Sustainability Master Plan

September 4, 2013

Office of Environmental Stewardship and Sustainability

Sewanee: The University of the South

Outline

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III. Introduction

Sustainability is rooted in the premise that we are dependent on the ecological systems of this planet for our own survival and quality of life. It is a process that allows us to create and maintain conditions by which people can live within the context of ecological systems and not impair the ability of future generations to enjoy the same social, economic and educational benefits that we enjoy today. As an institution of higher learning, the University of the South has made a commitment to not only engage in sustainable practices and education but also to use our land-base as a model demonstration for training students in sustainability at the landscape level.

Sustainability incorporates local, regional and global aspects, with the global becoming increasingly more apparent in light of the looming threat of climate change. The process of sustainability is not rigid and formulaic; rather it is dynamic and adaptive, demanding new approaches and efforts that grow and evolve relative to a changing world. It is essential to recognize that achieving sustainability goals at multiple spatial scales is complicated, and there may be tradeoffs involved in realizing sustainability goals at these scales; what may seem best at a local level may have greater, less desirable implications at a global one, or vice versa. As a process, sustainability is characterized by these different aspects that often demand tradeoffs that present a definite challenge, though not an insurmountable one. Through this plan and the incorporation of sustainability commitments into the Campus Master Plan and Strategic Plan this institution has resolved to undertake that challenge.

The University has committed to building a community in which sustainability is seen as a way of life and a curriculum in which sustainability has a prominent place. Two official acts motivate these goals:

- An addendum to the University Strategic Plan in 2008 calls for Sewanee to become a national leader in teaching about the environment and in living and operating sustainably. More specifically it calls for the “academic integration” of sustainability into the curriculum. It further calls for a Sustainability Master Plan to set goals and measure progress.
- The signing of the Presidents’ Climate Commitment calls for a plan to reduce our carbon emissions to net zero, a daunting task that will require a very broad cultural transition throughout the student body and faculty and staff. This transition must begin in the classroom and radiate throughout the operations of the institution

Furthermore, the University’s commitment to sustainability parallels a commitment to sustainability held by the Episcopal Church, the University’s owning body, which states that “Our faith calls us to consider the impact of our present actions on future generations, other creatures, and the earth” and that is encapsulated in the Church’s upholding of the United Nations’ Millennium Development Goals, one of which is to “ensure environmental sustainability."

Given these ambitious goals, and the centrality of the student experience in University decision-making, it is reasonable to expect that the curriculum should be reviewed and modified using a lens (i.e. sustainability) that reflects these official commitments (i.e., approved by our governing boards and upheld and emphasized by the current vice-chancellor). As a process of decision-making and a lens of analysis, sustainability ought to become an integral part of the spirit of this institution, permeating all aspects of life on campus, from individual behaviors to institutional decisions regarding greenhouse gas emissions, investment strategies, and building design.

Insofar as sustainability is a lens, a process, and an attitude rather than a static, determinant end, quantifying and creating benchmarks of an institution's commitment to sustainability is an especially pressing challenge. Leaders in the field have come together through the Association for the Advancement of Sustainability in Higher Education (AASHE). Recognizing the burgeoning worldwide interests of students and institutions of higher learning in sustainability, AASHE has made an effort to reach consensus on the meaning of sustainability in the context of institutions of higher learning. To this end AASHE identifies goals and benchmarks institutions can use to measure their progress. Colleges and Universities that are leaders in sustainability are using the AASHE STARS system (Sustainability Tracking, Assessment & Rating System™) to codify their goals in Sustainability Master Plans and assess their progress. Our Master Plan reflects an adherence to the most recent STARS 1.2 framework as basis for our performance evaluation going forward.

This Master Plan represents the ongoing work of many people at Sewanee and the Plan itself has been vetted these past 6 months in over 30 separate meetings where we broadly engaged the Sewanee community (see list of meetings in Appendix). As sustainability is by its nature interdisciplinary, responsibility for sustainable practices lies not in a single department or division but with every individual associated with this institution and will draw on a large range of skills and expertise. It is the role of the Office of Environmental Stewardship and Sustainability to be a catalyst empowering each facet of the University to understand and promote sustainability as part of what they do, and to facilitate ongoing conversation about sustainability. As sustainability is an adaptive, dynamic process, so is this document; it is not meant to be a top-down dictation of requirements of sustainable practices, but is a baseline from which a greater dialogue and set of actions should arise. As social and ecological realities, technologies, and other contexts change over the coming years, so should this document.

While the complete set of goals and objectives of this Master Plan will grow and expand, we have developed a set of strategic goals to serve as a framework to elucidate the driving values and give direction to the University's approach to sustainability:

Strategic Goals

1. Complete the implementation of the 2008 Strategic Plan Addendum's call for excellence in sustainability and the study of the natural environment, and for the development of this Sustainability Master Plan

2. Commit to going beyond carbon neutrality and becoming a significant carbon absorber using a three-pronged approach:

    a. Deep energy conservation
    b. Extensive renewable energy generation
    c. Evaluation of the potential for carbon sequestration in Domain forests.

3. Galvanize and transform the academy and the community by launching and executing a "Call to Sustainability" –a mission to achieve a STARS Gold rating by 2015.

4. Build sustainability goals into all departments and into the career development and work expectations of all employees.

5. Promote sustainability throughout and beyond the curriculum to empower and facilitate a student body literate and focused on pressing issues of sustainable living.

6. Utilize the University's land base and its management to establish the University as an exemplar of responsible land stewardship both among universities and on the southern Cumberland Plateau

7. Critically reexamine the university's investment strategies, engaging in a dialog of how our investment portfolio can best reflect institutional values

Reading the Sustainability Master Plan

Each section in this plan begins with an introduction relating the subject to sustainability and is in turn followed by a table of goals that offers a set of subtopics, individual actions, time frames, and metrics of success. This format allows the reader to move fluidly from a general topic, to specific issues, to steps to address those issues, and eventually to the target time frame in which that action is to be enacted and the measure by which the success of the action can be evaluated.

Individual actions range in specificity from broad and sweeping to very specific. The specificity of each action corresponds with the metrics that are given; for example, an action that calls for the further study of an issue will have a metric as simple as whether the study has been completed, whereas an action seeking an easily quantifiable outcome will have a more definite

metric (e.g. if the goal is to increase the amount of local food in the dining hall, the metric may be that 20% of food served certified organic).

As this document is meant to be dynamic and evolving, it does not contain specific target dates by which actions are to be completed; rather, in a broad stroke it paints a picture of a loose hierarchy of prioritization in which actions are deemed to be part of short, medium, or long term planning, or are denoted as completed or ongoing. Short range actions are ones that should and can feasibly be accomplished within a year of the initial rollout of this plan, medium range actions are those that can be accomplished within about 2-3 years, and long range actions are those that may be five years down the road. These are not absolute categories, but are meant to give some structuring and prioritization to the scope and process of this plan's enactment.

IV. Physical and Biological Systems

i. Energy and Carbon Neutrality

By signing onto the Presidents' Climate Commitment in 2007 "we recognize the scientific consensus that global warming is real and is largely being caused by humans"; and "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." Thus we welcome the challenge of reducing our carbon emissions to net zero and beyond.

We have embraced the principle that, as far as possible, carbon neutrality should be achieved by initiatives on campus that can be a part of the learning experience of Sewanee students. We will reduce our carbon emissions first by 10% and ultimately 25% or more through energy conservation and similar reductions of other emissions sources. Carbon emissions will be reduced through the generation of renewable energy on campus using individual building PV solar, larger solar installations, and perhaps wind as opportunities arise. In addition to energy conservation and generation, a third potential means of moving towards carbon neutrality on the Domain is carbon sequestration in Sewanee forests.

