

Sustainability

Current Sustainable Practices at SCF

March 2011

State College of Florida, Manatee-Sarasota has taken great strides in its efforts to become a more sustainable institution. In 2008 the institution, under the leadership of Dr. Lars Hafner, began to focus on increasing sustainability goals and action. The College has just completed its first LEED Gold Certified facility at the Lakewood Ranch Campus. SCF is also promoting sustainable education and outreach by providing courses in clean energy. It is currently accepting applications to its new Bachelor of Applied Science in Energy Technology Management. SCF has been and continues to look for ways to be more sustainable.

Leadership and Administration

LEED Building Certifications

Recycling Policy

Indoor Air Quality Policy

Sustainability is part of SCF Strategic Plan and Goals

Board of Trustees has been issued IPADs and is e-mailed meeting materials instead of being provided hard copies.

The Administration has purchased video conferencing software (Live Meeting) and hardware to reduce the amount of travel required by faculty, staff and vendors.

The Human Resources Department utilizes the internet, web-pages, digital documents and phone interviews for all but the final selection process in the recruitment of faculty and staff. In addition, it has moved to all evaluations being done on-line.

Many administrative documents once distributed in hard copy form are now provided on the SCF website or in a common directory on the SCF computer server.

All faculty and staff can request a web camera to reduce the amount of travel required between campuses.

SCF is an institutional member of the U.S. Green Building Council.

Buildings-Facilities & Operations:

Recycling and Waste Reduction

SCF recycles its paper, cardboard, plastic and glass bottles through the respective County utilities services. Recycling containers are located throughout the campuses for use by the students, faculty and

staff. Recyclable materials are then collected by custodial staff and moved to large containers provided by the County's recycling vendors.

The College was entered into the World Records for most number of recycled containers being collected within an hour period.

SCF purchases copy paper that is composed of eighty percent post recycled material that is Fiber Sourcing Certified and manufactured in an elemental chlorine and acid free process.

Double sided printing and copying are encouraged at every opportunity.

All copiers leased by SCF have scanning capabilities.

The use of desk-top printers and portable paper shredders has been reduced and use of centralized printers, copiers shredding is recommended.

Faculty and staff have provided document programming to maximize page usage when printing documents is necessary.

E-scrap consisting of old computer components is sold to a vendor who disassembles them, recycles some materials and properly disposes of hazardous ones.

Hazardous Waste Disposal

Florescent light bulbs, light ballast, batteries, mercury containing items and other hazardous materials are disposed of by a qualified vendor.

Energy Conservation

In 2006 SCF entered into a contract with Jonson Controls Inc. for a comprehensive energy conservation program. The program includes:

- Energy utilization study at Bradenton and Venice campuses
- Replacement of fluorescent bulb and ballast at most fixtures with new 25W bulbs
- Replacement of high-bay fixtures at Gym and Library with new T5HO fluorescents
- Addition of "energy-miser" sensors at drink and snack machines
- Replacement of bulb and ballasts at all parking lot fixtures
- The majority of buildings at Bradenton have been retrofitted with motion sensor light controls.
- All new buildings in the last three years have been installed with motion sensor light controls.
- Mechanical systems at all three campuses are monitored through the ALS control system for proper operation and energy efficiency.
- FPL SMART electronic metering for additional monitoring of KWH & KWD electrical loads is being planned.
- A web-based CMMS (Computerized Maintenance Management System) is maintained to sustain preventive maintenance practices and reduce the use of paper.
- Best practices have been established for building schedules, modes of operation and monitoring.

- Only Energy Star compliant appliances are purchased.
- Dell Flex computer systems that utilize only one computer processor to service numerous terminals are being utilized in computer labs to reduce the required amount of energy per student user.

Transportation

Employees are encouraged to order video cameras for their office personal computers in order to participate in web conferencing in lieu of travel.

Electric Carts are used for on campus transportation of facilities.

The College utilizes Commuter Services, a Florida Department of Transportation program that assists people in forming carpools.

The College President has selected a hybrid vehicle for his personal transportation.

Preferred parking is provided for motorcycles.

