing the involvement of the campus community in sustainability projects and research will increase the ability and incentive to pursue sustainable operations, prepare students to be more effective contributors to the global community, reduce costs due to increased sustainability practices on campus, and create a positive image for UCCS in the greater community. Additionally, sustainability projects and research will enable us to attract increased funding from grants for these initiatives. |

| Five-year Targets | Performance Indicators | Action Steps | Responsible Persons | Resources Needed |
|---|---|---|---|---|
| **1. Increase research on sustainability** | ▪Increase in percent of faculty conducting sustainability research<br><br>▪Increase in number of proposals regarding sustainability research submitted and funded | ▪Determine current research initiatives and grants on campus<br><br>▪Publicize ongoing research incorporating sustainability on the campus<br><br>▪Publicize sustainable research opportunities on campus and in the greater community | **Sustainable Development Minor Director**<br><br>▪Faculty in the Minor<br><br>▪Associate Vice Chancellor for Research<br><br>▪Institutional Research<br><br>▪Office of Sponsored Programs<br><br>▪Campus Sustainability Committee<br><br>▪Students in the Minor<br><br>▪VCAA<br><br>▪Sustainability Officer | Staff time for website development and coordination |

## Education – Involvement

| Five-year Targets | Performance Indicators | Action Steps | Responsible Persons | Resources Needed |
|---|---|---|---|---|
| **2. Increase number of staff, faculty, and students involved in sustainability projects on campus** | ▪Increased signage explaining sustainability features and initiatives<br><br>▪Annual sustainability awards for best practices on campus | ▪Increase visibility of sustainable campus operations initiatives through newsletter, website, and signage<br><br>▪Create partnerships between faculty and operations staff to conduct sustainability projects with students<br><br>▪Publicize opportunities for students to conduct research in sustainable operations<br><br>▪Create sustainability award to be included in campus awards ceremony<br><br>▪Create Pledge for Sustainability - get campus community to sign - consider matching with funds for investment in sustainability efforts | **Sustainability Officer**<br><br>▪Facilities staff<br><br>▪Campus Sustainability Committee<br><br>▪Faculty to work with independent study students<br><br>▪Public Safety<br><br>▪Staff of Resident Life and Housing<br><br>▪Students for work study or independent study<br><br>▪Student organizations (SEAS) | ▪Incentives for campus based sustainability projects<br><br>▪Funds for promotional materials, signage, etc.<br><br>▪Award materials |
| **3. Increase collaboration and learning opportunities with Colorado Springs community regarding sustainability** | ▪Increased attendance at sustainability events by members of the Colorado Springs community<br><br>▪Increase in number of student projects accomplished in coordination with community | ▪List community sustainability projects and organizations on UCCS sustainability website<br><br>▪Develop list of field trips that demonstrate sustainability initiatives<br><br>▪Identify faculty members interested in setting up internships or projects with local businesses<br><br>▪Market and invite community to sustainability lectures and events on campus<br><br>▪Invite community participation on UCCS sustainability working groups<br><br>▪Market Sustainable Development Minor to Colorado Springs community | **Sustainable Development Minor Director**<br><br>▪Faculty involved in the Minor<br><br>▪Students involved in the Minor<br><br>▪Sustainability Officer | ▪Course off-load for Director<br><br>▪Marketing to the Colorado Springs community |

## Education – Healthy Lifestyles

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|---|---|
| Education Objective 4 | ***Promote healthy lifestyles and behaviors to the campus community.*** |
| Current Situation/Baseline | The current condition of our physical, social, and emotional climate affects the wellbeing of individuals. However, sustainability awareness is rarely linked to healthy living and safety. The task of the University in sustainability and health is to counteract harmful activities, such as poor nutrition, smoking, and unhealthy living conditions, and to reorient health services and benefits toward the promotion of wellness. |
| Benefits of meeting objective | Comprehensive health promotion services on campus will increase the opportunity and likelihood of students, staff, and faculty to participate in wellness activities. Additionally, UCCS can create an identity of a "healthy" campus by promoting walking and cycling and improving the necessary infrastructure, and by providing buildings that maximize healthy materials and high indoor air quality. A healthy campus translates into less sick days and greater productivity throughout the campus community. |

| Five-year Targets | Performance Indicators | Action Steps | Responsible Persons | Resources Needed |
|---|---|---|---|---|
| **1. Increase percentage of people who participate in preventive health services and practices** | Health surveys show increase in participation in preventative health services and practices | ▪Identify preventative physical and psychological health services and practices<br>▪Develop program for health screening<br>▪Develop programs and education linking sustainability and wellness<br>▪Develop safety and wellness indicators<br>▪Develop wellness incentives<br>▪Create identity for UCCS as a community dedicated to health and wellness | **Health Center**<br>▪Public Safety Department<br>▪Environmental Health and Safety<br>▪Student Groups - SEAS, SGA, etc.<br>▪Campus Sustainability Committee<br>▪Residence Life and Housing Admin Team<br>▪Finance Team: UBAC<br>▪Assessment Team: SAAC/Institutional Research<br>▪Community Partnerships | ▪Coordinator Position<br>▪Research Team<br>▪Access to fitness facilities<br>▪Worksite weight control/Healthy Food<br>▪Program funding |

# Operations Action Plans

Operations Vision

***UCCS will be a living laboratory where the infrastructure and operations exemplify sustainable practices and serve as teaching tools for the entire campus community.***

## Operations – Energy

Operations Objective 1

**Significantly reduce greenhouse gas emissions by reducing energy use and increasing the use of renewable energy.**

Current Situation/Baseline

UCCS is currently expending a 1.3 million Energy Performance Bond to identify and address conservation projects. In 2007, the Chancellor signed the American College & University President's Climate Commitment (Appendix B), which requires the University to establish an plan to achieve carbon neutrality by a future date. There is a commitment to install solar pre-heat for the Recreation Center swimming pool, our first renewable energy project. For energy use statistics, see footnote page 30.*

Benefits of Meeting Objective

Pursuing the outlined energy strategy will not only reduce greenhouse gas emissions, but will provide significant savings and avoided costs for the University. Other benefits include creating a leadership and educational role in our community regarding energy conservation practices, contributing to improved air quality for the Pikes Peak region, and providing potential renewable energy research opportunities.

