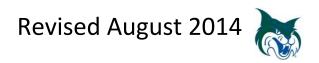


## Department of Facilities Operations

Sustainability Unit

Campus Sustainability Plan

... a working document ...



## **Executive Summary**

The Georgia College Campus Sustainability Plan initiated in 2014 is an effort to enhance the management of resources and the long-term sustainability of Georgia College and the Georgia College campus community. The primary objectives of this plan include coordination, communication and advancement of sustainability initiatives throughout the campus community. The Sustainability Council is the vehicle by which the coordination, communication and advancement of sustainability initiatives occurs through assessment of goals, reporting of accomplishments and recommendations for future direction.

## **Importance**

Sustainability efforts establish Georgia College as a leader in sustainability in Central Georgia. Georgia College is committed to being sustainable and protecting the environment now and for future generations which it strives to achieve through effective and efficient resource management, behavior change, culture change and good environmental stewardship. Current practices of environmental impacts and consumption of natural resources affect the university economically, environmentally and socially which can no longer be ignored. The Georgia College campus community is responsible to itself and beyond to take action through research, planning and development to establish and implement programs, goals and objectives with clearly defined processes and procedures for measuring and monitoring those actions to effectively and efficiently manage resources and create a more sustainable environment. Additionally, Georgia College and the campus community is responsible for complying with policies and procedures as set by the University System of Georgia as well as federal, state and local regulations as are in effect now and will be established in the future.

## Vision

The Georgia College campus sustainability vision is one of Georgia College

- implementing sustainability initiatives embracing social, environmental and economic components throughout campus;
- progressing as a model of engagement through development and promotion of community-based partnerships;
- evolving as a model for a sustainable campus in the Middle Georgia area;
- attaining recognition in the University System of Georgia as a campus leader in sustainability.

## **Mission**

The Georgia College campus sustainability mission is to effectively and efficiently manage natural, physical and financial resources through social, environmental and economic responsibility and provide leadership and coordination of sustainability initiatives throughout the campus community with education, research and engagement.

## **Purpose and Goals**

The Georgia College Campus Sustainability Plan addresses short and long-term objectives and establishes principles and practices to enhance the sustainability initiatives of the campus.

## **Initiatives**

The initiatives of primary focus for the Georgia College Campus Sustainability Plan include Energy Management and Waste Management. Energy Management includes electricity, water and gas. Waste Management includes composting and recycling or waste diversion.

#### **Energy Management**

Energy Management has been an initiative of continual improvement in electricity, water and gas usage. Improvements have included lighting retrofits, occupancy sensors and the installation of low-flow and automatic sensor fixtures. Sub-meters have been installed for the establishment of a baseline for measuring, monitoring and management of electricity, water and gas resources.

#### Goal 1: Reduce campus greenhouse gas emissions

#### Objectives:

- Identify carbon footprint (energy, water, gas) 1-3 years
- Develop and implement a Climate Action Plan 1-3 years
- Reduce carbon footprint 15% by 2020
  - o Governor's Energy Challenge, 2007
- Increase awareness of the Climate Action Plan
- Engage faculty, staff and students in achieving the Climate Action Plan

## Goal 2: Reduce campus energy consumption and increase energy efficiency

- Reduce energy usage 15% by 2020 through building retrofits and behavior change
  - o Upgrade 100% of lighting with compact florescent or LEDs; 5-10 years
  - Replace heating and cooling with high energy efficient systems
  - Replace with/install low flow fixtures/retrofit kits
  - Install retrofit kits/hydration stations at drinking fountains
  - Track energy consumption monthly
  - o Perform annual energy audits, 3-5 years
    - Identify areas for improvement

- Secure funding to implement improvements
- Create incentives for reducing energy usage, especially during peak demand, 2-7pm.
- Research and increase use of energy efficient and rebate programs
- Increase awareness of energy usage through a dashboard
  - Educate and empower users; 1-3 years
- Engage students, faculty and staff in reducing energy consumption
- Coordinate efforts with local providers/vendors; 5-10 years
- Provide opportunities for sustainability awareness

#### **Goal 3: Increase usage of alternative energy sources**

#### Objectives:

- Research alternative energy sources, on-site energy generation and renewable energy usage
  - a. Solar
  - b. Wind
  - c. Biofuels
  - d. Other opportunities
- Develop and implement opportunities for alternative energy sources, onsite energy generation and renewable energy usage
- Secure funding to implement improvements

