Environmental Sustainability Committee
FY 2011 – 2012 Report to the SPIEC

Committee Members

<table>
<thead>
<tr>
<th>Division</th>
<th>Representative</th>
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<tr>
<td>Environmental Health and Safety</td>
<td>Lewis Johnson, Co-Chair</td>
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<tr>
<td>University Colloquium</td>
<td>Sarah Davis, Co-Chair</td>
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<td>Physical Plant</td>
<td>Jim Hehl</td>
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<td>Environmental Engineering</td>
<td>Simeon Komisar</td>
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<td>Marine and Ecological Sciences</td>
<td>Mike Savarese</td>
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<td>Center for Environmental and Sustainability Education</td>
<td>Peter Corcoran</td>
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<tr>
<td>Student Government</td>
<td>Keishla Negron-Acebido</td>
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<td>Deans' Council</td>
<td>Tony Barringer</td>
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<td>Faculty Senate</td>
<td>Hulya Yazici</td>
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<td>Shelby Gilbert</td>
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<td>Staff Advisory Council</td>
<td>Lisa Paige</td>
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Environmental Sustainability Goals
Executive Summary

The Planning and Budgeting Committee charged the Environmental Sustainability Committee (ESC) to produce a strategic plan for environmental sustainability with recommendations, action plans, proposed responsible individuals, and indicators measuring the university’s progress implementing sustainable operations.

The ESC considered a host of tasks, weighed the challenges, achievability, and existing resources, and identified 50 sustainability tasks in support of the University’s sustainability mission. ESC organized these tasks as prioritized lists to the appropriate University division. The specific tasks cover the wide range of operations at the University; curriculum, physical plant construction and maintenance, waste minimization and recycling, energy consumption and sources, student involvement, research, investments, transportation, and staff development.

Some of these tasks are already underway, but they are included in the plan to ensure continuity and reporting going forward. As the University’s sustainability goals are not limited to just a few departments across campus, it was the consensus of the ESC that the program content experts in the assigned division, college, or department are best equipped to plan the implementation of each specific task. The ESC contacted the vice-president for each division to request his support in establishing goals towards implementing tasks not already underway.

The ESC assembled the attached document with goals and plans for implementation from these responses. Each year, the ESC will request updates from the division vice-presidents on both their ongoing and new goals in support of campus sustainability, and will use these updates in making recommendations and planning for the subsequent year planning cycle.