| Five-year Targets | Performance Indicators | Action Steps | Responsible Persons | Resources Needed |
|---|---|---|---|---|
| **1. Decrease Energy Use Intensity (per square foot) of campus to 20% below 2006 level.*** | ▪Energy Use Intensity is tracked and reduced by 4% per year<br>▪Monitoring of savings and cost avoidance increase show increases in both<br>▪Rebates are received for energy conservation initiatives | ▪Create position of Energy and Conservation Engineer within Facilities Services<br>▪Communicate energy goals to entire campus<br>▪Establish Energy Management website<br>▪Establish revolving Sustainability Fund<br>▪Complete no and low cost measures recommended by audits<br>▪Continue projects for Energy Performance Bond<br>▪Establish Energy Committee of faculty, staff and students<br>▪Approve Energy Policy for campus with temperatures, hours of operation, conservation tips<br>▪Develop ongoing conservation education<br>▪Purchase Energy Star equipment<br>▪Include mechanical upgrades for energy conservation in scope for all renovations<br>▪Develop Energy Strategic Plan for campus to inform future Facilities Strategic Plans | **Energy Engineer**<br>▪Sustainability Office<br>▪Facilities Services<br>▪VCAF<br>▪Auxiliary Services directors<br>▪Energy Committee of faculty, staff, and students<br>▪Facilities Resource Conservation Group<br>▪Building Sustainability Supervisors | ▪Salary of Energy and Conservation Engineer funded by savings<br>▪Existing 1.3 million Energy Performance Bond<br>▪Revolving Sustainability Fund to provide $100-150K seed money for projects to be based on Simple Payback and Return on Investment<br>▪Significant operating expense savings<br>▪Staff time for committee involvement |

*Recommended target of Colorado Executive Order D0011 07

## Operations – Energy

| Five-year Targets | Performance Indicators | Action Steps | Responsible Persons | Resources Needed |
|---|---|---|---|---|
| **2. Increase energy efficiency of new buildings to 20% below ASHRAE standards** | ▪Monitor new building design for energy efficiency<br><br>▪Monitor energy use of new buildings when they are operating (initially with commissioning agents, then facilities staff) | ▪Develop and follow UCCS Facilities Guidelines and Specifications for New Buildings<br><br>▪Prepare accurate design and construction budgets to meet energy goals<br><br>▪Communicate and enforce campus energy standards to all contractors<br><br>▪Commission all new buildings<br><br>▪Provide adequate energy training for facilities staff managing new buildings<br><br>▪Establish percentage of construction budget (1-5%) for energy performance options-Use Life Cycle Cost framework to justify | **Campus Architect**<br><br>▪Facilities Services<br><br>▪ Sustainability Office<br><br>▪VCAF<br><br>▪Energy Committee<br><br>▪Architects and contractors working on new buildings and renovations<br><br>▪Commissioning agents | ▪Whole system, high performance design incorporated at beginning will keep costs lower<br><br>▪May or may not incur slightly higher first costs that produce significant operating savings and short paybacks |
| **3. Meet 10% of the school's energy use through renewable energy** | Calculate percentage of energy use met from renewable energy each year | ▪Establish renewable energy portfolio that may include Renewable Energy Credits, photovoltaics, geothermal, wind energy, biomass<br><br>▪Provide incentives for research on campus to pursue renewable energy strategies for campus<br><br>▪Look for opportunities to partner on renewable energy research and projects with external agents<br><br>▪Research local renewable energy projects for feasibility and design<br><br>▪Pursue grants and rebates to fund strategies | **Renewable Energy Subcommittee**<br><br>▪EAS faculty and students<br><br>▪Business faculty and students<br><br>▪Renewable energy faculty<br><br>▪Office of Sustainability<br><br>▪VCAF and Chancellor<br><br>▪Colorado Springs Utilities | ▪Initially higher costs with potentially significant paybacks for on-site generation projects<br><br>▪Potential for grant funds and rebates<br><br>▪Energy Committee – staff time - potentially consultants |

*Fiscal year 2006, our total Energy Use Intensity was 105,061 BTU per sq. ft. for a cost of $1.34/sq. ft. The University used a total of 18,615,586 kWh of electricity and 666,371 CCF (hundred cubic feet) of natural gas. The University spent $1,693,119 on energy: $1,206,775 for electricity, $486,344 for natural gas. Many of our buildings currently exceed the EPA Energy Star benchmark levels of energy use intensity. For fiscal year 2006, greenhouse gas emissions from building energy use was 20,653 tons, or 41,391,790 lbs. of CO2.

## Operations – Energy

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|---|---|---|---|---|
| **4. Develop UCCS Energy Policy to communicate and encourage conservation** | Approval and communication of Energy Policy by administration | ▪Research successful energy policies at other universities<br>▪Policy will communicate campus hours of operation, temperature bands, conservation expectations, etc.<br>▪Make this a priority of an Energy Committee on campus<br>▪Collaborate with Facilities Services to complement existing programs | **Energy Committee**<br>▪Facilities Services<br>▪Directors of Auxiliary Services<br>▪Chancellor<br>▪VCAF<br>▪Deans and directors | Staff time |
| **5. Meet requirements of American College and University Presidents Climate Commitment** | ▪Greenhouse gas emissions reports each year<br>▪Development of plan within 2 years to achieve carbon neutrality<br>▪Reports that demonstrate our meeting of the commitment | ▪Develop infrastructure (committee) to develop climate neutrality plan for UCCS within 2 years<br>▪Develop mechanism to conduct greenhouse gas inventories each year<br>▪Determine 2 initiatives that will be pursued for reducing greenhouse gas emissions to be completed in the next 2 years<br>▪Develop mechanism to provide transparency and report to Climate Commitment committee<br>▪Establish CU system committee to collaborate on strategies<br>▪Collaborate with other signatory schools and the Association for the Advancement of Sustainability in Higher Education | **Chancellor and VCAF**<br>▪ Energy and Conservation Engineer<br>▪Sustainability Officer<br>▪Energy Committee<br>▪Campus Architect | Cost will depend on which two energy initiatives are chosen and the ultimate carbon reduction plan |

## Operations – Water

Operations Objective 2 **Institute water conservation practices and planning throughout the campus to reduce both domestic and outdoor water use, and provide a model of effective stormwater management.**

Current Situation/Baseline

Indoor water use for fiscal year 2006 was 24,709,641 gallons at a cost of $69,852. Newer buildings on campus have low water facilities, but there are still a number of buildings appropriate for water efficiency retrofits. Two new buildings currently under construction will be LEED certified and are aiming for a 20**%** reduction in water use, but this is not a campus standard. Water use for irrigation for 2006 was 8,437,066 gallons at a cost of $35,073. Currently 74 acres on campus are irrigated. A conversion of some of the school's grass areas to xeriscape was recommended as part of a recent energy audit of the school, but has not been pursued. All water on the UCCS campus is potable supplied by Colorado Springs Utilities. Wastewater costs for fiscal year 2006 were $54,847.