## Goal 4: Enhance data collection, monitoring, research and evaluation

- Track consumption monthly through billing statements and campus-owned meters
  - Separate irrigation metering from domestic metering; 3-5 years
    - Engage with the City of Milledgeville/Baldwin County Water Department/campus administrators
- Increase measurement data collection through metering; 1-3 years
  - o Identify areas for additional metering/sub-metering; 3-5 years
    - Building metering
    - Landscape metering
  - Connect additional metering/sub-metering to the data collection system; 3-5 years

- Building metering
- Landscape metering
- o Identify areas for improvement
  - Install emergency flow meters-irrigation
- o Secure funding to implement improvements
- Continual improvement of landscaping/irrigation
  - o Continual use of drought resistant plants
  - o Increase efficiency/improve landscape design
  - Assess/reassess landscape systems

#### Goal 5: Develop strategies to recycle, reuse or repurpose for future use

- Research and recommend alternatives and technologies; 5-10 years
  - o Cistern installation for rainwater for irrigation purposes
    - Identify locations for cistern(s)
    - Conduct feasibility assessment
    - Conduct budget analysis
  - o Identify other projects; 5-10 years
    - Chilled water/ice tank-Chiller Plant
- Secure funding to implement improvements

### **Waste Management**

The Waste Management Initiative, including composting, recycling and other solid waste, has experienced the most recent of development, improvements and changes.

#### **Composting**

Lawn material composting has existed at Georgia College for the last nineteen years. These materials have been and will continue to be utilized for the benefit of the campus grounds by Grounds and Landscaping Services. Food composting is the next phase to be initiated, plans for which are in the final stages.

#### **Goal 1: Increase composting campus-wide**

#### Objectives:

- Develop food composting site; 1-3 years
  - Determine location
  - Develop the infrastructure
    - Purchase composter and pulper
    - Establish water and power to site
    - Provide shelter for the composter and composting materials
    - Purchase/provide means of transporting composting material to and from site
    - Create two part-time composting maintenance positions
- Partner with Sodexho and Auxiliary Services
  - Develop process for collecting composting material

## Goal 2: Broaden the composting initiative

- Create a community garden; 1-3 years
  - Determine location
  - Create infrastructure
  - Create one part-time garden maintenance position
- Increase awareness campus-wide; 1-3 years
  - o Educate faculty, staff and students
  - Encourage involvement
    - Provide opportunities for engagement

- Long-term; 5-10 years
  - Encourage local community engagement
  - Partner with local businesses and community for composting material
    - Events
    - Restaurants, School System, Hospital,
    - Supply Companies, Nurseries, Tree Services
  - Sell composting; 5-10 years
    - Develop process
    - Market to campus and local community
    - Market to nurseries and landscape vendors

#### **Recycling & Waste Management**

Co-mingling recycling was initiated in a few locations on campus prior to 2012, a student driven program. In 2012, the program moved to single stream recycling in those locations. Single stream recycling campus wide was initiated in 2013.

# Goal 1: Reduce and ultimately eliminate waste streams on campus with the ultimate goal of net zero waste.

- Modify the current recycling plan
  - o Increase single stream recycling campus-wide; 3-5 years
  - o Expand capacity and infrastructure
  - o Incorporate desk-side recycling by 2013
  - Increase the collection of recyclables (i.e. e-waste, appliances); 3-5
    years
  - Partner with outside vendor(s) to move recycling efforts forward; 5-10 years
  - o Increase measurement, data collection and analysis; 3-5 years
- Decrease transported and disposed waste in landfill
  - Encourage usage of reusable material (i.e. cups/mugs/water bottles)
  - Coordinate with campus organizations/departments for recycling at all campus events; 1-3 years
  - Coordinate with Housing during move-in/move-out; 1-3 years

- Recycle/Repurpose/Reuse unwanted items left behind; 1-3 years
- o Decrease disposal of construction material
  - Recover and repurpose useable material from demolition
  - Recover recyclable material from demolition

#### Goal 2: Increase recycling efforts campus wide.

#### Objectives:

- Increase awareness of recycling efforts and recycling locations
  - Educate campus on recycling efforts
    - Use university media and social networks
    - Provide targeted information to programs, offices, departments
  - Engage students, faculty and staff in recycling efforts
- Develop measurement and data collection strategies for analysis 1-3 years.
  - Conduct recycling and waste audits
    - Identify areas for reducing waste
- Search and research for funding opportunities to advance recycling efforts

## **Goal 3: Develop a self-sustaining program**

- Establish recycling sorting facility; 5-10 years
  - o Partner with vendor(s) for sale of recyclables
  - Purchase of collection/distribution vehicle(s)
  - Purchase scale for measurement
  - Create two part-time recycling maintenance positions

The Sustainability Council is responsible for oversight of the goals and objectives of the plan.