<table>
<thead>
<tr>
<th>Division</th>
<th>Tasks Assigned</th>
<th>Tasks Already Underway</th>
<th>Tasks with New Goals for FY 2011-12</th>
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<tbody>
<tr>
<td>Academic Affairs</td>
<td>11</td>
<td>3</td>
<td>7</td>
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<td>Administration and Finance</td>
<td>26</td>
<td>12</td>
<td>18</td>
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<td>Student Affairs</td>
<td>7</td>
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<td>University Advancement</td>
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<td>Planning and Budget Committee</td>
<td>4</td>
<td>3</td>
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<tr>
<td>Environmental Sustainability Goal</td>
<td>What action(s) will you undertake to achieve this goal?</td>
<td>Responsible Department</td>
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<tr>
<td>Academic Affairs Priority 1</td>
<td>Identify all courses with a sustainability focus or content.</td>
<td>Colleges</td>
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<td>Academic Affairs Priority 2</td>
<td>Identify sustainability related learning outcomes for FGCU students.</td>
<td>Colleges</td>
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<td>Academic Affairs Priority 3</td>
<td>For all disciplines, identify methods to increase research in the area of sustainability.</td>
<td>ORSP</td>
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<td>Academic Affairs Priority 4</td>
<td>For all disciplines, identify by Department the research related to sustainability occurring at FGCU.</td>
<td>ORSP</td>
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<td>Academic Affairs Priority 6</td>
<td>Develop and implement participatory and educational activities that communicate sustainability to students.</td>
<td>Center for Environmental and Sustainability Education</td>
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<tr>
<td>Academic Affairs Priority 7</td>
<td>Identify and implement methods to encourage development, design, and redesign of sustainability courses, or course components.</td>
<td>Service Learning Office of OCI</td>
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<td>Academic Affairs Priority 8</td>
<td>Measure the annual community service hours of University students.</td>
<td>Service Learning Office of OCI</td>
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<td>Environmental Sustainability Goal</td>
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<td>Administrative Services Priority 1</td>
<td>Conduct Greenhouse Gas Inventories as required by the ACUPCC.</td>
<td>Conduct Greenhouse Gas Inventories as required by the ACUPCC.</td>
<td>Environmental Health and Safety</td>
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<td>Administrative Services Priority 2</td>
<td>Construct University buildings to the LEED Silver standard or higher.</td>
<td>Design and construction of major building projects for academic and residential buildings shall be LEED Silver standard or higher. Major building projects are defined as those buildings over $2 million in project costs.</td>
<td>Facilities Planning</td>
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<tr>
<td>Administrative Services Priority 3</td>
<td>Collect all building and demolition waste for recycling.</td>
<td>During the construction process of a typical building, collect all building and demolition waste for recycling.</td>
<td>Facilities Planning</td>
</tr>
<tr>
<td>Administrative Services Priority 3</td>
<td>Collect all building and demolition waste for recycling.</td>
<td>Collect all building and demolition waste from remodeling and renovation projects under the supervision of Physical Plant for appropriate recycling</td>
<td>Physical Plant</td>
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<td>Administrative Services Priority 4</td>
<td>Make electronic waste recycling mandatory at every level at all University campuses and facilities.</td>
<td>Make operational resources (financial and human) available for the collection of electronic waste throughout the campus (not including Housing) and develop a disposal process using Lee County Solid Waste – Recycling/Electronics Department.</td>
<td>Physical Plant</td>
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<td>Administrative Services Priority 5</td>
<td>Include information on the FGCU’s sustainability commitments in new employee orientations.</td>
<td>We have planned to invite the EH&amp;S Director to be a “informational” speaker during one of the quarterly sessions of the “On Boarding” program</td>
<td>Human Resources</td>
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<td>Administrative Services Priority 7</td>
<td>Implement Best Management Practices for storm water management on the FGCU campus</td>
<td>Assure any modification to the landscape do not impede the flow of storm water.</td>
<td>Assure the storm water paths are clear of debris, culverts are kept clean, and water retention areas have been properly maintained.</td>
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<td>Environmental Sustainability Goal</td>
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<td>Administrative Services Priority 8</td>
<td>Purchase/use only Green seal or other third party certified cleaning products for use in University facilities.</td>
<td>Physical Plant</td>
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<td>All solicitation for products and services issued by Physical Plant will require the successful vendor to have made every reasonable and prudent effort to use products approved by green Seal or a similar entity.</td>
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<td>Administrative Services Priority 10</td>
<td>Reduce the solid, liquid and gas waste streams produced by the University.</td>
<td>Physical Plant</td>
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<td>The Physical Plant continues to work closely with the solid waste contractor provided by the County to assure all efficiencies are implemented in both the collection of solid waste and recyclable material.</td>
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<td>The Physical Plant, working with the waste removal contractor mandated to serve the campus, has recorded all the sizes of containers, frequency of pickups and special services during the year.</td>
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<td>The Physical Plant does not have the capability to utilize anything but volume per container and frequency as a benchmark. There is no capability to weigh solid waste.</td>
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<td>Administrative Services Priority 12</td>
<td>Reduce water consumption at all FGCU campuses and facilities.</td>
<td>Physical Plant</td>
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<td>Physical Plant will establish a baseline for water consumed during current year. Continue installation of low flow toilets and flush valves to further reduce consumption. Continue working on plan to remove buildings irrigated with potable water.</td>
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<td>Administrative Services Priority 13</td>
<td>Use Integrated Pest Management techniques for control of insects on campus.</td>
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<td>In the process of renewal of the pest control contract, or when solicitations for services occur again, there will be a mandatory requirement for the use of Integrated Pest Management</td>
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<td>Administrative Services Priority 14</td>
<td>Include sustainability in annual employee evaluations.</td>
<td>Human Resources</td>
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<td>Best case scenario….the performance management process becomes mandatory and all employees are evaluated on FGCU created core values and competencies (in addition to performance) – waiting to see how the cabinet will respond to this recommendation in the report</td>
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<td>Environmental Sustainability Goal</td>
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<td>Administrative Services Priority 15</td>
<td>Provide opportunities for professional staff development in sustainability.</td>
<td>Design and present Sustainability 101, an overview of sustainability at FGCU, raising awareness of current practices and goals, and providing common definition for frequently used terms.</td>
<td>Environmental Health and Safety</td>
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<td>Administrative Services Priority 16</td>
<td>Establish a demonstration project for the bio-remediation of aqueous wastes containing phenol.</td>
<td>Coordinate with faculty advisor to supervise the demonstration project, and underwrite materials needed for the proof of concept as a student research project. Promote the project among the concerned parties.</td>
<td>Environmental Health and Safety</td>
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<td>Administrative Services Priority 17</td>
<td>Develop incentives for employees to adopt commuting methods that reduce their number of one-person-one-vehicle trips to and from campus.</td>
<td>By survey and live counts, Parking Services will determine the current ratio of employee one-person-one trip vs. shared/mass transit rides. Parking Service staff will survey other Universities for possible beneficial programs and determine applicability of use for FGCU. Implement a trial program of any program determined in step #2 to be beneficial. Conduct survey/counts, per step #1, to determine success and permanent establishment of program.</td>
<td>Parking Services</td>
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<td>Administrative Services Priority 17</td>
<td>Reduce single passenger motor vehicle trips to and from the FGCU campus.</td>
<td>Promote partnership with FL DOT Commuter Services for Van Pool and Guaranteed Ride Home programs. Implement an incentive program to encourage Ride2FGCU users to record ridesharing trips. Explore the potential for hourly rentals such as WeCar and ZipCar on campus. Provide information promoting non-motorized commuting options.</td>
<td>Environmental Health and Safety</td>
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<td><strong>Administrative Services</strong></td>
<td><strong>Reduce or eliminate the use of fleet vehicles that require the use of fossil fuels.</strong></td>
<td><strong>Reduce use of fossil fuel vehicles by seeking alternatives prior to the purchase of each vehicle, to determine suitability, market availability and funding availability for energy efficient and low emitting vehicles (LEEDS vehicle).</strong></td>
<td><strong>University Police</strong></td>
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<td>Priority 18</td>
<td><strong>Continue expanded use of alternative forms of transportation when practical.</strong></td>