Benefits of Meeting Objective

The rapid growth rate of the Colorado Springs region necessitates elaborate water schemes and significantly increasing water costs to supply the growing population. Xeriscape landscapes will model appropriate and aesthetic vegetation for the campus and greater community to learn and emulate. The University can lower demand on the water system, create conservation savings, and model responsible water use though adoption of the following targets.

| Five-year Targets | Performance Indicators | Action Steps | Responsible Persons | Resources Needed |
|---|---|---|---|---|
| **1. Decrease outdoor water use intensity on campus by 10%.*** <br><br> *Recommended target of Colorado Executive Order D001 07 | ▪Water use intensity (irrigation per square feet) decreases | ▪Calculate outdoor water use intensity baseline <br><br> ▪Reduce current irrigation water use by installing automated irrigation system <br><br> ▪Convert appropriate turf areas to native and low water vegetation <br><br> ▪Emphasize native, and low water vegetation for all new buildings and in Facilities Strategic Plans <br><br> ▪ Design new buildings to divert rain water through landscape areas <br><br> ▪Ensure that there is adequate submetering for irrigation in all existing and new buildings <br><br> ▪Develop Xeriscape demonstration garden to education the community | **Grounds Department** <br><br> ▪Facilities Services <br><br> ▪Landscape Committee <br><br> ▪Campus Architect <br><br> ▪Office of Sustainability <br><br> ▪VCAF <br><br> ▪UCCS Leadership Team | ▪New irrigation system $3-400,000 requested for fiscal 2008 state projects budget <br><br> ▪Staff time <br><br> ▪Cost to convert turf to Xeriscape |

## Operations – Water

| Five-year Targets | Performance Indicators | Action Steps | Responsible Persons | Resources Needed |
|---|---|---|---|---|
| **2. Decrease indoor water use in existing buildings by 10%.*** <br><br> *Recommended target of Colorado Executive Order D001 07 | ▪Utilities bills show targeted reduction of water use <br><br> ▪Water saving retrofits are tracked to show decreases in water use | ▪Schedule retrofit water saving devices and equipment for all existing buildings <br><br> ▪ Implement water efficient devices and equipment in all new buildings to include (front load clothes washers, shower heads, faucet aerators, single mixing valve faucets, faucet censors, flush valve kits, dual flush toilets, waterless urinals, control valve or standby program for autoclaves) <br><br> ▪Establish standard of 20% water use reduction over conventional buildings in all new construction <br><br> ▪Conduct water conservation education for campus, especially in student residences | **Physical Plant Manager /Plumbing Shop** <br><br> ▪Office of Sustainability <br><br> ▪Campus Architect <br><br> ▪VCAF <br><br> ▪Director Residence Life and Housing <br><br> ▪Auxiliary Services directors | Materials for retrofits and installation costs - some to be covered by Energy Performance Bond |
| **3. Develop comprehensive stormwater plan that mitigates stormwater runoff and decreases impervious surfaces** | UCCS Stormwater Plan is used to guide development decisions on the campus | ▪Develop and integrate UCCS Stormwater Plan into Facilities Strategic Plan for future growth <br><br> ▪Ensure that Stormwater Plan is shared with all relevant contractors <br><br> ▪Research methods for stormwater mitigation including pervious pavement, green roofs <br><br> ▪Work with city to develop credit system for mitigation efforts | **Director - Facilities Services** <br><br> ▪Campus Architect <br><br> ▪Office of Sustainability <br><br> ▪VCAF | ▪Staff time <br><br> ▪Collaboration with the City of Colorado Springs <br><br> ▪Pervious pavement and green roof add some cost to projects - may be offset by grants or rebates |

## Operations – Transportation

Operations Objective 3 **Create a pedestrian and bicycle oriented campus that provides alternative transportation options and reduces the overall greenhouse gas emissions from trips to and from the University.**

Current Situation/Baseline: Less than 13% of the campus community currently uses alternative forms of transportation to arrive on campus. A 2004 study revealed that 4% carpool, 4% use buses, 3% use bicycles, and 2% walk to UCCS. The majority of the UCCS community use single-occupancy vehicles (SOV) as their primary mode of transportation. The campus currently falls short of being pedestrian and bicycle friendly, mainly due to connectivity issues within the campus, and difficult entry for these modes from off campus.

Benefits of Meeting Objective: Adoption of comprehensive transportation planning and transportation demand management strategies will ensure that future growth creates and preserves an attractive pedestrian and bicycle friendly campus. Considerable cost avoidance can be achieved by reducing the number of parking spaces and subsequent parking structures that will need to be built as a result of greater reliance on alternate means of travel. Other benefits include the reduction of greenhouse gas emissions, higher air quality around the campus, reduced traffic congestion, and increased safety from reduced pedestrian-car interaction.

| Five-year Targets | Performance Indicators | Action Steps | Responsible Persons | Resources Needed |
|---|---|---|---|---|
| **1. Develop Transportation Demand Management (TDM) strategies to reduce Single Occupancy Vehicle(SOV) travel to the campus** | ▪Monitor TDM tools that have been implemented for effectiveness<br>▪Yearly report on completed TDM measures<br>▪Reduction in SOV travel to campus | ▪Pursue alternative transportation coordinator position within Public Safety<br>▪Create UCCS TDM Committee of faculty, staff, students and community transportation planners to work on ped/bike infrastructure, public transit, transportation funding opportunities, and parking strategies<br>▪Develop and implement UCCS TDM plan<br>▪Support the "Transportation & Traffic Advisory Board" on campus to incorporate sustainability strategies<br>▪Investigate feasibility of bus hub on campus<br>▪Develop demographic study of student, faculty, staff home and work locations and travel times (GIS)<br>▪Increase campus access to bus passes<br>▪Work with city to ensure the maintenance and expansion of University routes as needed<br>▪Support rapid transit line down Nevada<br>▪Increase safety at major intersections onto campus<br>▪Investigate car-pooling program on campus<br>▪Promote parking permit sharing<br>▪Establish annual transportation education fair<br>▪Encourage FREX stop at Four-diamonds | **Public Safety**<br>▪Facilities Services<br>▪Campus Admin.<br>▪Sustainability Office<br>▪Auxiliary Services<br>▪ TDM Committee<br>▪Transportation and Traffic Advisory Board<br>▪Residence Hall Association<br>▪SGA<br>▪Student Success Center<br>▪City transit planners, bike/ped planners, PPCAG, Parks and Recreation, etc.<br>▪Mountain Metro Transit | ▪Funding for part time position through GSPA<br>▪Purchase reference materials<br>▪Staff time needed for research and surveys<br>▪Partnership with Mountain Metro Transit |