In the interest of exposing students and participating in the broader carbon landscape, renewable energy generation and carbon offsets from elsewhere will also be considered. Offset programs should be designed from their conception as partnerships that students have the opportunity to participate in and learn from. One such potential offset program involves the purchase of carbon credits generated by smallholder reforestation in Haiti.

By taking a comprehensive and multi-faceted approach towards achieving carbon neutrality, we can have both a positive impact on global climate and also provide a beneficial educational experience for our students.

GHG Emissions (MT eCO2)		Percent of Total
Current Carbon Emissions (2010)	**Metric Tons CO2e**	**Percent of Total Emissions**
Electricity	11091	57.4%
Natural gas	3746	19.4%
Mobile combustion	319	1.7%
Landscaping chemicals	8	0.0%
Fugitive refrigerants	376	1.9%
Transmission and distribution losses	1096	5.7%
Commuting	391	2.0%
Air Travel	1240	6.4%
Solid Waste	978	5.1%
Bus Travel	77	0.4%
Wastewater	11	0.1%
Renewable energy credits purchased	-524	
Net Annual (2010) Sewanee Emissions (Metric tons CO2e)	**18809**	**100%**

A. Energy and Carbon Neutrality	
	Become a Permanently Net Carbon Absorbing Campus by 2016
Issues and Goals	
A	Quantify and reduce greenhouse gas (GHG) emissions
Strategies	
1	At least every two years, inventory and report GHG emissions using the CleanAir-Cool Planet (CA-CP) method
2	Update our Climate Action Plan annually and publicly post on AASHE website
B	Conserve electricity and natural gas consumption in University facilities
1	Reduce carbon emissions due to facility energy consumption by 10%(vs. a 2008 base year)
2	Reduce emissions an additional 15% by a deep energy conservation program employing less wasteful operating procedures, behaviors, and more efficient systems
3	Evaluate prospective energy conservation and efficiency capital improvement projects on the basis of life-cycle cost/benefit analysis
4	Develop a Sewanee-Plus Energy Conservation Manual that serves as a road map for detailed energy conservation planning
5	Use the average Return on Investment (ROI) from the University's endowment investments as a benchmark for judging the desirability of energy conservation retrofits. Look favorably on projects that equal or exceed this ROI.
6	Establish an action-oriented facilities energy committee that meets frequently to guide ongoing implementation of energy conservation measures. Ex officio membership should include PPS mechanical supervisor, PPS electrical supervisor, director of sustainability integration, with other faculty, staff and student representatives.
7	Maintain a comprehensive utility bill database of historical and current energy usage (e.g. the Energy Watchdog system currently in use)

8	Upgrade building envelopes: insulation, weatherstripping, window replacements, door closers, etc. in accordance with the Sewanee-Plus Energy Conservation Manual
9	Upgrade lighting systems: delamping , occupancy/daylighting controls, migration to more efficient lamps especially LEDs, dimming, etc. in accordance with the Sewanee-Plus Energy Conservation Manual
10	Broadly implement HVAC controls strategies and policies: space temperature limits, unoccupied/shoulder season setback optimization, kitchen hood smoke sensing controls, etc. in accordance with the Sewanee-Plus Energy Conservation Manual
11	When installing or replacing HVAC systems: select the most energy efficient systems/units consistent with performance and durability; especially look for an opportunity to install a geothermal well system to improve HVAC efficiency
12	Establish a University policy for office and classroom computer hibernation
13	Establish and keep current a database of all energy conservation projects, showing energy and cost savings and paybacks
14	Conduct a study of vending machine use across campus with the goal of reducing the number of vending machines on campus. Part of the study should include retrofitting existing machines with motion-sensored lighting and other energy efficiency measures
15	Measure and display data (in real time) of energy usage in University buildings to increase awareness and understanding and to incentivize energy conservation
C	Install renewable energy systems
1	Conduct an independent comparative feasibility study, leading to a Campus Renewable Energy Plan, of solar (PV and thermal), wind, and biomass to determine the optimum blend for generating renewable energy on the Domain
2	Using the Snowden PV system performance as a pilot, develop a master plan for the installation of additional solar PV systems for both individual buildings and larger

	installations (including a community solar farm allowing ownership participation by community members)
3	Evaluate the potential for reducing net carbon emissions using woody biomass for energy. Consider the pre-feasibility study completed by the Biomass Energy Resource Center.
4	Collect data on annual wind power potential in Sewanee and develop a master plan for the installation of wind energy generation systems over the next ten years.
5	Implement sufficient renewable energy generation to meet campus carbon net absorption goal
D	Carbon Sequestration and Offsets
1	Estimate the Domain's carbon stocks and sequestration rates and consider the verification, registration, and retirement of Domain based offsets.
2	Evaluate the feasibility of participating in carbon offset projects elsewhere (e.g. Haiti) with the vision of purchasing offsets from partner organizations.
3	Establish direct student involvement in offset programs by partnering Sewanee and Haitian students to monitor and evaluate offset generation.

ii. Food

Food underpins and unifies many areas of our lives. Our physical being derives solely from food and our bodily health is, in part, a reflection of how we eat. Our society's relationship with other species, ecological processes, land and water is mediated largely through agricultural practices. Modern food production methods are also energy-intensive, making food an important component of our use of fossil fuels. Food also ties us together in community, ritual and celebration, and our cultural diversity is displayed in the dishes we prepare. Food is therefore central to sustainability at many levels: sustainability of physical health, sustainability of human communities, and sustainability of human and natural economies. Food must therefore lie at the core of our attempts to create a responsible campus community. Our goal is to focus on sustainability from farm to table; the purpose of our farm is to educate students to go out and change how the world eats, but first we must address issues of how we as a campus eat.

	ii. Food
	Prioritize whole, fresh, local and/or organic foods; minimize food and energy waste in dining services. Establish dining hall and farm as places for learning about food, nutrition and sustainability.
Issues and Goals	
A	Establish nutrition and sustainability as two key guiding principles for food purchasing and preparation policies at the University's dining facilities
Strategies	
1	Take a clear stand on the importance of nutrition and sustainability in its food services in the form of a policy statement
2	Renegotiate/rebid food service contract or move to self-operation
3	Increase the percentage of local, organic, and otherwise environmentally responsible food served in the dining hall to 20% and provide signage to inform students. Create a plan of specific increases over specific time. Build a strong relationship with local growers.
4	Consider ways for students with a deep interests in the intersections of food, agriculture, and sustainability to have the opportunity for arrangements affording them more control over their food, especially focusing on groups and communities
5	Institutionalize student involvement in food purchasing decisions and educational activities related to nutrition and sustainability.

B	Optimize waste management, composting, and energy conservation and production from dining services
1	Institutionalize delivery of compost from dining services and put to use in the student garden, campus planted areas, and Farm.
2	Monitor food composting activity to develop the best mechanism for encouraging aerobic decomposition.
3	Conduct educational campaigns on waste-reduction for diners to minimize food going to the landfill.
4	Work with dining services to create a sustainability module to be incorporated quarterly into dining hall staff training
5	Critically review the culture of catered events on campus, looking for opportunities to reduce waste.
6	Explore how to reduce and capture waste for compost from all the University's food operations: McClurg, SoT, Globe, Pub, Stirling's, and catered events.
7	Examine the quantity and quality of waste oil from kitchens for potential biofuel uses.
8	Research and perform cost-benefit analyses on equipment that could be used to optimize amount of compost and the effectiveness of the composting process for dining hall waste
C	Expand agriculture on campus and in the curriculum and implement the Farm Plan
1	Appoint a University Farm Manager responsible to the Office of Sustainability and convene advisory committee.
2	Develop and enlarge the student organic garden in its present location. Purchase needed equipment and supplies.
3	Initiate infrastructure developments (including the renovation of the Old Dairy and the Old Barn) to establish a University Farm that produces both vegetables and animal products to be served in the dining hall.

