

An Act to Promote the 2008 Sustainable Energy Initiative

Respectively Submitting By:

Kokumo Tiffani Brown (GA State University)
Jonathan Strobel (Valdosta State University)

Sponsor:

SGA presidents from KSU(??)
GATech (?)..

Realizing,

Institutions within the University System of Georgia are educational and community leaders in the Southeastern United States; **and,**

Recognizing,

the energy consumption of these institutions is provided primarily from fossil fuels: approximately 82% of total campus utility expenditures in 2006-2007 were attributed to fossil fuel forms of energy; **and,**

Having Considered,

fossil fuel impacts have adverse effects:

- a. Emissions from burning coal have been proven to cause respiratory problems, like asthma, and other health issues in humans.
- b. The United Nations Intergovernmental Panel on Climate Change (IPCC) reports that emissions from fossil fuels are a significant contributor to global warming;
- c. Emissions are a leading cause of smog, mercury in our water sources, and acid rain.
- d. In Georgia, nearly 946 deaths in 2002; according to the EPA, were directly attributed to coal-fired power plant emissions ;**and,**

In understanding,

Board of Regents Sustainable Energy Management Plan, written April 03, 2007, section 7.0 reflects that "the successful implementation of a Sustainable Energy Management Program at each institution within the University System of Georgia is a high priority for the Board of Regents. A successful program requires a long-term commitment from the students, staff, faculty, and administration of each university within the system"; **and,**

Being Aware,

Board of Regent's Chancellor Erroll B. Davis Jr. has stated: "It's clear that higher education – particularly in the area of research – will be called upon to play an increasing role in addressing a number of challenges posed by energy concerns. Over the last century, atmospheric concentrations of CO2 have risen to their highest levels for over 400,000 years – and this increase is materially due to our use of fossil fuels." **and,**

Bearing in Mind,

findings of a survey conducted by student organizations the Sustainable Energy Group, SAVE, SAGE, and Environmental Alliance have received 3,000 responses, which concluded:

	GA State University	Valdosta State University	GA Southern University	Kennesaw State University	Total Averages
Total Surveyed	1,000				

Importance of 1st statement*	93.4%	91.6%	92.8%		
Importance of 2nd statement**	95.9%	94.9%	94.9%		
Average Fee increase desired for Sustainable Energy Initiative	Student body:\$22.71 SGA: \$17	\$8.55	\$20.70		

*1st statement: that according to the EPA, in 2002 Georgia ranked 11th in total deaths a year (946), heart attacks a year (837), and hospitalizations a year (1,352): all being caused from exposure to fine particle pollution caused by coal fired power plants (approximately 80% of our institution's electricity generation comes from these plants).

**2nd statement: that the university switch to "clean, renewable energy".

Amount Desired: When surveyed students were asked "how much would you be willing to contribute per semester if those funds would be used to specifically increase efficiency on campus and to purchase renewable sources of energy?"; **and,**

ENACTED BY THE STUDENT ADVISORY COUNCIL OF UNIVERSITY SYSTEM OF GEORGIA THAT

Declared Accordingly:

this recommendation shall be known as the "Sustainable Energy Initiative of 2008",
and;

Emphasizing:

Institutions within the University System of Georgia shall actively pursue clean energy options for the campus as well as create feasible efficiency and conservation projects as outlined in the accompanied document, Sustainable Energy Initiative Implementation Plan, **and;**

Encouraging:

University System of Georgia actively educate students about the impact of energy use on regional, national, and international scales, in order to encourage progress within the community, as is outlined within section 916 of the Board of Regents Policy Manual, many university master plans, mission statements, and student handbooks, **and;**

In full Support:

the University System of Georgia Board of Regents adopt a plan to implement renewable energy and energy efficiency projects on all of it's institutions, as is laid out within the Sustainable Energy Initiative Implementation Plan; and that the Board of Regents support the adoption and implementation of campus student sustainability fee's, of between \$10-25, on a campus by campus basis; and that the Board of Regents support institutional or donor matching of these fee's, and;

Approving:

this Bill shall take effect immediately upon passage by the Student Advisory Council and the University System of Georgia, Board of Regents.