## Operations – Transportation

| Five-year Targets | Performance Indicators | Action Steps | Responsible Persons | Resources Needed |
|---|---|---|---|---|
| **2. Develop comprehensive UCCS Transportation Plan for future development** | ▪Completion and implementation of plan<br><br>▪Incorporation into next UCCS Facilities Strategic Plan | ▪Develop Transportation Task Force to begin development of plan<br><br>▪Research successful examples of campus transportation plans<br><br>▪Create budget and obtain funds for developing plan<br><br>▪Examine how Transportation Plan will support current and future UCCS Facilities Strategic Plans | **Public Safety / Facilities Services**<br><br>▪Transportation Planning Consultant<br><br>▪Sustainability Office<br><br>▪Transportation and Traffic Advisory Board | ▪Fees for transportation planning consultant<br><br>▪Staff time |
| **3. Create more pedestrian and bicycle friendly campus through improved infrastructure** | ▪Increase in quantity of bike and pedestrian trails on campus and entering the campus<br><br>▪Bike registration show increase each year<br><br>▪UCCS becomes seen as safe and pleasant place to bike and walk | ▪Research the potential and effectiveness of options such as a bike loan program, improving pedestrian and bicycle infrastructure, bicycle maintenance stations<br><br>▪Work with City to improve safety of major access points to campus<br><br>▪Conduct baseline audit of current surface area of sidewalks<br><br>▪Create and distribute a bike/pedestrian map of the campus and routes to get to campus<br><br>▪Increase the number of bike racks on campus<br><br>▪Establish a walk/bike/ride the bus to work week on campus, concurrently with the city of Colorado Springs<br><br>▪Pursue alternative transportation coordinator position within Public Safety | **Public Safety / Facilities Services**<br><br>▪Campus Architect<br><br>▪Residential Housing Authority (RHA)<br><br>▪Alternative transportation coordinator | ▪Funding for bike racks<br><br>▪Limited capital funding<br><br>▪Staff time needed to monitor programs and find alternative sources of funding (i.e., grants, restaurant sponsorship, etc.) |

## Operations – Transportation

| Five-year Targets | Performance Indicators | Action Steps | Responsible Persons | Resources Needed |
|---|---|---|---|---|
| **4. Decrease fuel emissions from University vehicles and University business related travel***<br><br>*Recommended target is a 25% volumetric reduction in petroleum consumption as per Colorado Executive Order D0011 07 | ▪Increase in percentage of bio-diesel gallons purchased each year<br><br>▪Increase if percentage of consolidated trips to off-campus meeting sites.<br><br>▪Increase number of teleconferences and distance learning classes | ▪Run University-owned busses on biodiesel, at least B-20 in summer (B-5 in winter)<br><br>▪Purchase hybrid or high fuel efficiency vehicles<br><br>▪Consolidate trips off campus for supplies and for meetings at other CU campuses<br><br>▪Increase bicycle program for Public Safety<br><br>▪Support and track teleconferencing program<br><br>▪Support and track academic distance learning program | **Public Safety**<br><br>▪Facilities Services<br><br>▪Campus Administration<br><br>▪Information Technology<br><br>▪Academic Affairs | ▪Staff time needed to monitor programs<br><br>▪Biodiesel costs may be less or more than diesel<br><br>▪Increased capacity for teleconferencing<br><br>▪Increased funding for initial capital cost for hybrid vehicles - lower operating costs |

## Operations – Sustainable Infrastructure

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| Operations Objective 4 | **Implement comprehensive building and land use planning that ensures energy and water conservation, efficient transportation, sustainable building materials, occupant health, and serves as a continuing applied learning opportunity for the university community.** |
| Current Situation/Baseline | The University is currently pursuing LEED certification for two new buildings, the Recreation Center and the Science Engineering Building. There are no comprehensive campus building guidelines that specify features such as sustainable materials, energy and water efficiency, or low VOC materials. The University is currently drafting the UCCS Facilities Guidelines and Specifications that will raise UCCS campus building standards toward at least a LEED Silver certification equivalent. |
| Benefits of Meeting Objective | High performance buildings reduce operating costs and provide for healthier work environments. Since the workforce is the greatest ongoing expense of any building, reduced sick days and increased productivity can result in significant savings for the University. LEED certified buildings provide recognition for the University as a leader in sustainability and serve as a model for our community. |

| Five-year Targets | Performance Indicators | Action Steps | Responsible Persons | Resources Needed |
|---|---|---|---|---|
| **1. Meet highest possible certification level of LEED ™ for new construction*** | ▪Achieve highest certification level possible<br><br>▪If certification is not pursued, establish mechanism for ensuring highest level LEED™ equivalency* | ▪Develop Facilities Guidelines and Specifications<br><br>▪Set goal with contractors to meet LEED™-NC Gold Standard within a cap of 5% of project budget<br><br>▪Develop Campus Design Guidelines to include Landscape Plan<br><br>▪Develop Energy Plan for energy caps on new buildings and use of renewables<br><br>▪Incorporate high performance building costs in new building and renovation budgets (up to 5%)<br><br>▪Employ Life Cycle Cost process to guide new construction, renovations and mechanical purchases<br><br>▪Commit to commissioning all new buildings to ensure high performance design intent is met<br><br>▪Pursue green building grants and rebates during design and construction process<br><br>▪Pursue LAB 21 standards for all buildings with Laboratories | **Campus Architect**<br><br>▪Facilities Services<br><br>▪VCAF<br><br>▪Office of Sustainability<br><br>▪Energy Committee<br><br>▪Landscape Committee<br><br>▪CU Foundation | ▪To comply with SB 051 up to 5% the project budget must be allocated to achieving the highest level of certification possible*<br><br>▪Commissioning can provide significant savings to new construction projects<br><br>▪Grant funds are sometimes available for green building initiatives |
| *As per Senate Bill 051-for buildings receiving 25% of project funding from the state | *For those buildings receiving less than 25% of project funds from State | | | *Applies to buildings >5000 square ft., and receiving at least 25% of project costs from state |