4	Provide food preparation and preservation facilities to support the Farm operation that can be used by classes, student groups and Farm personnel.
5	Study Cheston Farm West as a place for sustainable livestock grazing and weigh alternative uses.
6	Initiate infrastructure development at Cheston Farm East to allow for continued use (either by the University Farm or by lessees).
7	Establish a farm apprenticeship program to provide educational opportunities in sustainable agriculture as well as practical experience on the farm during the regular academic year and the summer.
8	Continue to develop a summer internship program with the Cumberland Farmer's Market
9	Integrate apprenticeship/internship program with residential life and with other sustainability efforts through a Sustainable Living Community "dorm."
10	Begin installation of edible landscaping projects in central campus with interpretive information.
11	Initiate Heirloom Seed Saving project in a designated garden space.
12	Develop an agroecology curriculum for the apprenticeship program and to facilitate visitation by a wide range of interested classes. Include demonstration level farm projects to enhance depth of education and the visitor experience.

iii. Materials Management

Our society uses vast amounts of materials every day. The average American generates over 1,600 pounds of waste annually. Sewanee too uses a considerable volume of materials, both raw and processed, for our daily functions as an institution. Throughout their lives the materials we use and depend on have deep sustainability implications. We are able to choose sources that respect and maintain the integrity of natural and human communities. Our practices and use of materials dictate the quantities that are consumed. Our policies and practices relating to materials as they reach the end of their life cycles can have lasting impacts, since materials don't simply disappear, but persist to be dealt with by future generations. Thus policies and practices must reflect a consciousness of where materials come from, how they are used, and what happens to them following their initial period of utilization. Sustainability in Materials Management will be attained by a "cradle to cradle" mentality that focuses on each stage of the material life cycle, emphasizing wise use, reuse, repurposing, and recycling in a way that breaks the traditional, wasteful "cradle to grave" paradigm and encourages the maximum utilization of materials in various ways.

iii. Materials Management	
	Foster a climate of responsible consumption of material goods that focuses on sourcing of products, their use, reuse, and proper disposal with the long-term goal of achieving "cradle to cradle" usage of materials.
Issues and Goals	
A	Make strategic purchasing decisions, assessing products' sustainability through social, economic, and environmental lenses
Strategies	
1	Establish an ad-hoc purchasing committee with key stakeholders such as Dining Services, athletics, PPS-Custodial, PPS-Grounds, PPS-Facilities, Print Services, and Auxillary Services and Purchasing, chaired by the OESS
2	Identify current purchasers and their existing purchasing volumes and strategies
3	Establish a Green Purchasing Policy with the goals of utilizing environmentally friendly products and services, identifying values such as: • Durable versus single-use or disposable items

	• Made of recycled materials • Non- toxic and/or biodegradable • Energy efficient • Recyclable • Made from raw materials obtained in a sustainable manner • Manufactured in a sustainable manner • Cause minimal or no environmental damage during normal use or maintenance • Shipped with minimal packaging • Produced locally or regionally • EPEAT Silver or Higher Products
4	Encourage annual review of supply purchasing by departments prior to budget setting in the fall.
B	Reduce overall consumption by departments, offices, and individuals in order to achieve institutional material efficiency
1	Beginning with paper, identify key materials for concentrated efforts in materials reduction and establish goals, working towards a comprehensive materials reduction plan.
2	Establish printing quotas for students based on data about average semesterly printing figures, implementing financial disincentives when quotas are exceeded
C	Create a culture of reusing and repurposing materials
1	Establish a reuse center for materials generated from deconstruction, remodeling, and new construction to be used by the University and the community
2	Establish protocols for capturing reusable items from annual dorm move-out for distribution to local non-profits and thrift stores
3	Collaborate with Hospitality Shop to improve visibility and use by students
D	Improve the effectiveness of campus recycling
1	Establish and maintain appropriate and adequate recycling bins at campus buildings and grounds

2	Update guidelines for recycling and continue education efforts on recycling expectations for campus groups, departments, and individuals
3	Establish protocol for recycling and composting at large campus-wide events including Greek events, sporting events, alumni events, and commencement.
4	Improve planning and execution of "zero-waste events," ensuring that materials generated (especially compostable flatware, cups, and silverware) can be properly managed and disposed of.
5	Conduct at least three large-scale, University-wide zero-waste events annually, with the long-term goal of institutionalizing zero-waste at all events.
6	Review existing policy on Electronic Waste Recycling (and other potentially hazardous items) with appropriate University offices to clarify present procedures and incorporate best practices.
7	Quantify recycling loads leaving campus by way of Franklin County Recycling.
E	Reduce weight and overall volume of solid waste leaving campus
1	Establish protocol for measurement of solid waste utilizing available records and additional weight records.
2	Based on measurement data, set and work towards reasonable target goals for waste reduction through changes in materials purchasing and practices
F	Minimize waste through the reduction of bottled water distribution and consumption
1	Conduct study on feasibility of banning individual bottled water on campus, exploring possibilities including an independent campaign as well as third party assistance from groups such as Thinking Outside the Bottle

iv. Water

The University and the surrounding community is endowed with ample clean drinking water collected and stored in two rain-fed reservoirs with watersheds almost entirely within the jurisdiction of the University. Nevertheless, the University, working closely with the local public water utility, the Sewanee Utility District (SUD), should make policies that use water wisely, demonstrate best practices in terms of water use and sewage treatment and release and provide a positive model to students and others in the community. We should also focus especially on stormwater management – the quantity and quality of runoff water and what it carries from the campus further downstream off the Cumberland Plateau. We must implement the most environmentally sound stormwater management practices in order to help replenish natural aquifers, reduce erosion impacts, and minimize local and regional water contamination.

iv. Water	
	Promote sustainability in the University's use, protection, and harvest of its water resources
Issues and Goals	
A	Conservation
Strategies	
1	Consider feasibility of wastewater reuse systems
2	Consider feasibility of wetland filtration systems
3	Maintain all water fixtures on campus (faucets, shower heads, urinals, toilet tanks/valves) at the lowest flows that provide acceptable service. Diligently monitor the market for new technological developments in this area.
4	Operate irrigation systems on athletic fields so as to minimize water usage
B	Stormwater Management
1	Secure authority for OESS to inspect, approve, or halt projects based on their stormwater control systems

2	Require all future construction and renovations to have a Stormwater Management Plan(SWMP) approved by the OESS before construction begins with appropriate measures such as silt fences, retention ponds, stone swales, and vegetated swales to reduce water quantity
3	Identify specific existing locations where appropriate stormwater management systems such as rain gardens, pervious pavement, and bioswales could be installed and retrofitted
4	Based on results of the study, install stormwater management systems such as rain gardens, pervious pavement, and bioswales where deemed appropriate.
5	Research the feasibility of green roofs on a retrofitted existing roof or new construction
C	Drinking Water Protection
1	Protect water supply by maintaining land within watersheds as undeveloped, non-agricultural forestland, utilizing GIS to monitor land use in those watersheds

v. Transportation

One of the greatest contributing factors to the increase of greenhouse gasses in the atmosphere is the burning of fossil fuels by cars and other forms of transportation. According to the US Department of Transportation, the transportation sector accounted for up to 28%of all GHG emissions in 2006, second only to electricity generation. It is with this in mind that improvement in efficiency and fuel sources in the transportation sector is essential to curbing emissions and reducing contributions to anthropogenic climate change.