Sustainable Energy Initiative of 2008: Implementation Plan

Recommendations regarding the Sustainable Energy Initiative Act of 2008:

In order for successful implementation of the Sustainable Energy Initiative of 2008, institutional processes must provide for considerable traction and priority emphasis over-time, and which provides for period change and re-evaluation. Due to the nature of energy management, it is also imperative that each institution customize it's own Sustainable Energy Initiative Implementation Plan. This document is to hold as a guiding framework for institutions campus implementation plans:

A: Governing Body

1: Demographic and Powers

A governing body should be appointed by all partaking colleges and universities to administer all student funds produced and procured by the Clean Energy Initiative Act of 2008.

Democratic voting power should lie within this governing body, as each individual represents his or her constituent party. This governing body should have adequate representation from all the following parties: campus student body, campus faculty body, the campus Student Government Association, campus Plant and Facilities Operations departments, campus Auxiliary Services, and campus administration.

2: Responsibility

The governing body shall:

- i.** Meet at least two times a semester; the first meeting of which is to occur during the second month of each semester, at the latest, in order to discuss the following semester's spending.
- ii.** Compose a portfolio of the previous semester's Sustainable Energy Initiative's progress to be released publicly to the University community annually.
- iii.** Research all applicable rebate programs in an effort to gain additional funding.
- iv.** Submit request to Plant Operations and Auxiliary Services two months prior to meeting date concerning next semester's proposed energy improvement projects, in order that educated decisions about the operations for the following semester can be made.
- v.** Work in conjunction with University Policy and the Master Plan.

B: Implementation Priorities:

The following priorities are suggestions in regards to allocation of funding toward the Sustainable Energy Initiative of 2008. The priorities were created in consultation with Directors and Assistant directors of Plant and Facilities Operations at both Valdosta State University and Georgia State University, and from priorities laid out in the Board of Regents draft proposed Sustainable Energy Management Plan, initiated and led by President Michael Adams of the

University of Georgia. Priorities were often decided and created based upon data received from campus survey's conducted by and for students at Valdosta State University, Georgia State University, Georgia Southern University, and Kennesaw State University. The Institutional Research Board (IRB) backs these surveys.

1: Priority One: Energy Efficiency

In order to most cost-effectively meet campus and/or institutional energy demand while limiting global warming causing pollutants, an average of 1/2 of all resources allocated to a campus Sustainable Energy Implementation Plan should be allocated to projects and programs that emphasize energy efficiency.

The goal of energy efficiency projects is to reduce the square-foot energy load of the campus. This is to be accomplished by the governing body's prioritization of projects that produce the best rate of return for the lowest cost.

The governing body of the Sustainable Energy Initiative, upon deciding to propose any efficiency practices and or equipment onto campus, should submit a request to University Plant and Facilities Operations two full calendar months in advance of the next meeting.

At the meeting, the governing body will vote and decide on the proposed projects for the following semester. Examples of proposed projects would be: off-hours equipment and lighting shutdowns, water savings low-flow devices, replacing lighting in older areas, building automation, window and door retrofits, increased thermal insulation in buildings, use of geothermal energy to heat and cool buildings, hybrid solar lighting, a solar thermal system to heat water, or other load reduction or control technologies, and others.

The governing body will request a report from Utilities Services regarding the money expenditure, actual and projected savings, and other project updates. These updates will then be published to the campus community in an annual report.

Other spending under allocation 2 may include, but are not limited to:

- Application fees such as that for the US Green Building Council's Leadership in Energy and Environmental Design (LEED), when applicable..
- Application fee's for those programs that provide opportunities that may arise to gain additional funding or offset costs through rebate programs, grants, or governmental aid. (The governing body of the Sustainable Energy Initiative Act will research and advise all rebate programs).
- Research grants, an academic program for educational, training, and research purposes to help develop awareness about energy use and consumption.

2: Priority Two: Renewable Energy Generation Projects

In order to promote campus energy independence from 'dirty' and foreign energy sources such as coal, nuclear, and/or oil and natural gas, the established governing body shall devote half (1/2) of each semester's allocated funds to the procurement and/or operation of institutionally owned renewable energy production facilities and equipment. These expenditures should be mandated to either on-site or off-site generation projects that utilize renewable and alternative energy technologies such as solar arrays on campus, the purchase of wind turbines off campus, geo-thermal systems used in the heating and

cooling of the campus, support of off-campus hydroelectric facilities, on-site fuel cell technology, or the use of renewable fuels/vehicles.