## Operations – Sustainable Infrastructure

| Five-year Targets | Performance Indicators | Action Steps | Responsible Persons | Resources Needed |
|---|---|---|---|---|
| **2. Incorporate sustainable design standards in all future UCCS Facilities Strategic plans** | ▪Incorporation of Energy and Transportation Plans into Facilities Strategic Plan<br><br>▪Utilization of Facilities Strategic Plans, including Transportation and Energy Plans, for informing development decisions | ▪Complete UCCS Transportation Plan<br><br>▪Complete UCCS Energy Plan<br><br>▪Ensure that Facilities Strategic Planners (consultants) have sustainable development planning expertise<br><br>▪Complete UCCS Utilities Strategic Plan | **Director - Facilities Services**<br><br>▪Directors - Auxiliary Services<br><br>▪VCAF<br><br>▪UCCS Leadership team<br><br>▪UCCS TDM Committee<br><br>▪Energy Committee<br><br>▪Facilities Strategic Plan consultants<br><br>▪Colorado Springs city planners<br><br>▪Transportation planning consultant | ▪Staff time<br><br>▪Consulting fees<br><br>▪Ultimately this could save significant money in operating costs |

## Operations – Waste/Recycling

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| Operations Objective 5 | **Institute comprehensive recycling program at UCCS to reduce material waste, divert waste from the landfill, and provide recycling education to the UCCS community.** |
| Current Situation/Baseline | UCCS currently has no comprehensive recycling program and participation in current recycling initiatives is low. Approximately 5% of UCCS waste is diverted from the landfill.* A proposal is being developed for a comprehensive recycling program to be implemented in 2007. Two new buildings under construction, the Recreation Center and the Science Engineering Building, are currently pursuing 75% percent construction waste recycling, the first such projects to do so on the campus. |
| Benefits of Meeting Objective | Recycling is the most visible sign of a campus committed to sustainability. It provides educational opportunities for students and campus community to extend recycling practices in their personal lives. There is a potential future reduction in waste expenses with increased tipping fees and increased diversion of waste. |

| Five-year Targets | Performance Indicators | Action Steps | Responsible Persons | Resources Needed |
|---|---|---|---|---|
| **1. Recycle at least 26% of waste (start within 1 year)** | ▪Conduct baseline audit<br>▪ Conduct yearly audits to ensure landfilled waste is reduced by 5% each year | ▪Develop scope of recycling, materials, quantities<br>▪Prepare RFP for waste/recycling companies to conduct recycling for UCCS<br>▪Hire recycling coordinator for school<br>▪Develop plan for location of bins and necessary internal processes<br>▪Purchase bins and necessary equipment<br>▪Develop informational campaign to achieve full participation of campus<br>▪Decrease non-recyclable materials used by the University | **Facilities Services / Auxiliary Services**<br>▪Recycling Coordinator<br>▪VCAF<br>▪Waste/Recycling Committee to identify recycling needs on campus, prepare informational campaign<br>▪Office of Sustainability | ▪Some recycling bins if not provided by vendor<br>▪Potential increased cost for recycle pickups -waste costs will go down<br>▪Part-time UCCS employee for recycling coordination |
| **2. Achieve at least 75% construction waste recycling on all new projects and renovations (currently in progress)***<br><br>*Recommended target is zero waste as per Colorado Executive Order D0011 07 | Measurement of construction waste and recycling indicates at least 75% recycling | ▪Include 75% construction waste recycling in scope of work for contractors (2 LEED points)<br>▪Support UCCS Project Managers to enforce recycling<br>▪Make construction recycling a permanent part of Facilities Guidelines and Specifications<br>▪Select materials for Facilities Guidelines and Specifications that are recyclable | **Facilities Services – Project Managers**<br>▪Campus Recycling Coordinator<br>▪Campus Architect<br>▪Office of Sustainability<br>▪VCAF | Depends on market conditions for recyclables. Generally there is little or no added cost for construction waste recycling (perhaps with the exception of drywall). |

## Operations – Waste/Recycling

| Five-year Targets | Performance Indicators | Action Steps | Responsible Persons | Resources Needed |
|---|---|---|---|---|
| **3. Develop campus-wide program for recycling or refilling toner cartridges** | Successful transition to campus-wide cartridge recycling or refilling program | ▪Determine all campus purchasers of cartridges<br>▪Conduct budget analysis to determine potential savings from cartridge refill or recycle<br>▪Examine cartridge contracts<br>▪Work with PSC to determine system for getting cartridges refilled - possibly new contracts | **IT Department**<br>▪Campus cartridge purchasers<br>▪Campus Recycling Coordinator<br>▪VCAF<br>▪PSC<br>▪Office of Sustainability | This initiative will produce considerable savings to the University if cartridges are refilled |

* Estimated quantities of recycling based on interviews with facilities staff in 2003 and 2006. A complete audit is needed to determine accurate quantities.

## Operations – Paper Consumption

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| Operations Objective 6 | **Significantly reduce paper consumption per person and utilize a greater percentage of recycled paper products.** |
| Current Situation/Baseline | Estimated paper use for the campus is over 400,000 pounds per year, which equates to roughly 47 pounds of paper per person on the campus every year. There is double side-printing in some labs, but this practice is not consistently used across the campus. Pay for printing will begin in the computer labs in July 2007. Recycled paper use on the campus is limited. |
| Benefits of Meeting Objective | Reducing paper use significantly decreases both purchasing and waste/recycling costs for the University and especially for the Information Technology department. It also preserves an important resource of carbon sequestration: trees. With one acre of trees removing up to 2.6 tons of carbon dioxide each year, decreasing our paper use is an important contribution the University can make toward reducing greenhouse gasses in the atmosphere. |

| Five-year Targets | Performance Indicators | Action Steps | Responsible Persons | Resources Needed |
|---|---|---|---|---|
| **1. Reduce paper consumption on campus by 30%per campus headcount** | Documented reduction in paper use each year | ▪Increase use of double-sided printing across campus for non-official documents<br>▪Institute pay-for-printing in all computer labs<br>▪Teach students about reducing margins to 1 inch when faculty allow<br>▪Publicize paper use each semester to educate campus community<br>▪Encourage paperless classroom<br>▪Determine ways to increase reliance on electronic reports campus wide | **IT Department**<br>▪Campus paper purchasers<br>▪Office of Sustainability<br>▪SGA<br>▪Campus Sustainability Committee<br>▪SEAS, Student Groups<br>▪PSC<br>▪VCAF | ▪IT department time to design system<br>▪Reduced overall costs |
| **2. Increase purchase of recycled paper on campus in all departments – at least 30% recycled content** | 30% recycled content paper becomes the standard for bulk paper orders | ▪ Make purchase of paper with 30% recycled content a standard campus wide<br>▪ Work with PSC to establish vendors to provide recycled paper<br>▪ Explore combined purchases with CU Boulder or Denver to keep recycled paper costs low<br>▪ Explore possibility of paper with higher than 30% recycled content | **IT Department**<br>▪Campus paper purchasers<br>▪Office of Sustainability<br>▪PSC<br>▪VCAF | Small cost added depending on market |