The University is home to hundreds of vehicles belonging to students, faculty, staff, and campus operations. And while the school has implemented various policies to reduce the amount of driving done by students, by addressing the impact of the campus fleet, promoting walking and bicycling by individuals through incentives and disincentives, and addressing and rethinking past paradigms of fossil fuel consumption, we hope to reduce our total emissions and create a community aware of the collective impact of their transportation choices.

v. Transportation	
	Reduce the overall environmental impact of University-related transportation
Issues and Goals	
A	Campus Fleet
Strategies	
1	Reduce the overall carbon emissions by University fleet vehicles by 10% per year, ultimately reaching a 50% reduction
2	Inventory the current carbon emissions by the institution's fleet by vehicle type
3	Increase the efficiency of the fleet by downsizing and substituting lower carbon-emitting vehicles to reduce emissions
4	Reduce total miles driven by fleet vehicles
5	Convert at least one vehicle to biodiesel from fuel sources on campus (fry oil, biomass waste, etc)
6	Diversify University motor pool vehicle types per 2012 Provost Motor Pool Assessment

7	Convert all motor pool vehicles to synthetic oil
8	Consider including non-motorized vehicles, especially bikes, in the campus motor pool
B	Commuting
1	Use surveys to determine the current practices of student vehicular commuting and isolate potentials for more sustainable commuting practices
2	Incentivize carpooling and other measures to reduce student vehicular commuting by 50%
3	Use surveys to determine employees' primary methods for commuting including by vehicle (determining number of vehicle occupants), motorcycle/scooter/moped, bicycle, or other means
4	Develop promotional materials to encourage sustainable commuting among faculty and staff
C	Walking and Bicycling
1	Create a focus group of concerned parties from within the university and the broader community to discuss and determine the needs of the Sewanee biking community
2	Plan for a connected system of bike lanes, bike paths, and bike racks throughout and between the major focus zones of Sewanee based on focus group recommendations
3	Formalize and construct a trail from the School of Theology to the Town
4	Construct secure indoor bike storage, shower facilities, and lockers for bicycle commuters in at least one building.
5	Research the feasibility of a bike-sharing program
D	Parking
1	Creative incentivized system for students to not bring vehicles to campus with the goal of reducing the number of student vehicles
2	Prevent construction of new parking lots through incentives for not bringing vehicles and promotion of existing periphery parking lots

3	Incentivize the use of high efficiency, compact, and otherwise environmentally responsible vehicles by providing more convenient spaces for those vehicles
E	Other Topics
1	Continue negotiations with ZipCar (or similar) to establish a workable car-share program on campus
2	Investigate student ride sharing program
3	Implement and enforce a no-idling policy for university vehicles and visiting busses (as resolved by the Sewanee Community Council)
4	Study how to reduce carbon emissions from University business air, bus, and van travel

vi. The Built Environment

More than 83%of Sewanee's greenhouse gas emissions result from existing structures, those newly constructed, and the maintenance of the surrounding landscape. Beyond the implications of these contributions to GHGs, the Built Environment also impacts the natural environment through chemical, noise, and light inputs. In light of this reality, and in anticipation of the needs of a growing community and student body, it is critical that we plan for sustainable growth and development on central campus, nearby residential areas, and businesses in order to maximize environmental sensitivity. We ought to build the most energy efficient structures possible, minimize the intensity and extent of active grounds management, and mitigate the environmental impact of specialized programs like the equestrian center and golf course. As further growth and planning occurs, our policies and practices should promote infill development rather than sprawl, prioritize mixed-use buildings, maximize building occupancy, increase pedestrian opportunities and mitigate light and noise pollution.

	A. Buildings and Facilities Design and Construction
Issues and Goals	
A	Buildings and Facilities
	Strategies
1	Design all new and renovated buildings (for projects over $200,000 construction budget) to minimum LEED silver equivalent and to LEED gold equivalent when reasonably achievable.
2	Design at least one building to LEED platinum equivalent
3	Design all new and renovated buildings to standards established in a published "*Sewanee Green-Plus Building Standards"*
4	Assess noise and light pollution and mitigate through changes in design and practices

	B. Facilities Operations and Maintenance
Issues and Goals	
A	General Goals
	Strategies
1	Schedule the use of spaces to maximize utilization ratios including the concentration of summer programs in residence halls to allow whole buildings to be empty
B	Cleaning
1	Create a *Green Cleaning* policy and guide codifying best practices in purchasing and practices
C	Groundskeeping
1	Sustainably maintain landscaping without sacrificing aesthetic and practical values by Create an explicit set of guidelines for landscaping and pest management with a particular focus on issues relating to chemical use and watershed protection, water conservation and controlling exotic species.
2	Create an ongoing education program for groundskeepers and maintenance personnel for best practices
3	Increase town and campus urban canopy coverage and diversity, giving preference to native species over exotics
4	Calculate and reduce total GHG emissions resulting from landscaping practices
5	Create GIS map of landscape assets and practices—turf area, agricultural area, mowing frequency, irrigation zones, and zones of chemical application
6	Reduce mowed areas by 25 % and consider additional reductions in mowed areas and frequencies
7	Strategically plant trees and shrubs to increase the energy efficiency of buildings
8	Provide the most environmentally sound snow and ice removal practices by implementing sand-only policies for steps and high risk areas, brush or blow only policies for sidewalks,

	and by working with Franklin County to reduce salt use on roads during winter weather events
9	Eliminate purchased mulch and utilize the organic waste collected from groundskeeping (leaves, grass clippings, woods chips from fallen trees) to be converted into compost and mulch
D	Equestrian Facilities
1	Document and reduce sedimentation and runoff from equestrian center pastures and facilities and increase effectiveness of pasture management to reduce needs for outside feed and pasture inputs
E	Golf Course
1	Develop a maintenance and management plan for the golf course that ensures the course will be maintained in an exemplary and sustainable fashion – with a particular focus on its impact on the water quality of the surrounding watersheds
2	Join a voluntary environmental stewardship program such as the Audubon Sanctuary Program run by jointly by the USGA and National Audubon Society
3	Provide ongoing training for groundskeepers through integrated pest management classes provided by organizations such as the Audubon Society or the Golf Course Superintendents Association of America (GCSAA).

C. Planning and Growth Management

Issues and Goals

Strategies		
1	Incorporate into future campus planning measures, language that demonstrates how the University will prevent degradation of ecological values in all areas of growth and development (e.g. new buildings, increase in student body size, parking lots, roads, etc.) and by doing so create a model of sustainable growth management.	
2	Promote mixed-use design to encourage increased community interaction and pedestrian use	
3	Any plan (campus, downtown, residential, or otherwise) must be held accountable for meeting the University's overall sustainability goals and objectives	

vii. The Natural Environment

Our land base is a defining feature of Sewanee and represents a strategic and integral part of the educational mission of the University. Sustainable land stewardship at Sewanee embraces the challenge of engaging in responsible practices today such that future generations of Sewanee students will continue to enjoy the wide array of educational benefits that the Domain offers students now.