<td><strong>Segway</strong>&lt;br&gt;<strong>Bicycle</strong>&lt;br&gt;<strong>GEM or other electric vehicle</strong>&lt;br&gt;<strong>Foot patrol</strong>&lt;br&gt;<strong>Others as technology evolves</strong></td>
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<tr>
<td><strong>Administrative Services</strong></td>
<td><strong>Reduce or eliminate the use of fleet vehicles that require the use of fossil fuels.</strong></td>
<td><strong>Conduct a staff awareness program addressing the impact of fossil fuel powered vehicles, and viable alternatives such as electric and human powered transportation.</strong></td>
<td><strong>Environmental Health and Safety</strong></td>
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<td>Priority 18</td>
<td><strong>Prepare a business plan to replace 50% of individual department vehicles with a WeCar or similar fleet of vehicles.</strong></td>
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<td><strong>Continue to evaluate the potential to bring bio-diesel or bio-diesel blend fuel to the campus.</strong></td>
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<td><strong>Administrative Services</strong></td>
<td><strong>Reduce or eliminate the use of fleet vehicles that require the use of fossil fuels.</strong></td>
<td><strong>Physical Plant will review all future vehicle purchases and consider purchase a hybrid or other LEEDS vehicle when possible.</strong></td>
<td><strong>Physical Plant</strong></td>
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<tr>
<td>Priority 18</td>
<td><strong>Physical Plant has pursued purchasing such hybrid vehicles in the past, but at present time no trucks, tractors or large enclosed vehicles are produced and or affordable.</strong></td>
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<td><strong>Environmental Sustainability Goal</strong></td>
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<td><strong>Administrative Services Priority 21</strong></td>
<td>Reduce greenhouse gas emissions per student, per square foot, and overall as measured, to comply with the American College and University Presidents Climate Commitment (ACUPCC).</td>
<td>Physical Plant will establish a baseline for energy and fuel consumed in a current year.</td>
<td>Physical Plant</td>
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<td><strong>Physical Plant</strong></td>
<td>Physical Plant Department and Facilities Planning will meet annually to establish methods for such reduction of energy and fuel consumption used by the University and will work with project architects and engineers to comply with the above stated measureable outcome.</td>
<td>Facilities Planning</td>
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<tr>
<td><strong>Administrative Services Priority 21</strong></td>
<td>Reduce greenhouse gas emissions per student, per square foot, and overall as measured, to comply with the American College and University Presidents Climate Commitment (ACUPCC).</td>
<td>Physical Plant representatives should establish a baseline for energy and fuels consumed in a current year, and provide the monitoring services for energy and fuel used annually by the University.</td>
<td>Facilities Planning</td>
</tr>
<tr>
<td><strong>The Facilities Planning Department and the Physical Plant Department should meet annually to establish methods for such reduction of energy and fuel consumption used by the University.</strong></td>
<td>As new projects are planned and constructed, Facilities Planning should work project architects and engineers to comply with the above stated measureable outcome.</td>
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<td><strong>Administrative Services Priority 22</strong></td>
<td>Measure the annual community service participation of University faculty and staff.</td>
<td>Offering quarterly community service projects to employees is also a suggested recommendation included in the Climate Study report</td>
<td>Human Resources</td>
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<tr>
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<tr>
<td>Planning and Budgeting Committee</td>
<td>Ensure coordination of the activities of all campus units engaged in activities designed to achieve environmental sustainability.</td>
<td>Environmental Health and Safety</td>
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<td>Priority 4</td>
<td>Create a structured group of representatives from campus departments and registered student organizations to foster sustainable practices on campus and facilitate communication between groups.</td>
<td>Environmental Health and Safety</td>
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<td>Create a calendar of sustainability-related events to record sustainability related initiatives.</td>
<td>Environmental Health and Safety</td>
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<td><strong>Student Affairs Priority 2</strong></td>
<td>The Office of Housing &amp; Residence Life has established new standards for all new construction to meet LEED certification. These standards now require low flow water fixtures and toilets used in the facility. Biscayne Hall and Palmetto Hall have these fixtures and equipment installed. Additional changes could be implemented to reduce water consumption in residences on-campus. Possible ideas are listed in order of priority/rate of return. Funding would need to be identified for these projects. Purchasing could assist in establishing requests for proposals on these projects. Install low flow fixtures and toilets for Everglades Hall (406 residents), North Lake Village (1949 residents) and West Lake Village (504 residents). Install computerized irrigation controllers. Plant native/drought tolerant plants. Install waterless urinals in public bathrooms.</td>
<td>Housing and Residence Life</td>
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<tr>
<td><strong>Student Affairs Priority 3</strong></td>
<td>This can be a separate response request in future request for proposals for the university contracts for pest control.</td>
<td>Housing and Residence Life</td>
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<tr>
<td><strong>Student Affairs Priority 4</strong></td>
<td>The Office of Housing and Residence Life is currently meeting this goal. This was included in the last request for proposal in the contract for housekeeping in April 2010. Our vendor, Gulf Coast Services, only uses green seal cleaning product.</td>
<td>Housing and Residence Life</td>
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<td><strong>Student Affairs Priority 5</strong></td>
<td>There are some overlapping opportunities with this goal and the Priority 2 goal of reducing water usage. Additional opportunities could include recycling grey water, rainwater and AC condensation in housing residences. An expert in this area could be hired to develop recommendations/cost analysis for how these opportunities could be implemented in housing residences.</td>
<td>Housing and Residence Life</td>
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<td>Student Affairs Priority 6</td>
<td>In 2011, AC units will be replaced in North Lake Village (one phase each year). The units will be upgraded from a 10 SEER (seasonal energy efficiency ratio) to a 14 SEER.</td>
<td>Department</td>
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<td>Everglades, Biscayne, and Palmetto Hall all have solar panels to heat hot water for the facilities.</td>
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<td>Biscayne and Palmetto Hall both use energy recovery units to reduce the cooling loads/demands for the facility.</td>
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<td>Biscayne and Palmetto Hall use lower flow faucets and toilets.</td>
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<td>Compact fluorescent light bulbs have been installed in all locations in North Lake Village. This will be expanded to West Lake Village in the next year.</td>
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<td>Retrofitted existing incandescent light fixtures with energy efficient fluorescent fixtures in North Lake Village</td>
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<td>Thermostats set to 78 in summer in all units when unoccupied</td>
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<td>Specify energy efficient wash machines to be used in all Housing laundries</td>
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<td>University Advancement Priority 1</td>
<td>Explore opportunities to collaborate with other community organizations to promote and implement sustainable operations.</td>
<td>University Advancement</td>
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<td>University Advancement Priority 2</td>
<td>Explore possible options for considering sustainability in University investments.</td>
<td>University Advancement</td>
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<td>Many of the investment managers do not offer a fund made up of only sustainable companies, and it is not easy to screen companies for their sustainability. Our Investment Consultant said it is easier to eliminate certain negative companies (for example tobacco, etc.) then to screen for positive companies. They also said that screening for positive companies also carries a higher fee schedule. The Finance Committee has a fiduciary responsibility to the donors and to the beneficiaries of the donor’s gifts (usual the students) to maximize the returns on investments so that more funds are available to the students for scholarships etc.</td>
<td>University Advancement</td>
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<tr>
<td>GOAL 5: Environmental Sustainability and Innovation</td>
<td>ACTIONS</td>
<td>BENCHMARKS/GOALS FOR 11-12</td>
<td>Responsible Agent</td>
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<td>1. Promote energy conservation and efficiency.</td>
<td>1.1: Implement</td>
<td>1.1: Implement the recommendations of the Environmental Sustainability Committee’s (ESC) Strategic Plan; all new buildings will be built to at least LEED standards; automate buildings and retrofit to reduce energy consumption; realize approximately $150,000 in energy consumption savings during 2011-12 from these actions.</td>
<td>PBC/VP's VP Admin. Services</td>
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<td>strategies to</td>
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<td>2. Sustainability as it applies to the</td>
<td>2.1: Update</td>
<td>2.1: Receive UBOT approval of updated Campus Master Plan; continue fuel reduction program, develop Master Landscape Plan.</td>
<td>VP Admin. Services</td>
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<td>Campus environment in its myriad ways will be</td>
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<td>habitat.</td>
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2010-2011 (7 Departments)