## Operations – Health and Safety

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| Operations Objective 7 | **Provide a safe and healthy environment for the campus community by ensuring high indoor air quality, minimizing hazardous waste, and limiting exposure to toxic chemicals and pesticides.** |
| Current Situation/Baseline | There is currently no policy for green janitorial cleaning supplies. There is also no pest management policy. There is a policy and set of procedures for Hazardous Materials Management that emphasizes considering less hazardous substitutes, using the least hazardous chemicals, and ordering minimum quantities. Hazardous waste generation for 2003-2006 was: 2003 – 255 gallons & 1356 pounds, 2004 – 150 gallons & 599 pounds, 2005 – 237 gallons & 1250 pounds, and 2006 – 105 gallons & 718 pounds. |
| Benefits of Meeting Objective | Acute and chronic illness, diminished student performance and employee productivity are all potential effects of poor air quality. More than $75 million are spent each year on medical expenses and lost time wages for custodial staff due to chemical-related illnesses in the U.S. Ensuring indoor air quality, as well as a reduction in the use of toxic chemicals, will reduce health risks for the entire University community and especially for custodial and facilities staff. |

| Five-year Targets | Performance Indicators | Action Steps | Responsible Persons | Resources Needed |
|---|---|---|---|---|
| **1. Reduce campus exposure to harmful pesticides through development of integrated pest management plan** | Creation and implementation of integrated pest management plan | ▪Create inventory of pesticides used on campus<br>▪Explore biological, mechanical and cultural methods for pest and weed management<br>▪Support achievement of Master Gardeners Certification for Grounds Department | **Grounds Department**<br>▪Facilities Services<br>▪Auxiliary Services<br>▪Landscape Committee<br>▪Colorado State University Extension Office | Little to no added cost |
| **2. Institute a standard of "green" cleaning products campus-wide** | Acceptance of UCCS cleaning products policy | ▪Inventory current janitorial cleaning products<br>▪Identify "green" cleaning products<br>▪ Explore collaboration with Janitorial Products Pollution Prevention Project<br>▪Transition to green cleaning products<br>▪Train custodial staff on green cleaning products | **Supervisor Custodial staff**<br>▪Custodial staff<br>▪Facilities Services<br>▪Auxiliary Services<br>▪Office of Sustainability | Little to no added cost |

## Operations – Health and Safety

| Five-year Targets | Performance Indicators | Action Steps | Responsible Persons | Resources Needed |
|---|---|---|---|---|
| **3. Use low or no VOC (volatile organic compounds) paints in all new construction, renovations, and maintenance** | Low –VOC products becomes the standard for new construction, renovations, and maintenance projects | ▪Research and develop list of all products that qualify as low or no-VOC<br>▪Include Low-VOC products in Facilities Guidelines and Specifications<br>▪Conduct campus education to ensure use of low VOC products in all maintenance projects | **Campus Architect**<br>▪Physical Plant Manager<br>▪Facilities Services<br>▪Contractors | No added cost |
| **4. Reduce hazardous waste generated by the campus and ensure that it is properly disposed** | Document and monitor use and disposal of hazardous materials | ▪Inventory hazardous materials used on campus<br>▪Form collaboration between Environmental Health and Safety Manager and faculty to look at ways to reduce hazardous waste<br>▪Investigate feasibility of micro-scaling to reduce quantity of hazardous materials used in each experiment<br>▪Advance "Best Management Practices" adopted by many laboratories to maximize safety and minimize waste | **Health and Safety Manager**<br>▪Risk Manager<br>▪Chemistry, Biology, Engineering Faculty<br>▪Facilities Services | Staff time |

## Operations – Green Purchasing

Operations Objective 8 **Institute an environmentally responsible purchasing (ERP) program that facilitates the purchase of cost-competitive products and services.**

Current Situation/Baseline: There is currently no Environmentally Responsible Purchasing program at the University. This is an additional lens that needs to be added when considering products and services for the University. Many of these products and services are routed through the CU Procurement Services Center, so collaboration with this office is crucial.

Benefits of Meeting Objective: The University has a significant impact based on the products and services it selects. Establishing an ERP program lessens our impact and creates a greater demand for these products and services in the market. An ERP program can also provide information for our campus community to extend these purchasing behaviors in their individual lives.

| Five-year Targets | Performance Indicators | Action Steps | Responsible Persons | Resources Needed |
|---|---|---|---|---|
| **1. Collaborate with CU system to identify ERP products and services***<br><br>*ERP program recommended in Colorado Executive Order D0011 017 | ▪Formal list of ERP providers and products and services is developed and distributed | ▪Establish a committee on campus to coordinate and research ERP opportunities<br><br>▪Work with CU Procurement Service Center and CU Boulder to establish list of ERP products and services<br><br>▪Investigate development of policy for ERP procurement | **Office of Sustainability**<br><br>▪VCAF<br><br>▪Auxiliary Services<br><br>▪CU Procurement Service Center (PSC)<br><br>▪Facilities Services | Staff time |
| **2. Increase the amount of products and services purchased through ERP program** | ▪Education program in place regarding ERP program<br><br>▪Record of products and services purchased through ERP program indicates increases | ▪Educate the campus community about ERP programs and policies<br><br>▪Train the campus purchasers to apply an environmentally-responsible purchasing framework in purchasing decisions | **VCAF**<br><br>▪PSC<br><br>▪Campus purchasing agents<br><br>▪Sustainability Office | Staff time |