In an assertion directing the University towards sustainability, the 2008 Strategic Plan for Environmental Education and Sustainable Living mandated that "The University of the South will attain excellence and national distinction for programs in the study of the natural environment and the disciplined practice of sustainable living." Furthering the ideas in the 2008 addendum to the Strategic Plan and exploring what the University's commitments mean in the context of management of the University's land base, the "2012 Domain Strategy White Paper," specifically identifies sustainability as one of the four lenses by which proposed projects involving the Domain will be evaluated. It notes that all "land management decisions will be based on our best understanding of the ecological interactions and processes necessary to sustain the composition, structure and function of ecological communities on the Domain." Responsible stewardship of the Domain's natural environment should take into consideration the following:

1) Protecting important ecological areas:
   We want to protect the diversity of existing ecological communities across the Domain and also allow for shifting species distributions over time in the face of climate change. This includes protecting portions of the landscape that serve as refugia, environmental gradients (slope, aspect, etc..), wildlife corridors, and maintaining appropriate habitat heterogeneity. The resilience of ecological communities in response to climate change is dependent on maintaining the biological diversity inherent in these systems.

2) Minimizing non-climate stresses on ecological systems:
   This includes pollution and habitat degradation, habitat fragmentation, unsustainable timber management, deer overbrowse and invasive species.

3) Managing for uncertainty by employing adaptive management protocols.

4) Reviewing proposed land-use changes on the Domain within the ecological context of changes occurring outside the Domain

	Promote sustainability through strategies of adaptive management that promote and protect ecological values including biodiversity and ecosystem services in the context of a working educational landscape.

Issues and Goals

A	Ecological Communities		
	Strategies		
1	Identify and map the ecological communities of the Domain to provide a baseline understanding of communities to guide Domain stewardship		
2	Establish long-term monitoring plots within each ecological community on the Domain		
B	Species and Habitats of Concern		
1	Perform surveys to identify rare, endangered, or threatened species and rare and exceptional habitat		
2	Identify, monitor, and report on indicator species and other variables of forest ecology for ecosystem function and success in management for biodiversity		
3	Include specific language on how to promote species and habitats of concern in future land management plans and decisions		
C	Utility Corridors		
1	Establish a management plan for utility corridors in conjunction with utility companies agreeable to both parties that balances ecological values with economically feasible maintenance of utilities. This involves the university taking a more significant role in managing utility corridors.		
D	Recreation Use		
1	Evaluate and make accessible rules and regulations for recreational use relative to protecting ecological values and ensure accessibility to the public.		
2	Education on sustainable use and responsible recreation incorporated into new student orientation programming		

E	Poaching and Incidental Take
1	Assess and subsequently monitor the impact of exploitation on plant and animal species, focusing on quantifiable impacts like road mortality and wildflower poaching.
2	Maintain and promote awareness of these issues
F	Deer Overpopulation
1	Reduce deer populations across the Domain to state recognized densities for our region and maintain balanced sex ratio and age classes through judicious use of hunting.
2	Document changes in plant communities as indicators of the ecological effects of deer browse across the Domain
G	Exotic Species
1	Complete an exotic species report assessing notable exotic plant and animal species, their distribution across the Domain, and the potential extent of their threat to ecological values. Report also should delineate an eradication plan for each species.
2	Continue to maintain GIS database of exotic species control across the Domain quantifying successes and areas for improvement
H	Silviculture
1	Identify areas of the Domain as potential candidates for restoration projects and consider these areas as zones for intensive management activities (pine plantations, borrow pits, logging roads, etc.) and establish criteria for successful and sustainable restoration
2	Assess the ecological implications for using forest ecosystems on the Domain for the purposes of carbon sequestration as outlined in the “Energy and Carbon Neutrality” section
3	Assess feasibility and consequences of offsetting pulp and paper consumption with Domain harvests.
4	Establish baseline percentage of Domain harvested woods for inclusion in new construction projects.

5	For all management projects, establish and evaluate sustainability criteria on a project by project basis
I	Quarrying, Mining, and Subsurface Minerals
1	On a project by project basis, evaluate potential use of Domain resources for quarrying and mining
2	In instances when Domain resources are not used, consider the sustainability implications of sources utilized for materials
J	Regional Stewardship
1	Work with other conservation organizations to connect the Domain to other protected areas in the region, focusing particularly on natural areas on the Cumberland Plateau
2	Develop a comprehensive GIS for the South Cumberland Region
3	Hold a series of expert meetings to develop criteria for future conditions in each focal area as laid out by "Cumberland Voices"
4	Provide training and support to conservation professionals, land managers, and local stakeholders for application of information and tools
5	Hold meetings, workshops, and field events to promote sustainable land management and the conservation of ecological values. Use the Domain to promote exemplary land stewardship within the region.

viii. Cultural Resources Management

As we look towards preserving resources and quality of life for posterity, it is critical that we protect and preserve the invaluable resources of generations that came before us. These resources can help us understand the drivers behind particular sustainability problems historically while also helping provide potential solutions to other problems. The University of the South is dedicated to the conservation of the cultural and natural resources on the Domain.

This region of the Southern Cumberland Plateau contains a rich but little known record of human occupation that goes back at least 12,000 years. In addition to prehistoric Native American sites there are also historic 18th and 19th century industrial and habitation sites. The protection, management, and interdisciplinary study of these archaeological resources is an integral part of the Sewanee curriculum and Domain management practices. As such, it is vital that we enhance our understanding of past inhabitation and land use for present day teaching and land management, while also preserving existing cultural resources that may be adversely affected during campus growth and expansion.

	viii. Cultural Resource Management
	Use knowledge of past inhabitation and land use to practice Cultural Resource Stewardship in teaching and land management
Issues and Goals	
A	Practice cultural resource stewardship in our teaching and land management
	Strategies
1	Include in Freshman Orientation a brief talk about the cultural history of the region and the importance of protection followed by brief discussion in small groups of what it means to be a steward of these resources on the Domain (this can include cultural as well as natural resources).
2	Meet with all Outing Program (SOP) leaders at the start of the school year to present the same talk and discussion. *Note: SOP leaders taking students off the Domain are often on state and federal lands and may not be aware of cultural resource laws in these areas. They also need this in their training*.
3	All ground disturbance activities proposed on the Domain must go through a proposal process through the DSC
B	Increase our knowledge of previous human occupation of the Domain in the context of environmental and social change through time

1	Inventory the existing archaeological collections so that we can meet our obligations as a "federal museum" and we can facilitate student/faculty research
2	Develop interdisciplinary collaborative projects addressing research questions on the Domain that are directly related to environmental reconstruction and human land use
3	Pursue external funding for these undergraduate research projects following initial pilot studies like those formally or informally underway at King Farm, the Cook Site and surrounding area.
4	Integrate the history and prehistory of the Domain into courses across the curriculum including History, Literature, Biology, Anthropology, Environmental Studies, etc.
C	Mitigate the effects of construction projects, recreation impacts, and various types of land management on the Domain's cultural resources.
1	Conduct needed data recovery projects as either class projects or during the Summer Archaeological Field School. Planning and notifying the University Archaeologist is essential for this to be carried out and construction schedules not to be affected.

V. Social Systems

i. Human Resources

While the spirit of an institution is largely determined by its student body, those students are a transient presence, spending only a limited number of years within the institution. The faculty and staff, however, are more permanent presences that have a more sustained effect on the spirit of the institution. For sustainability to be promoted on campus, it must go beyond the work of those in the OESS and ought to be incorporated into the experience of every employee, from their initial orientation throughout the rest of their careers. This can be accomplished in partby making sustainability a presence in the job descriptions of each employee, the expectations of each division or department, and ongoing training modules.