College of Health Professions
- All future buildings will be constructed to LEED standards. - The Health Professions building is designed to be LEED certified silver.

Computing Services
- FGCU established a standard to use Dell Desktops, Notebooks, and Workstations. All standard systems meet the ENERGY STAR® label and the more stringent 4.0 requirements.

Environmental Health and Safety
- Evaluate the potential for bio-remediation of phenol containing aqueous wastes as a way of further reducing hazardous waste generation on the FGCU campus.
- Work with the Environmental Sustainability Committee to develop reporting and tracking mechanisms for campus activities in support of environmental sustainability.

Facilities Planning
- Completion of current projects that are either in design or construction to meet academic needs, LEED Certification and to remain within project budgets and schedules.

Internal Audit
- All future buildings will be constructed to LEED standards. During 2010-2011 we completed an audit of the construction of AB7, our first LEED standards building.

Physical Plant
- To decrease the university's annual utility consumption.
- Replacement of non-native melaleuca trees with native plant material to better the environmental health of campus and to meet South West Florida Water Management District mitigation requirements.

Telecommunications
- By implementing digital faxing, we are eliminating stand-alone fax machines which saves power and hardware. Faxes go directly on digital messages as an email attachment eliminating most paper.
2011-2012 (3 Departments)

Environmental Health and Safety

• Establish a demonstration project for the bio-remediation of aqueous wastes containing phenol.

• Reduce single passenger motor vehicle trips to and from the FGCU campus.

• Provide opportunities for professional staff development in sustainability.

• Ensure coordination of the activities of all campus units engaged in activities designed to achieve environmental sustainability.

• Reduce or eliminate the use of fleet vehicles that require the use of fossil fuels.

Facilities Planning

• Completion of current projects that are either in design or construction to meet academic and recreational needs of the campus community, obtain LEED certification.

Physical Plant

• Reduce energy consumption with building automation and technological upgrades to existing systems.