## Operations – Sustainable Food

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| Operations Objective 9 | **Provide high quality nourishment for people on campus that is healthfully prepared, features organic and locally produced food, serves to educate the campus community about sustainable food choices, and produces minimal food and paper waste.** |
| Current Situation/Baseline | Organic or local food purchasing is not currently required by the food service contract and does not consistently occur. Our current food service provider uses national distributors for the vast majority of purchasing and often does not have the ability to report on location of origin for their products. Sustainability was a significant theme in the last food vendor solicitation process. Fair Trade Coffee is presently served at all locations. Grease is collected and sold to a biodiesel company in Fort Collins. |
| Benefits of Meeting Objective | Food production, processing, and transportation have a large environmental impact including significant greenhouse gas emissions, nonrenewable resource use, and water pollution. Providing sustainable food options and education at the University will lesson our environmental impact and will help our community to make healthy and more informed food choices. |

| Five-year Targets | Performance Indicators | Action Steps | Responsible Persons | Resources Needed |
|---|---|---|---|---|
| **1. Purchase 5-10% locally grown or produced food products throughout the course of the year** | ▪Establishment and procurement of available local items<br><br>▪Records show increase of local procurements (to be provided by vendor and reviewed by University staff) | ▪Work with vendor to define "local"<br><br>▪Include desired percentage of local products in vendor RFP<br><br>▪Work with vendor to develop network of approved local food and beverage distributors<br><br>▪Network with local providers to ensure eligibility or various regulatory compliance with industry standards<br><br>▪Food service provider to work with other state-wide institutions to gauge feasibility and compare successful models | **Residence and Life Director, University Center Director**<br><br>▪Food Advisory Board<br><br>▪Food Service Provider<br><br>▪Interested students, staff and faculty | ▪Staff hours to work with vendor<br><br>▪Possible increase in student fees/meal plan pricing |
| **2. Purchase 5-10% organic products throughout the course of the year** | ▪Establishment and procurement of organic items<br><br>▪Records show increases in organic food procurements (to be provided by vendor and reviewed by University staff) | ▪Include desired organic percentage in vendor RFPs<br><br>▪Work with vendor to develop network of approved organic distributors.<br><br>▪Encourage existing vendors to offer organic choices<br><br>▪Offer organic meal or entrée of the day at the Overlook and the Lodge and increase options based on student support.<br><br>▪Offer organic “grab ‘n’ go” selections at the Overlook, Jazzman’s and the Recreation Center<br><br>▪Require vendor to provide organic options and pricing for catering events | **Residence Life and Housing Director, University Center Director**<br><br>▪Food Advisory Board<br><br>▪Food Service Provider<br><br>▪Interested students, staff and faculty | ▪Staff hours to track invoices<br><br>▪Possible increase in student fees/meal plan pricing |

## Operations – Food

| Five-year Targets | Performance Indicators | Action Steps | Responsible Persons | Resources Needed |
|---|---|---|---|---|
| **3. Implement an educational program designed to increase awareness of sustainable food practices for the entire campus community** | ▪Consistent educational campaigns are developed and delivered to the campus community<br><br>▪Periodic surveys of the campus community indicate increased awareness and likeliness to choose more sustainable food options | ▪Add a sustainability representative to the Food Advisory Board<br><br>▪Develop a curriculum segment on sustainable food for use in freshman seminars<br><br>▪Develop and implement educational campaign about sustainable food choices<br><br>▪Hold focus groups and/or forums for the campus community on a semester basis to facilitate discussion and opportunity for outreach | **Campus Sustainability Committee**<br><br>▪SEAS<br><br>▪Food Advisory Board<br><br>▪Residence Life and Housing Director<br><br>▪SEAS<br><br>▪Sustainability Officer<br><br>▪Sustainability Development Minor Faculty advisors<br><br>▪Student Government Association<br><br>▪Office of Campus Activities | ▪Food service provider resources already designated to education<br><br>▪Promotional materials and printing costs<br><br>▪Staff and student time |
| **4. Develop a food waste plan to research and implement comprehensive composting on campus** | ▪Development of feasibility plan<br><br>▪Full implementation of the plan<br><br>▪Food service provider to provide reports ensuring food is composted | ▪Conduct feasibility study to explore site, required permits, cost, funding opportunities, etc.<br><br>▪ Implement education plan for students, faculty and staff, as well as Food Service Provider (FSP) staff on how to effectively conduct the program<br><br>▪Facilities to distribute the composted materials for landscaping and possibly a gardening program at the Heller Center<br><br>▪ Work with FSP to purchase compostable materials (such as Ceraplast) for containers<br><br>▪Use self-sorting stations where possible | **Residence Life and Housing Director, University Center Director**<br><br>▪Food Advisory Board<br><br>▪Food Service Provider<br><br>▪SEAS<br><br>▪Campus Sustainability Committee<br><br>▪Interested students, staff and faculty<br><br>▪Facilities - Grounds Department | ▪Suitable location<br><br>▪Cost and maintenance of composting unit (or contract)<br><br>▪Education materials<br>▪Additional containers |

# Appendix A

# DRAFT DRAFT DRAFT DRAFT

Campus Sustainability Policy

I. POLICY

It is the policy of the University of Colorado at Colorado Springs to use the best practices of sustainable development on the campus in three separate, yet, interrelated areas: leadership, education, and operations. The campus will use the Sustainability Strategic Plan adopted in May 2007 as a guiding document.

II. AUTHORITY

The authority to develop campus policies rests with UCCS Policy Number 100-001, effectively dated April 19, 2004.

III. PURPOSE

UCCS recognizes the need to reflect the reality that humanity is affecting the environment in ways which are historically unprecedented and which are potentially devastating for natural ecosystems, humans, and all living species. Since universities are an integral part of the global economy/community, we have a fundamental responsibility to teach, train and conduct research for sustainability, a framework addressing environmental, social, and economic factors.

This policy provides the authority for all campus entities to be integral to the concept of sustainability as a campus priority as a main principle. The three main areas of focus for the campus are:

- Leadership
- Education
- Operations

IV. DEFINITIONS

Leadership: Leadership most importantly includes the chancellor and the leadership team consisting of the provost and vice chancellors. At a more operational level, it includes all deans, directors, department heads, and staff supervisors.

Education: The primary job of the University is to educate – both our students and the larger community. Curriculum in this case means the formal curriculum in the form of courses and research projects. It also means the more informal education of the campus and greater community by example and by actively pursuing appropriate opportunities to actively affect sustainability in the region.

Operations: Principally, operations/facilities are those functions of campus that deal with the physical structures, grounds, and infrastructure of the UCCS property. At times it will also

interact with the UCCS neighborhood and City of Colorado Springs functions in and near campus.

Sustainable development: improving the quality and equity of human life while living within the carrying capacity of supporting ecosystems.

V. PROCEDURES

None

VI. RESPONSIBILITY

A. The chancellor is ultimately responsible for all aspects of this policy. But the campus chain of command, both on the academic and the non-academic sides, is also responsible for the total implementation of the policy.

B. The main responsibility for the curriculum lies with the faculty, but the entire campus is a "community" of educators ultimately responsible for the education role of the campus.

C. The Director of Facilities Services has primary responsibility for sustainability in operations and facilities and is assisted by the Campus Sustainability Officer. However, all campus members bear some responsibility for the sustainable culture of the campus.