Beyond the expectations and opportunities for faculty and staff engagement of sustainability, employee happiness and well-being is an important component of creating a culture of sustainability within the community. Sustainability is largely about preserving a quality of life for future generations, and while this has a large environmental component, it is also dependent on the proper functioning of human systems. Thus issues such as sustainable compensation, employee wellness, and general employee happiness are issues that ought to be taken up by any institution seeking to remain sustainable at an institutional and community level.

i. Sustainability in Human Resources	
	Strengthen community, foster an atmosphere of respect in the workplace, expand the presence of sustainability in the employee experience, and offer ongoing support and training through Human Resources initiatives.
Issues and Goals	
A	Sustainable Compensation
Strategies	
1	Conduct an evaluation of current employee compensation, focusing on fairness of wages and how these compare to prevailing wages.
2	Independent Assessment performed by faculty and staff on a regular basis evaluating local cost of living

3	Based on evaluation, restructure any wages that do not meet standards for the local cost of living
4	Offer a retirement package featuring sustainable investment options
B	Employee Satisfaction
1	Conduct a survey of employee satisfaction every five years
2	Continue to provide child care to university employees, creating a system of subsidies to increase availability to all employees
3	Evaluate current status and research ways to expand and develop an employee wellness program
C	Employee Orientation, Professional Development, and Policies
1	Develop a sustainability module for employee orientation focused on continuing dialogue and fostering interest and engagement
2	Provide training opportunities for staff interested in promoting and developing new sustainability efforts within their division
3	Build sustainability objectives into the career development and work expectations for all employees
4	Build sustainability goals and accountability into all departments and divisions

ii. Diversity and Affordability

Located in a rural context in the South, Sewanee has been shaped by a distinct and historical set of socioeconomic and racial problems. As Sewanee looks to become a model institution of sustainability for other Southern liberal arts schools, it is crucial that we address these problems within the context of sustainability. While sustainability rhetoric often dwells on environmental issues like carbon sequestration and water conservation, sustainability when viewed comprehensively also has an important social justice component. A major part of this is promoting and supporting diversity and underrepresented sections of the population. We are all equally dependent on our environment, and our environment equally dependent on each of us. Thus, for us to be able to live sustainably, we must promote well-being amongst all people that will afford them a standard of living adequate to focus on sustainability and provide equal access to sustainability education. Hence, it is important that we as an institution provide the adequate resources and programming to promote enhanced diversity in both the student body and faculty and staff.

ii. Diversity and Affordability			
	Work with an array of campus programs and organizations to promote and support a diverse campus (students, faculty, administration, etc.), providing equal opportunities to people from a range of racial, socio-economic, and other personal backgrounds.		
Issues and Goals			
A	Staff Support		
Strategies			
1	Evaluate the need for an expansion of staff in the Office of Multicultural Affairs, adding more positions as deemed necessary		
2	Conduct an annual diversity survey focused on campus stakeholders' personal experience		
B	Diversity Programming		
1	Keep record of and promote to student body peer mentoring, counseling, support, and affinity groups.		
2	Evaluate the current status of academic support for students from diverse backgrounds		

3	Facilitate the creation of support, affinity, and mentoring groups for any group not represented in current support network
C	Promote and develop a more diverse faculty, not only at Sewanee, but throughout higher education
1	Create a teaching fellowship for graduates from underrepresented groups seeking careers in higher education

iii. Investment Management

A University's most powerful resource, aside from the intellectual capital of its faculty and staff, is its endowment. The way an institution manages its endowment is a vehicle through which it can espouse institutional values and take a stand on issues that goes beyond the realm of rhetoric to action with tangible impact. Through awareness and intentionality in where it invests its money, an institution is able to support industries, practices, and initiatives that assert sustainability as a high priority and assert disapproval of those that preserve paradigms antithetical to the university's espoused values. From a sustainability perspective, this could prioritize proper practices that seek to reduce GHG emissions, promote social justice, and offer economic sustainability where otherwise it may not exist. We are not advocating immediate and comprehensive divestment or reinvestment of university resources; rather we are advocating a critical assessment of current strategies and intentionality in future investment decisions through a lens of sustainability.

iii. Investment Management	
	Engage in discussion about current investment holdings, their relationship to institutional values and how investment strategies may be rethought and redirected in the future with a focus on sustainability.
Issues and Goals	
A	Transparency within the endowment
	Strategies
1	Increase transparency of the endowment to make university investment holdings publicly available
B	Evaluation of University investment strategies
1	Establish a permanent committee on investor responsibility composed of students, faculty and administrators to facilitate dialog about investment strategies
2	Evaluate University holdings in stocks and assets and their relationship to our institutional commitment to the environment and other values.
3	Develop guidelines for evaluating investments with a sustainability lens.
4	Facilitate institution-level discussion about the implications of investment holdings in fossil fuels and other potentially environmentally or socially problematic industries

5	Increase the percentage of the endowment invested in positive sustainability investments

VI. Education and Engagement

i. Academic Integration

As our society looks towards achieving a more sustainable future, success will only come through increased knowledge and understanding of broader sustainability concepts. As an institution of higher learning, Sewanee's goals concerning sustainability are twofold: we must not only operate more sustainably, but we must also aim to increase sustainability literacy among our students. This can only be fully achieved through the integration of sustainability into the curriculum.

Sustainability across the curriculum will be accomplished primarily through the creation of a sustainability certificate or other recognition program. In implementing this program we promote sustainability literacy and awareness by creating course modules and co-curricular opportunities that by themselves or combined as part of a certificate or other recognition will enrich the campus experience for sustainability. The certificate or other recongition program will be designed around existing courses by highlighting learning objectives already present or newly developed for this purpose. This directly allows students to explore what sustainability means in conjunction with each major field of study and provides a catalyst for faculty across departments to develop learning objectives relating to sustainability. All students and faculty will therefore have the opportunity to participate. The certificate or other recognition program will also serve as an impetus for developing speaker series, service learning, internships and research opportunities. These opportunities will be available for all students. Sewanee students will also be exposed to sustainability in the curriculum through first-year programming and the general promotion of sustainability within existing and newly developed courses.

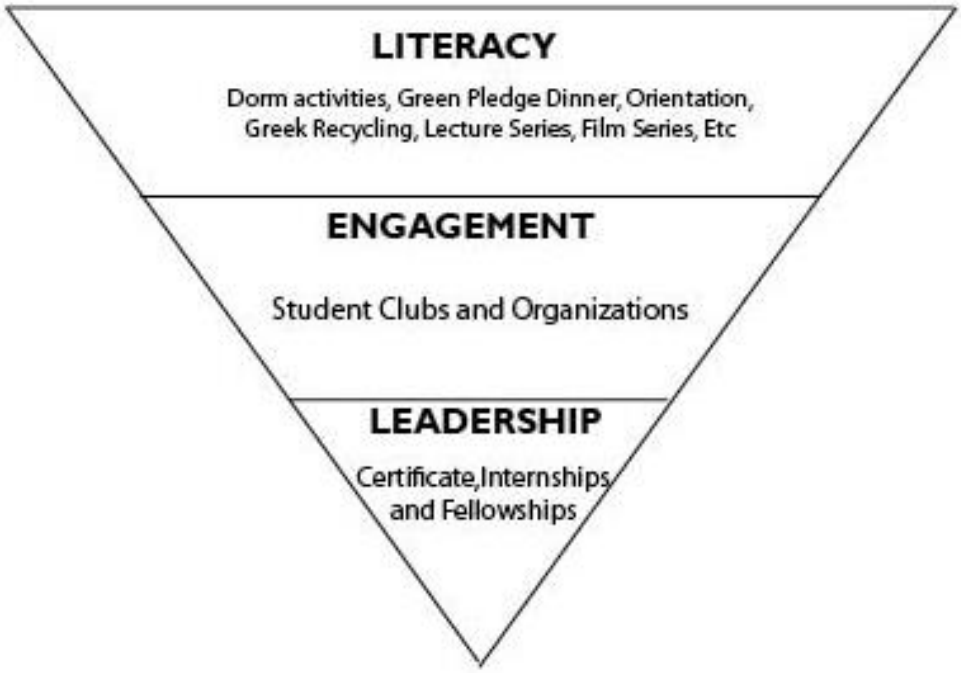
i. Sustainability in and beyond the Curriculum	
	Provide a blend of curricular and co-curricular student opportunities in sustainability
Issues and Goals	
A	Sustainability Certificate
Strategies	
1	Develop and launch certificate program
B	Curricular
1	Develop an Introduction to Sustainability course to serve as the foundation for the certificate program