These projects may be contracted to outside, properly certified, corporations or institutions, each being under the approval of the governing body. Any finances needed for the in-house labor needed to maintain, upgrade, or construct the institutions renewable energy generation projects, whether these projects be undertaken as a University venture or contracted to outside labor, will not be applicable to Sustainable Energy Initiative expenditures.

Furthermore, projects for section two priorities are not limited to those described here, but must be defined as renewable and/or sustainable energy technologies, and are subject to the complete review of the governing body.

C: Changes to the Sustainable Energy Initiative of 2008:

If there is a proposed change in the fundamental spending tactics involved with the Sustainability Energy Initiative of 2008, either for renewable energy generation projects or conservation/efficiency projects, the change will be subject to vote in the governing body, as well as presented to the campus Student Government Association body for approval.

If for any reason there is a proposed increase or discontinuation of approved campus fee's associated with the financial support of the Sustainable Energy Initiative of 2008, the proposed change will be brought before the campus Student Government Association and then subject to a student body vote before approved.

Why this bill is needed?

Bill to Promote Sustainable Energy Consumption and Production

1. 75.3% of electricity in Georgia is generated in coal-fired power plants.
 - a. Coal is a non-renewable, polluting resource.
 - b. Effects of Pollution from coal-fired power plants:
 - i. CO2 emissions result in a thicker blanket of greenhouse gases, which contribute to global warming.
 - ii. Increased rates of asthma and respiratory ailments, particularly in children and the elderly as a result of Sulfur dioxide, Nitrogen oxide, Ozone, and other particulate emissions
 - iii. Release of Mercury, a dangerous neurotoxin, into the environment. Of which, most of Georgia's rivers and streams are over regulated levels.
 - iv. According to the EPA, in 2002, 946 people living in Georgia died due to complications directly caused by coal-fired power plant emissions.
 - c. Georgia Power owns and operates, within the state, two of the three most pollutant coal-fired power plants in the nation (plants Scherer and Bowen).
 - d. Effects of mining coal
 - i. Mountain top removal destroys the mountains, culture, and

communities in Appalachia.

- ii. Land is permanently altered beyond repair.
- iii. Topsoil is removed, so trees and native plant species do not grow back resulting in desertification and a reduction of biodiversity (and natural heritage).
- iv. Mining results in a drastic reduction in property values for Appalachians.
- v. In Tennessee, mountain top removal threatens the future of the Cumberland Plateau, a region listed by NRDC as one of the twelve most endangered ecosystems in the Western Hemisphere.
<http://www.savebiogems.org/cumberland/>

2. Universities, representing the best interest of their student constituents and adjacent community interests, are the size of small cities; they possess huge ecological footprints and wield considerable economic power. Using this “purchasing” power, Universities across the nation are beginning to take action to responsibly minimize their impacts. At the forefront of the issues that require immediate action are the problems of energy generation/extraction and global climate change.
 - a. Because the problems of energy consumption and extraction are most severe in the Southeast, Southern universities are taking action to solve these problems. Many Georgia institutions are today participating in the same campaigns materialized here: (VSU, KSU, UGA, GT, Emory...Etc).
 - b. The University of Tennessee, Tennessee Technical University, University of Kentucky, Duke University, University of North Carolina, and Warren Wilson have all enacted programs (by creating new student fees) to buy Green Power and promote energy efficiency on their campuses.
3. As the training grounds of tomorrow’s leaders and professionals, Universities are obligated to provide their students with an ethic of civic responsibility, and an education that will allow them to build a better world for current and future generations.
 - a. Sustainability is the ability to sustain a set of practices indefinitely. It entails taking advantage of current economic opportunities without limiting those same opportunities for future generations.
 - b. Using renewable resources, like solar and unlike burning coal, is a sustainable practice.

What this bill will do:

1. Recommends to the University System of Georgia (USG) Board of Regents Energy (BOR) that they, and concurrently that all Institutions within that system, formally adopt Sustainable Energy Management and Implementation Plans.
2. Outlines basic best practices for College and University level management of allocations to such a Sustainable Energy Management/Implementation Plan
3. Encourages the University System of Georgia Board of Regents to support and adopt student-led campus Sustainable Energy Fee's, which would financially back campus Sustainable Energy Initiatives, as they are passed through Student Fee Committees at individual institutions.