• Replacement of non-native melaleuca trees with native plant material to enhance the environmental health of campus and to meet South Florida Water Management District mitigation requirements.

• Environmental sustainability practice improvements.
2012-2013 (11 Departments)

Lutgert College of Business
Promote sustainability which encompasses economic, environmental, and social responsibility.

Academic and Event Technology
Continuously assess new and emerging technologies and determine corresponding academic needs for faculty and students.

Computing Services
FGCU established a standard to use Dell Desktops, Notebooks, and Workstations. All standard systems meet the ENERGY STAR® label and the more stringent 4.0 requirements.

Network Services
Increase server virtualization reducing the current physical server by 20% over last year’s numbers which will reduce power and cooling requirements.

Telecommunications
Goal 5 by embarking on a conversion of telephone sets that use about 30% less electricity than current models.

Environmental Health and Safety
Expand existing sustainability benchmarking to meet the needs of other well recognized third party evaluations including The Princeton Review Green Rating, and Sierra magazine’s America’s Coolest Schools..

Facilities Planning
Continued cooperative efforts between faculty, staff and students to reduce energy consumption for both existing and new campus buildings.

Maintain the use of sustainable materials to qualify for LEED Silver certification on new buildings.

Physical Plant
Reduce energy consumption with building automation and technological upgrades to existing systems.

Mitigation of campus natural areas to enrich the natural environment and support native wildlife.

Housing and Residence Life
Expand and review all existing sustainability initiatives that are currently operating in the department

University Advancement
Events - Provide creative design using environmentally safe or recycled products.

Events and Special Projects
Events - Provide creative design using environmentally safe or recycled products.
FLORIDA GULF COAST UNIVERSITY
DEFINITION OF
ENVIRONMENTAL SUSTAINABILITY

The Florida Gulf Coast University definition of environmental sustainability flows from the University Mission to “practice and promote environmental sustainability.”[1] Building on the classic definition of sustainable development, this means operating in a way that “meets the needs of the present without compromising the ability of future generations to meet their own needs.”[2]

A broad understanding of environmental sustainability is considered in FGCU’s teaching, in learning, in curriculum, in scholarship, in research, in service, and in operations. The University is an Affiliate of Earth Charter International and draws inspiration from the Earth Charter vision. The Florida Gulf Coast University Guiding Principles illustrate the aim to instill “in students an environmental consciousness that balances their economic and social aspirations with the imperative for ecological sustainability.”[3] The issues related to “economic, social and ecological sustainability”[4] are embedded in Florida Gulf Coast University’s history and mission. This understanding of environmental sustainability is a broad, multifaceted concept that cultivates, in the words of the Earth Charter, “respect for nature, universal human rights, economic justice, and a culture of peace.”[5]

The Florida Gulf Coast University definition of environmental sustainability establishes goals of climate neutrality, renewable resource use, and preservation of habitat while recognizing the limitations imposed on the University by procurement practices and fiduciary responsibilities. Achieving this definition of environmental sustainability is a participatory process requiring collective engagement of the University community members.

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Sustainability Inclusions within the 2010 – 2015 Master Plan

GOAL 105

Demonstrate responsible leadership and innovation by infusing environmental sustainability throughout critical dimensions of University life and community interactions.

**Objective 105.1 --- Energy conservation**
Promote energy conservation and efficiency.

**Policy 105.1.1**
Study recommendations of the Environmental Sustainability Committee (ESC) and identify those to be implemented.

**Policy 105.1.2**
All new buildings will be built to at least LEED standards.

**Policy 105.1.3**
Automate buildings and retrofit to reduce energy consumption by 5% per square foot.

GOAL 106

FGCU will increasingly become a force for positive change in Southwest Florida through the leadership and actions of its faculty, staff, and students.

**Objective 106.2 --- Community awareness**
Promote community awareness among students through curricular initiatives.

**Policy 106.2.3**
Provide a minimum of 10,000 hours of service learning focusing on environmental sustainability contributed by Colloquium.

**Objective 106.4 --- Business and community partnerships**
Foster business/community partnerships to stimulate economic development and promote professional growth.

**Policy 106.4.2**
Explore private/public partnerships (e.g., with Algenol, Jackson Laboratories, and environmental sustainability enterprises).

GOAL 107

FGCU will emphasize the discovery and application of knowledge in its degree programs, through its research and sponsored programs, and through its efforts designed to diversify and develop the region’s economy in cooperation with local industry whenever possible.
**Objective 107.1 --- Scholarship and research**
Support scholarship and research.

**Policy 107.1.1**
Pursue private public partnerships (e.g., with Algenol, Jackson Laboratories, and environmental sustainability enterprises) to promote alignment of FGCU academic programs and research with the external community.

## GOAL 201

Develop and maintain academic programs for Florida Gulf Coast University which reflect, support, and implement the mission statement of the University and of the individual colleges and schools.

**Objective 201.5 – Partnership and Collaborations**
Continue to seek, develop, and expand partnerships with other educational institutions and community organizations to efficiently articulate programs in response to current and future needs, as well as to fulfill the community service goal of the University mission.

**Policy 201.5.3**
FGCU’s participation in the 240-acre research park known as the IHUB will be a crucible for the practical application and commercialization of new green technologies with the intent of generating hundreds of well-paying jobs.