VII. HISTORY

None

VIII. ATTACHMENTS

A. UCCS Sustainability Strategic Plan

# Appendix B

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.

*(continued...)*

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 more comprehensive 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.

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,

Pam Shockley-Zalabak
President /Chancellor Signature

Pam Shockley-Zalabak
President /Chancellor Name

University of Colorado at Colorado Springs
College or University

2/19/07
Date

# Appendix C

## UCCS Sustainable Energy Management Program, SEMP

**Agents**
**S**ustainability Officer
**E**nergy Engineer
**M**aster Electrician
**P**hysical Plant Manager

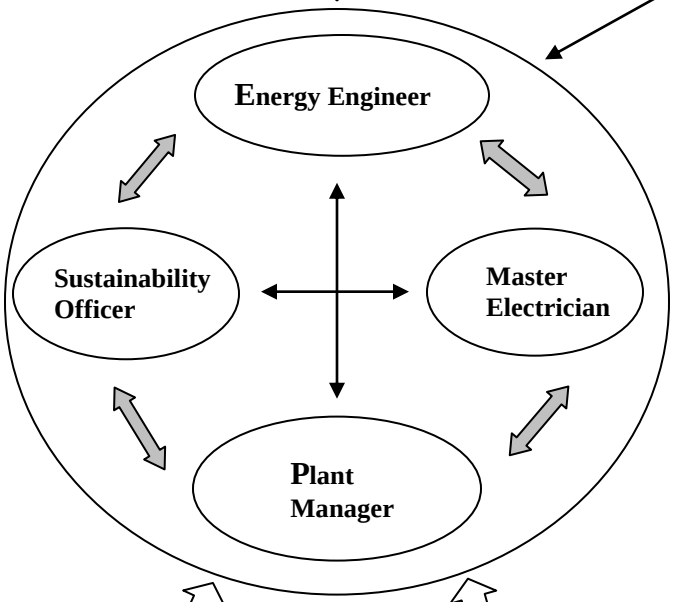
**Facilities Director**

**Objective** – Recognizing the seriousness of global climate change, UCCS will strive to reduce its contribution to greenhouse gasses by reducing energy use and encouraging the use of renewable energy.

**5-year targets:**

- **Target 1** - Decrease Total Energy Use Intensity of UCCS by 20%
- **Target 2** - Increase energy efficiency of all new buildings by at least 20% better than ASHRAE
- **Target 3** - Increase sourcing of energy to10% renewable energy - to meet goal of 25% renewable energy by 2025

**Target 4** - Meet the requirements of the American College and University Presidents Climate Commitment




### *Energy Engineer*

- Commission new buildings – retro-commission existing buildings
- Review Building Design Guidelines and Specifications
- Review design and construction documents
- Coordinate development of Energy Master Plan
- Complete LCC for mechanical equipment and infrastructure to coordinate with SEMP
- Guide UCCS and contractors in energy efficient design
- Recommend renewable energy strategies
- Optimize DDC system for campus

### *Sustainability Officer*

- Project Management – $1.3 million Energy Performance Bond
- Seek sources of funding for sustainability – renewable energy – rebates
- Measure, communicate, and market sustainability progress
- Develop behavioral resource conservation campaign
- Direct campus-wide sustainability strategies
- Establish system of monitoring and reporting energy use and trends
- Liaison for LEED strategies with Campus Architect
- Coordinate development of Energy Master Plan
- Review design and construction documents

### *Physical Plant Manager*

- Develop O & M schedules in digital, accessible format
- Review and edit UCCS Design Guidelines and Specifications
- Ensure effective O & M program
- Coordinate training for employees for energy management
- Work with Facilities Director to include energy and resource conservation in all job descriptions for department
- Review design and construction documents
- Project management of contractors for energy performance work

### *Master Electrician*

- Coordinate all electrical issues O & M
- Review Design Guidelines and Specifications
- Suggest and implement energy savings strategies such as:
  - Lighting retrofits
  - Occupancy sensors
  - Photocells
  - Power factor correction
  - DDC adjustments
- Provide technical support for renewable energy installations
- Review design and construction documents

**UCCS Energy Committee**

Faculty, staff, students, community members

**Facilities Resource Conservation Group**

Campus Architect, HVAC, Electricians, Plumbing, Building Managers, Custodial

# Sustainability Task Force Members

## Advisory Committee

| | |
|---|---|
| **Tom Christensen** | **John Milliman** |
| **Tom Huber** | **Sherry Morreale** |
| **Hillary Hamann** | **Linda Kogan** |

**Leadership Team**

| | |
|---|---|
| Tom Christensen | Dean, Letters Arts and Science |
| Tom Huber | Dean, Graduate School |
| Laura Quinn | Lecturer, Center for Creative Leadership |
| Venkat Reddy | Dean, School of Business |
| Susan Szpyrka | Associate Vice Chancellor Administration and Finance |
| Kee Warner | Faculty, Sociology |
| Jerry Wilson | Director, Information Technology |

**Education Team**

| | |
|---|---|
| Greg Chase | Student, Geography and Environmental Studies (GES) |
| Minette Church | Faculty, Anthropology |
| Sean Flaherty | Director, Residence and Student Life |
| Hillary Hamann | Faculty, GES |
| Curt Holder | Director, Sustainable Development Minor |
| Carole Huber | Faculty, GES |
| Barbara Joyce-Griesbach | Faculty, GES |
| Sherry Morreale | Faculty, Communications |
| John Milliman | Faculty, School of Business |
| Kristin Rice | Institutional Research |
| Judith Rice-Jones | Faculty, Library |
| Jackie Rockwell | Student, GES |
| Dandapani Ramaswami | Associate Dean, Engineering and Applied Sciences (EAS) |
| Brian Yochim | Faculty, Psychology |

**Operations Team**

| | |
|---|---|
| Diane Alberico | Administration and Finance |
| Sandy Berry-Lowe | Faculty, Biology |
| Winni Dubois | Student, GES |
| Glenn Carlsrud | Campus Architect |
| Ron Honn | Environmental Health and Safety |
| Brandon James | Co-executive, Student Government Association |
| Frank Kinder | Graduate student, GES |
| Linda Kogan | Sustainability Officer |
| Lisa LaForge | Office of Sponsored Programs |
| Tina Moore | Director, Office of Student Support, EAS |
| Jimmy Muniz | Facilities Services |
| Jim Spice | Director, Public Safety |
| Jim Stevens | Faculty, EAS |