2	Identify sustainability-related and sustainability-focused courses, isolating learning objectives within existing courses in each department
3	Facilitate the development of learning objectives in courses where previously not present
4	Incorporate sustainability education into first-year programming through a sustainability module, guaranteeing exposure to every student
5	Incorporate the development and implementation of this plan into the curriculum through class projects, individual research and as a case study in the process of sustainability policy-making
C	Service Learning
1	Working with Community Engagement Program director, identify existing opportunities that could count toward the sustainability certificate
D	Internships
1	Identify and promote internship opportunities in all facets of sustainability both on and off campus
2	Seek funding for new internship opportunities
E	Speaker Series
1	Develop and seek funding for a year-round speaker series highlighting local, regional and global sustainability issues and efforts
F	Research
1	Create capstone research opportunities for the sustainability certificate
2	Generate a working definition of “sustainability research” highlighting how different areas of research can be sustainability focused or related
3	Conduct a survey assessing how many faculty members are currently engaged in “sustainability research”

4	Utilize this Sustainability Master Plan as a catalyst for collaborative faculty and student research

ii. Student Activities and Initiatives

Sustainability at Sewanee has historically been a student-driven endeavor. Beginning with the creation of the EcoHouse by sustainability-minded students in the mid 1990's, there has been a persistent push by students for our University to adopt continually more sustainable practices. Although the University has created an Office of Environmental Stewardship and Sustainability, it is important that student-driven initiatives and extracurricular activities maintain prominence on campus. By creating a culture in which sustainability is prioritized and students are held accountable by their peers, these activities play a vital role in promoting sustainability literacy and awareness of the pressing issues of our contemporary age among all who pass through the University. While sustainability will not be the top interest for all students, it is still important promote a healthy environment that affords all students the opportunities to become engaged with sustainability on campus and develop and grow as leaders. As we understand it, the product and emphasis of student activities and initiatives can be understood as a 3-tiered system (see graphic below) of Literacy, Engagement, and Leadership. As students come and go and new issues arise, it will be important to approach support of student activities not as a static endeavor but as a dynamic process cultivating a student community literate and engaged in sustainability, and one that is able to produce leaders in the field who will go on to affect the communities they may find themselves in the future.



Issues and Goals	
A	Improve sustainability literacy of all matriculating students in the hopes of expanding student body awareness to empower sustainable lifestyle habits.
	Strategies
1	Generate and conduct a survey to assess and track student awareness of and engagement with sustainability issues on an ongoing basis, engaging students by cohort.
2	Use data from a sustainability survey to better inform a system of incentives encouraging sustainability literacy and quantifiable changes in behaviors across the student body
3	Continue our Sustainability Film series
4	Continue and improve our Green Pledge dinner, increasing attendance by 25% in next 5 years
5	Continue to be a mandatory part of Freshman Orientation, encouraging sustainability literacy and defining how students can immediately become part of sustainability at Sewanee.
6	Utilize pre-existing Greek system framework to promote recycling and other sustainability initiatives as a vehicle to change existing campus social culture
7	Promote and increase number of sustainability-related dorm activities and programming
8	Continue and improve dorm energy competitions
B	Promote and increase student-driven sustainability-related engagement opportunities
1	Continue to support, promote, and provide resources for the Forestry and Geology Club, Sewanee Green Action, Responsible Investment Club, EarthKeepers, Team Compost, Natural History Society, and other student organizations related to sustainability currently in operation or that may arise in the future.
2	Promote co-curricular engagement in the student residential experience by supporting sustainability-oriented theme housing.

3	Establish an annual sustainability-themed Spring Break or Fall Break trip
4	Expand existing relationships with the Sewanee Outing Program and Outreach Office through shared trips and outreach opportunities with a sustainability focus
5	Continue to support and promote cosponsoring and cooperation between on-campus sustainability clubs and initiatives with ally organizations.
6	Support and promote cosponsoring and cooperation between on-campus sustainability clubs and initiatives with ally off-campus organizations and peer institutions
7	Continue to promote dialogue between different sustainability-related student groups while also establishing an engaging educational experience (currently Green Convene).
8	Create a more involved, engaged and incentivized way to promote the Environmental Residents program
9	Create a Green Office Certificate program following guidelines outlined by the Alliance to Save Energy
10	Promote and expand alumni network for internships and job opportunities for current and graduating students
C	Green Corps
1	Work with students to establish a board of student sustainability leaders that to run programming, the revolving fund, and other facets of sustainability life on campus
2	Provide co-curricular student leadership opportunities relating to environmental stewardship and sustainability through the creation of a “Green Corps”

iii. Community Engagement

Whether viewing Sustainability from a development standpoint and understanding its mission to be focused on ensuring the ability of future generations to continue to meet their needs, or viewing it more in terms of the interface between natural and social systems and their ability to uphold one another, it is clear that efforts in sustainability operate on a variety of scales. While we are to be concerned with our impact on a global scale and ought to do all in our power to curb GHG emissions and mitigate impacts on global climate change, we also have a fundamental duty to uphold and promote the wellbeing of those in individual communities both surrounding the university and wherever our students find themselves. The University is not an isolated/self-sufficient entity; rather, it is embedded in a broader community and thus has a duty to promote and sustain the well-being of that local and global community, a duty that can be acted upon by promoting student engagement of those communities. The promotion of this engagement will not only benefit recipient communities, but will benefit the student body by offering insights, interactions, and experiences that can later empower them to continue to work towards the support and sustenance of communities around the globe.

iii. Engaging the Community on issues of Sustainability	
	To provide and support a myriad of opportunities for students to engage community level sustainability projects
Issues and Goals	
A	Fostering Community Engagement Opportunities
Strategies	
1	Work with key players on campus to develop the interface of sustainability and community engagement.
2	Implement a program to offset our emissions by implementing projects that reduce GHG emissions in the local community, e.g. the Utility Conservation Program offered through the Outreach Office.

3	Host seminars, workshops, and presentations on energy conservation and sustainability targeting surrounding community and local schools.
4	Maintain and promote Sustainability-themed outreach trips (Costa Rica, Jamaica, and Haiti) and explore potential for expanding sustainability focus.
5	Establish direct student involvement and create learning opportunities through offset programs by partnering Sewanee and Haitian students to monitor and evaluate offset generation.
6	Host a community charette about sustainability to foster a meaningful dialogue between the University and the surrounding community.
7	Continue to support and provide a location for the Cumberland's Farmer's Market.
8	Make an effort to place community members on various working groups of the Sustainability Committee to ensure grassroots and community-focused input.
9	Integrate sustainability outreach into opportunities for Canale and Bonner scholars
10	Establish Home Construction workshop and Builder consortium for local architects, contractors, etc. to promote green building practices.
11	Establish regional programming for agricultural practitioners to meet, to plan and to train based on the academic program and Farm. The dining hall serves a similar function for chefs.
12	Eliminate substandard housing on the Domain through Housing Sewanee or other means.