Bicycle racks are provided throughout the campuses.

SCF campuses are serviced by Public Transportation.

Water Conservation

Approximately 50% of irrigation on the Bradenton campus is accomplished with reclaimed water from the County. The JCI energy savings program described above also has a water conservation component. Water closets, urinals and sinks at both Bradenton and Venice were inventoried and all flush valves and sink controls were replaced with low-flow devices.

Design & Construction

SCF is an institutional member of the U.S. Green Building Council.

All new construction and major building remodeling is designed to meet a minimum of a LEED Silver certification.

SCF Participates in Association of Florida Colleges' Facilities Commission Sustainable Campus Award Competition.

Sustainable Development Practices will be included in the upcoming SCF Strategic and Campus Master Plans.

SCF's latest construction project is a Medical Technology and Simulation Building, our first LEED GOLD certified building project. Sustainable features included in this project are:

- Shower rooms for men and women and bicycle racks are provided to encourage bicycling as a transportation choice.
- Preferred parking will be provided for Low emission vehicles.
- Preferred parking for carpools and or vanpools.
- A designated carpool drop off area will be provided.
- Solar powered electrical recharging/parking stations will be provided for electric vehicles.
- Sustainable storm water management design.
- Outdoor lighting is controlled to by an automated system and directed to reduce its impact on neighboring properties.
- All irrigation water is provided by a reclaimed water system.
- A captured rainwater system will be utilized to supplement irrigation.
- Water use within the building will be 20 to 30 % lower than a conventional building.
- All the building systems will be commissioned to ensure design efficiencies are realized.
- Energy performance will be optimized by the use of an ice-making/thermal storage HVAC system that captures and utilizes condensate in a closed loop system that also conserves water.
- 50 to 70 % of the waste generated by the construction process will be recycled.
- Construction materials will contain 10 to 20 % recycled materials.
- Over 50% of wood based materials will be from sources certified by the Forest Stewardship Council's principals and criteria for wood components
- Meets the indoor air quality requirements set by the American Society of Heating, Refrigerating and Air-Conditioning Engineers
- Smoking is prohibited inside of the building and only allowed in designated areas more than twenty-five feet from the building
- Thirty percent more outdoor air is utilized by the HVAC system than is required by ASHRAE
- Indoor air quality is managed during the construction process
- Only low-emitting materials are used in adhesives, sealants, paints, coatings, flooring systems and composite wood materials
- Indoor chemical and pollutant source controls are included in custodial and chemical storage areas
- Lighting controls are provided for over ninety percent of the occupants
- HVAC systems are designed to provide for the comfort and well being for all occupants

- Thermal comfort of will be verified by surveys of building occupants within a period of six to eighteen months after occupancy

Landscape

SCF uses native plant material as the basic building blocks of its landscape. The trees used are the following:

- Live Oak
- East Palatka Holly
- Sable Palm
- Black Olive
- Red Maple
- Magnolia and a few others

Shrubs used are:

- Indian Hawthorn
- Coontie
- Firebush
- Coco Plum
- Eugenia
- Fakahatchee
- Sandcord Grasses

The lawn grass used in the College's latest projects is common Bermuda, which has been the latest trend in the industry towards low maintenance lawns. SCF also utilizes recycled mulch in all its planting beds. The College uses no potable water for irrigation only reclaimed and well water. The irrigation systems are automatic and equipped with rain sensors.

Education & Outreach

Campus Sustainability was the theme for a recent Faculty Development Day.

Courses in sustainability practices and clean energy are provided.

Alternative energy courses have added as graduation requirements to several programs.

SCF Environmental Trekkers Club and Earth Club are student organizations whose activities are open to all community members. These environmental organizations sponsor guest speakers, organize beach clean-up days, and supported a Guinness World Record plastic bottle recycling event at SCF on Earth Day 2008.

Many professors are conducting courses completely without paper. They are utilizing e-mail, Angel, and distance learning program to assign and receive assignments.

SCF is currently accepting applications for its new Bachelor of Applied Science in Energy Technology Management with a focus on Sustainability and the Environment. This program is scheduled to start in the spring of 2012.