## GOAL 301

Develop the campus of Florida Gulf Coast University in a manner that creates a memorable composition of buildings and open spaces (See Figures 3-1 and 3-2 1- Urban Design Framework Element Campus Character).

**Objective 301.7 – Energy Efficiency**
Develop, where feasible and cost-effective, buildings on campus that incorporate passive energy efficiency design practices.

**Policy 301.7.1**
Encourage architects to utilize the following specific passive energy efficiency design principle for campus buildings:
(a) Overhangs and recesses to shade southern-facing glass areas.
(b) Maximize shaded/protected outdoor corridors for circulation.
(c) Maximize shading of buildings through plant placement and selection.
(d) Design outdoor courtyards, arcades, etc., to maximize natural ventilation and air movement.
(e) Generally select roof materials and building colors to minimize heat gain.
(f) Exceed, where practicable, minimum insulation requirements for ceilings and walls.

## GOAL 401

Designate Sufficient Suitable Lands To Accommodate The Future Growth And Development Of The Campus.
Objective 401.24 – Land Use Compatibility/On-Campus

Develop the University campus in accordance with Figure 4-1: Future Land Use included as part of this element.

Policy 401.24.4

Develop the University campus to the following maximum density/intensities through the 10-year planning horizon:

(e) Wetland restoration/preservation, creation and conservation areas are not to be developed for academic or support facilities of the University.

GOAL 501

Provide academic space on- and off-campus to support and be consistent with the academic mission and program of the University and the individual colleges and schools, as well as with the goals, objectives, and policies contained in this Campus Master Plan.

Objective 501.4 – Energy Conservation

Develop academic facilities that consider and incorporate passive energy efficiency design practices as practicable and economical advantages.

Policy 501.4.1

Follow the policies supporting Objective 301.7 for encouraging energy efficient design of academic facilities.

GOAL 801

Provide recreation and athletic facilities adequate to meet the projected needs of students, faculty and staff of the University.

Objective 801.2 – Provision of Facilities

Ensure that athletic and recreational facilities and open space amenities are adequately and efficiently provided to serve projected student enrollment (See Figure 8-1 Future Recreation and Open Space).

Policy 801.2.7

Identify ways in which the natural preserve parcel set aside for University use to the east of the campus will be integrated into the academic program. In addition, the University will coordinate the educational use of this property with other institutional entities within the region to maximize the educational use of this property.

GOAL 901

Develop a stormwater management system for the Florida Gulf Coast University site through build-out that provides flood protection, water quantity/quality protection and environmental protection/enhancement (See Figure 9-1 Future Stormwater Management).

Objective 901.1 – Protecting the Functions of Normal Stormwater Management and Hydrological Areas

Protect on-site natural, high quality stormwater management/hydrological areas and their function.
Policy 901.1.1
Develop the University's stormwater management system in accordance with the surface water management plan map, the conceptual surface water management permit and the following policies.

Policy 901.1.2
Utilize natural wetland and upland features for detention, storage, and conveyance of stormwater runoff which will allow for:

a) Groundwater recharge;
b) Sedimentation;
c) Chemical degradation and nutrient uptake; and
d) Re-establishment of historic drainage patterns.

Policy 901.1.3
Provide hydrological enhancement of natural on-site wetland features through re-establishment of historic hydro-periods via on-site stormwater control structures.

Policy 901.1.4
Restrict development that would adversely impact Preserve natural on-site wetland areas to that will allow continuation of off-site stormwater conveyance patterns.

Policy 901.1.7
Provide conservation easements over all on-site wetland/upland preserves and mitigation areas, which establish allowable uses within these areas.

Policy 901.1.8
The University will continue to mitigate University-generated stormwater and minimize stormwater-borne pollutants through the implementation of a system of Best Management Practices (BMPs), which includes, but is not limited to:

a) Incorporating stormwater management retention and detention features into the design of parks, trails, commons, and open spaces, where such features do not detract from the recreational or aesthetic value of a site.
b) Use of slow release fertilizers and/or carefully managed fertilizer applications timed to ensure maximum root uptake and minimal surface water runoff or leaching to groundwater.
c) Educating maintenance personnel about the need to maintain motor vehicles to prevent the accumulation of grease, oil and other fluids on impervious surfaces, where they might be conveyed to surface and ground waters by runoff, and the need to regularly collect and dispose of yard debris.

Goal 1103

Reduce the need for future roadway capacity and parking at the University through the provisions designed to reduce dependence on the single-occupant vehicle and promote of public transit service to serve the needs of the University and surrounding areas.

Objective 1103.2 – Reduce Dependence on the Single-Occupant Vehicle
Promote the application of Transportation Demand Management (TDM) strategies within the campus and host community designed to reduce the dependence on the single-occupant vehicle as the primary mode of transportation and to encourage alternative modes of travel.