VII. Administration

i. Support

Sustainability initiatives can only gain traction and be maintained over time with adequate resources needed to accomplish outlined goals. As such, the execution of our Sustainability Master Plan will be entirely dependent on sufficient staff and an appropriate space for faculty, staff and student engagement in sustainability efforts. As such, providing regular post-baccalaureate fellowships to graduates generates employment opportunities which allow them to expand and enrich their engagement with sustainability projects while also providing continuous staffing of sustainability positions needed for the success of the OESS Program.

Support Staff	
	Endow staff positions to support sustainability at Sewanee
Staff	
Issues and Goals	
A	Post-Baccalaureate Fellows
Strategies	
1	Permanently fund fellowships
B	Additional Support Staff
1	Develop a plan to identify staffing needs necessary to implement and support this Sustainability Master Plan. Potential areas where support is needed include: • Energy Conservation • Community Engagement • Sustainability Certificate • Domain Education • Farm Personnel

ii. Communications

As words such as “eco”, “green”, and “sustainability” become more frequent in daily usage, they begin to lose some of their gravity. When communicating sustainability, it is important for that party to avoid “greenwashing” programs and initiatives, or else risk losing their credibility. An effective sustainability communications strategy not only espouses the importance of sustainability, but also helps to educate about actual processes being undertaken.

As Sewanee moves to become a national leader in sustainability, it is critical that we have an effective communication strategy to highlights our successes. Our communications efforts regarding sustainability will be aimed at educating various audiences both about the University’s achievements thus far and new efforts of the OESS.

The initial communications goals are intended to begin to educate members of the University and the entire Sewanee community about progress already made toward sustainability, as well as about ongoing efforts toward a more sustainable campus, and to increase support for those efforts. Whenever possible, student involvement will be sought—whether in writing news stories, updating web pages, creating surveys, or developing communications vehicles such as photo displays or films.

Communications strategies and tactics will address a number of audiences, both primary (including students, faculty and staff members, prospective students, alumni, Regents and Trustees, and the news media) and secondary (e.g., community members, parents, ranking agencies and membership organizations, donors and foundations, and environmental organizations). We will need to develop consistent messages and themes as sustainability initiatives progress, and provide broader context for individual projects. The message we want to promote is one that highlights the University’s firm commitment to sustainability and what makes Sewanee unique among peer institutions and establishes its position as a major player in sustainability nationally. This involves focusing on the University’s commitments to existing sustainability structures like STARS rankings and ACUPCC as well as Sewanee’s utilization of our unique resource base to become not only carbon neutral, but a carbon absorber.

	ii. Communications: Tools and strategies for conveying a sustainability message to and beyond the University community
	Establish a comprehensive and consistent message of an ongoing commitment to sustainability and utilize new and currently available tools to convey that message to and beyond the University community

Issues and Goals	
A	The Greening of Admissions: partner with admissions staff to convey a message of sustainability to prospective students
	Strategies
1	Create an annual training program for admissions counselors, educating them and updating them on current sustainability measures and distribute FAQ sheets as continuing reminders of sustainability efforts
2	Feature sustainability more prominently in admissions publications
3	Make sustainability a part of prospective students' first experiences of Sewanee, creating sustainability-oriented programming for prospective student preview weekends
4	Create a sustainability kiosk—a display presenting information to independent visitors and serving as a reminder to tour guides, admissions counselors, current students, etc.—to be displayed in Spencer Hall, but eventually to move to a new student center
B	Web Presence
1	Develop a website for the Office of Environmental Stewardship and Sustainability as a location to consolidate, promote, and present campus sustainability efforts
C	Branding and Promotion
1	Participate in Sustainability surveys and rankings (AASHE, Sierra Club, US News, etc.) not as a means to prove our sustainability but to avoid unnecessarily low rankings
2	Use existing resources within the community (Mountain Messenger, Sewanee Purple, public forums) to promote sustainability efforts and communicate possibilities for individual efforts.
3	Connect publications to sustainability. Domain and Sewanee specific publications (like the Flora of the Domain, butterfly guidebook, hiking guides, Domain Management Plan) that relate to sustainability efforts should be branded as connecting to sustainability efforts.

4	Use special events like Earth Day and Arbor Day as an avenue for OESS to promote sustainability to a larger audience
5	Found a Sewanee Sustainability Affiliates Association—an organization comprised of faculty, staff, alumni, and other Sewanee affiliates—for the purpose of networking professionals with similar interests and as a means to connect and empower students seeking to enter sustainability-related fields
6	Use existing and develop new avenues of communication to highlight the unique sustainability efforts going on at Sewanee, especially our approach to becoming a net carbon absorber
7	Highlight past work in sustainability by developing a documentary featuring past work of the Landscape Analysis Lab fighting against unsustainable land use practices on the South Cumberland Plateau
D	Sustainability Progress Report
1	Produce an annual "Sustainability Progress Dashboard" presenting progress in the implementation of this master plan and describing new and ongoing sustainability initiatives

iii. Green Revolving Fund

Many sustainability projects achieve an ongoing savings, and thus produce a "payback" on the initial investment. Energy conservation projects, for example, produce easily quantifiable savings from a reduction in utility usage. It is important that we achieve funding for an extensive selection of energy conservation and sustainability projects over time. By initially seeding a Green Fund and by rolling savings back into it a smaller starting amount is required and funding for future projects can be achieved with the ongoing cash flow. It is our goal to seed such a fund and continually replenish it with funds from savings.

	iii. Green Revolving Fund
	Establish a two-phase revolving fund to support energy conservation and other sustainability measures. Roll 100% of the savings back into to fund.
Issues and Goals	
A	Revolving Fund Creation
	Strategies
1	Establish a Phase I revolving fund with $150,000 seed money to support an annual competition of sustainability projects submitted broadly by all stakeholder groups.
2	Establish a larger, Phase II revolving fund for funding more capital intensive projects. Roll 100% of savings back into the fund to be used for further investment in deeper energy conservation and renewable energy investments until long-term carbon emissions and energy goals are met.

APPENDIX:

SUSTAINABILITY MASTER PLAN VETTING PROCESS

Regents III (approval of plan): June 2013

College and SoT Faculty (approval of plan): April-May 2013

School of Theology: Scheduled for April 2, 2013

Friends of the Library: February 27, 2013

Sustainability Steering Committee IV (plan approved): February 22, 2013

Emeriti Society: February 20, 2013

Regents II (review of plan): February 12, 2013

Residential Life Staff: February 12, 2013

Student Life Committee: January 30, 2013

Master Plan Steering Committee: January 29, 2013

Community/ Student Open Forum: January 22, 2013

Admissions: January 11, 2013

Advancement: January 9, 2013

Community Engagement II: December 21, 2012

Marketing and Communications: December 20, 2013

Information Technology Services/ Library: December 17, 2013

Executive Staff: December 17, 2013

Physical Plant: December 14, 2012

Duck River Electric: December 14, 2012

Sustainability Steering Committee IiI (review of 2nd draft): December 14, 2012

Athletics: December 13, 2012

Human Resources and Auxillary Services: December 13, 2012

Dining Services: December 13, 2012

Regents I (sequestration presentation): December 11

Community Engagement I: December 10, 2012

Farm Advisory Committee: December 3, 2012

Student Senate: December 3, 2012

Sustainability Steering Committee II (review of first draft): November 11, 2012

Academic Department/ Program Chairs: November 16, 2012

Domain Stewardship Steering Committee II:: October 4, 2012

Domain Stewardship Steering Committee I: September 28, 2012

Sustainability Steering Committee I (outlined reviewed): March 30, 2013