Policy 1103.2.1
The University shall implement (where feasible) transportation demand management (TDM) strategies designed to encourage the use of alternative modes of transportation and to reduce the dependence on the single-occupant vehicle as the primary mode of transportation. These strategies may include:
a) Operational modifications, such as preferential parking for carpools, working with transit providers to develop additional transit routes to student housing areas, and extended evening service;
b) Improvement of pedestrian and non-vehicular facilities;
c) Increasing the number of students living on campus;
d) Academic scheduling modifications, including scheduling more classes during non-peak hours;
e) Parking pricing strategies designed to make other modes of travel more economical;
f) Free bus pass vs. no parking permit for FGCU employees;
g) Traffic system management approaches; and
h) Locating student-oriented housing in close proximity to the campus.

Policy 1103.2.2
The University shall evaluate the potential uses of distance learning techniques (i.e., stay at home working; telecommuting) to reduce the need to travel to the University.

Policy 1103.2.3
The University shall work closely with the Lee County Planning Department and the Lee County DOT to evaluate strategies for multiple occupancy vehicles.

Policy 1103.2.4
The University shall pursue funding from the Florida Department of Transportation (FDOT) and other agencies for the establishment and operation of an off-campus park and ride program. Upon receipt of such funds, the adopted Campus Master Plan shall be amended as needed to reflect the operation of this program.

PEDESTRIAN AND NON-VEHICULAR CIRCULATION SUB-ELEMENT

GOAL 1105

Develop the campus of Florida Gulf Coast University with a comprehensive system of pedestrian and non-vehicular circulation facilities to meet the future needs of the University (See Figure 3-2 Urban Design Framework: Pedestrian Paths).

Objective 1105.1 – Coordination of On and Off-Campus Circulation Facilities
Coordinate the location and design of on- and off-campus pedestrian and non-vehicular circulation facilities with those planned and proposed to be developed in areas around the University.

Policy 1105.1.1
Coordinate with adjacent property owners in the development of concepts and plans for a pedestrian circulation system(s) in the southeast housing/student life district and northwest mixed-use district.

Objective 1105.2 – Provision of On-Campus Pedestrian and Non-Vehicular Circulation Facilities
Develop the academic core as a pedestrian oriented environment that encourages walking and discourages automobile trips.

Policy 1105.2.1
Develop the main pedestrian paths of the academic core as shown in Figure 3-2, and as described conceptually in policies described in the Urban Design Element. These facilities include:
A. Main pedestrian-ways running generally north-south and east-west.
B. Loop paths linking parking areas to the academic buildings and generally following along the lakes and wetlands within the academic core.
C. Pedestrian/Bicycle facilities along the loop road encircling the academic core.
D. Pedestrian/Bicycle facilities along the main entry road.
E. Pedestrian/Bicycle facilities linking the academic core and the lakefront and Southeastern parcels.
F. Pedestrian/bicycle facilities linking the academic core and the northwestern mixed-use parcel.

Policy 1105.2.2
Develop campus access roadways with 5-foot wide on-road bicycle lanes to accommodate bicycling to and from the campus.

Objective 1105.3 – Priority and Phasing of Pedestrian and Non-Vehicular Improvements
Develop pedestrian and non-vehicular circulation facilities in increments along with the construction of academic and support facilities to ensure a "completed" pedestrian circulation system at each stage of University construction.

Policy 1105.3.1
Continue to promote the pedestrian environment of the central "great space" during future construction and development of the campus core. Provide pedestrian amenities, such as shade and protection from the elements, within this space to encourage activity.

Policy 1105.3.2
To the maximum extent possible, build permanent pedestrian facility improvements rather than temporary facilities within the academic core, in accordance with the Campus Master Plan.

Policy 1105.3.3
Develop pedestrian and non-vehicular circulation system facilities in the sequence shown in the Capital Improvements Element.

Policy 1105.3.4
Permanent lighting of pedestrian and non-vehicular circulation facilities shall be constructed at the time those facilities are constructed to ensure adequate safety for pedestrians on-campus.

Objective 1105.4 – Programs to increase utilization
Provide programs, information, and physical facilities that will encourage increased utilization of pedestrian and non-vehicular movement systems.

Policy 1105.4.1
Provide maps of bicycle routes within Lee County as part information packages provided to new students.

Policy 1105.4.2
Indicate pedestrian and non-vehicular movement systems as part of the campus-wide system of information graphics.

Policy 1105.4.3
Provide attractive service areas and facilities on-campus for storage of bicycles to encourage their use.

Policy 1105.4.4
Encourage bicycle use through periodic "bike-to-school" days or other special events promoting awareness of other modes of travel to the University.

Policy 1105.4.5
Provide, as part of bicycle route information disseminated on-campus, safety guidelines as defined by Lee County/ FDOT/Federal DOT etc, in bicycle-related publications.
Objective 1105.5 – Safety of Pedestrian and Non-Vehicular Circulation Facilities
Provide a safe, multi-modal transportation system that maximizes the protection of faculty, staff, students, and visitors moving throughout the University and surrounding areas. Develop and maintain pedestrian and non-vehicular circulation facilities to provide safe routes of travel throughout the campus.

Policy 1105.5.8
Increase the effectiveness, comfort, and safety of multi-use paths found within the University.

Policy 1105.5.9
Widen the paths to 10’-12’ to allow for ease of movement between the various modes of transportation (bicycle/pedestrian/skateboard/etc.)

Policy 1105.5.10
Golf carts vehicles shall be prohibited from driving and parking within the central campus pedestrian spaces – the central pedestrian corridor, campus “Library Green,” and their extensions to the north, south, east and west.

GOAL 1301

Develop the campus of Florida Gulf Coast University in a manner that conserves, protects, restores, and enhances the natural ecosystems and natural resources (See Figures 13-1 through 13-4).

Objective 1301.1 – Protection of Air Quality
Develop facilities that meet National Ambient Air Quality Standards as well as State and local air quality standards.

Policy 1301.1.2
Improve air quality by restricting vehicles on Campus and through Transportation Element policies designed to discourage dependence on the personal automobile as the primary transportation mode on campus, and to encourage the use of alternative modes of transportation on-campus (i.e., bicycles, public transit, etc.).

Policy 1301.1.3
Encourage laboratory users to modify their operations as needed to minimize the discharge of pollutants from laboratory exhaust hoods. The University shall install appropriate filtering devices on fume hoods and minimize the storage and use of volatile and hazardous materials in campus buildings.

Policy 1301.1.4
The University shall monitor both indoor and outdoor air quality. Indoor sampling shall occur at chemistry laboratories, kitchens, and other sites where fumes are produced. Outdoor sampling sites shall include parking lots and congested intersections. Failure to meet air quality standards adopted by the Florida Department of Environmental Protection (FDEP) shall result in an assessment of the probable cause and the preparation and implementation of a plan to improve and maintain air quality.

Objective 1301.3 – Conservation and Protection of Native Vegetative Communities and Wildlife
Develop the University campus in harmony with the land's natural characteristics by conserving, protecting, restoring and enhancing native vegetative communities and wildlife habitat to the extent practicable and appropriate.

Policy 1301.3.5
Design roads and other horizontal site improvements crossing wetlands and upland buffer areas in a manner which will facilitate wildlife movement in those areas.

Objective 1301.4 – Conservation of Energy
Develop the University site and facilities in a manner that conserves energy.
Policy 1301.4.1
Energy conservation fixtures, air conditioning and lighting systems, and other building specific energy use and management techniques shall continue to be a required element of all new and renovated buildings on campus. Design University facilities to conserve energy using design principles identified in policies stated in Element 3.0, Urban Design, and Element 15.0, Architectural Design Guidelines.

Policy 1301.4.2
Design all University buildings with facilities to accommodate collection, storage, and disposal of recycled materials.

Policy 1301.4.3
Coordinate on-campus recycling programs with those of local government in regard to materials collected, and disposal/collection procedures.

Policy 1301.4.4
Pursue cogeneration of electricity and the generation of steam from waste heat where it can be demonstrated that energy savings will result.

Policy 1301.4.5
Encourage walking and biking on campus through Transportation Element policies designed to reduce dependence on the single-occupant automobile as the primary mode of transportation.

Policy 1301.4.6
Continue review procedures for mechanical and electrical equipment replacement that shall guarantee improved energy efficiency with the incorporation of new equipment.

Policy 1301.4.7
Where feasible, buildings on campus shall be equipped with devices to automatically reduce energy usage in rooms and buildings not in use, including programmable thermostats for air conditioners and sensors that automatically turn off lights.

Policy 1301.4.8
The University shall continue to investigate the possibility of using alternative energy sources.
Working Groups

**Energy Efficiency Working Group**
Dr. Simeon Komisar (Chair), Dr. Long Nguyen, Dr. Joseph Simmons, Tamera Baughman, Troy Kelly, Jim Hehl, Barrett Genson, Michael Flanders, Lewis Johnson, Gary Wydock

The charge of this group is to explore the option of maximizing building energy efficiency, and making recommendations for achieving efficiencies better than LEED. This group is using Whittaker Hall as a model to explore the potential costs, benefits, and potential return on investment for an energy focused over-haul of the building looking at equipment and occupant. To date the group has collected historical information on potable water, electricity, and chilled water use in Whitaker, and is working with an energy efficiency engineer to develop recommendations.

**Conservation Land Use Working Group**
Dr. Mike Savarese (Chair), Sarah Davis, TBD

The charge of this group is to recommend policy for activities on the campus conservation (mitigation) land. Specific issues identified for the group to consider include decisions about tree placement and removal, trail use and reservation policies, and a clearing house for research activities. To better understand the range of potential issues and help in prioritizing work the group is planning a series of forums during finals week to invite campus wide comment.
Recognition

**STARS Silver Rating**
The Sustainability Tracking, Assessment & Rating System (STARS) is a transparent, self-reporting framework for colleges and universities to measure their sustainability performance. STARS is one of the two primary sustainability benchmarks used by FGCU. In our inaugural report to STARS we received the Silver rating.

**Commuter Services Gold Partner**
FGCU was awarded the Gold Partner recognition from the Florida Department of Transportation’s Commuter Services. This recognition was for cooperative programs encouraging ride sharing, mass transit, and non-motorized commuting.

**Climate Leadership Award Finalist**
FGCU is a finalist in the Second Nature 2012 Climate Leadership Awards, a national competition among colleges and universities to earn the title of "Most Innovative Climate Leader." The awards program is sponsored by Second Nature, a national nonprofit that seeks to create a sustainable society by transforming higher education, and Planet Forward, a media company that publishes news, opinion, and insight about energy, climate, and sustainability.