

SUSTAINABILITY ACTION PLAN



UNIVERSITY *of* NORTH CAROLINA WILMINGTON

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EXECUTIVE SUMMARY

OVERVIEW

SUSTAINABILITY ACTION PLAN

As a first step in better organizing, prioritizing and facilitating campus sustainability efforts, this document contains a Sustainability Action Planning Framework. The purpose of the framework is to provide a common language campus stakeholders can use to describe the important elements of a strategic sustainability action plan. Organizing campus sustainability efforts around this framework will also allow performance to be measured and managed with more rigor.

The UNCW Sustainability Committee in coordination with an outside consultant, the Good Company, prepared this document based on interviews and work sessions with various campus stakeholders. This plan identifies eight broad areas of concern: Coordination, Planning & Governance, Academics, Campus Engagement, Climate & Energy, Transportation, Landscapes, Water, Materials Management, and Diversity & Affordability.

Within each of these categories, the plan identifies specific topics of concern, articulates aspirational goals, establishes measurable objectives, and prioritizes strategies and action items to meet these objectives.

SUSTAINABILITY ACTION PLAN

FRAMEWORK

Concept	Definition	Example
Category	A broad area of concern	Materials management
Aspect	A specific area of concern within a category	Solid waste
Goal	A desired end-state	Zero-waste campus
Objective	A measurable outcome	Increase waste diversion rate to 50% by 2020
Strategy	A method to achieve an objective	Implement disposal alternatives for organics
Action	A step taken to implement a strategy	Conduct a triple bottom line analysis of organics disposal alternative

First, the framework identifies a set of broad areas of concern, or “Category,” related to sustainability in higher education. The included categories are:

- Coordination
- Planning & Governance
- Academics
- Campus Engagement
- Transportation
- Landscapes
- Water
- Materials Management
- Diversity
- Affordability

SUSTAINABILITY ACTION PLAN

Second, the framework identifies specific areas or topics of concern, or “Aspects” within each category. For example, the Material Management category consists of two aspects: Purchasing and Solid Waste. Aspects are the highest level naming of an issue to be managed.

Next, the framework calls for the articulation of a “Goal” or desired end-state for each aspect. Goals should be aspirational and provide a sense of direction and vision. The goal is an articulation of what the university wants to achieve over the long-term and are generally qualitative. For example, a goal for “solid waste” might be to achieve “zero-waste” (i.e. diverting all solid waste from disposal via landfill or incineration).

For each goal, the framework establishes specific and measurable objectives. Objectives state how much of what will be accomplished by when. The framework includes both short-term and longer-term objectives. Objectives can be thought of as milestones that mark progress to a goal. For example, an objective for the goal of achieving a “zero waste” campus might be to increase waste diversion rate by to 50% by 2020.

A strategy is a general method or approach to be implemented in order to achieve an objective. Strategies seek to answer the question how will the university meet a given objective. Some common types of strategies include providing information to increase public awareness, creating, modifying or enhancing service offerings, modifying policies and procedures, and providing incentives, or disincentives, for certain behaviors. In order to meet an objective it may be necessary to use more than one strategy. An example of a strategy for the objective of increasing solid waste diversion might be to develop disposal alternatives for the organic waste component of the waste stream.

Finally, for each strategy the framework describes specific “Actions” that describe what specific activities will occur to be to implement a strategy. Actions should ideally identify the person or persons responsible for the carrying out the action, the date by which the action will be completed and the resources required to carry out the activity. An example of an action for the strategy of implementing disposal alternatives for organic waste might be to conduct a feasibility study of different disposal alternatives.

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Category		Coordination, Planning & Governance	
Aspect		Overall Performance	
Goal		Sustainability thinking integrated in all aspects of institution UNC Wilmington recognized as leader & innovator in sustainability in higher education	
Performance Measure		AASHE STARS rating	
Objectives	Aspirational	By 2024 achieve AASHE STARS Gold By 2028 achieve AASHE STARS Platinum	
	Short-term	By 2017 exceed the average AASHE STARS score of peer & sister institutions	
Priority Strategies		Formalize commitment to sustainability by completing STARS	Measure and report performance
Priority Actions		Develop campus sustainability policy	Track and report key performance measures Use AASHE STARS Framework to perform comprehensive sustainability assessment Report AASHE STARS performance
Future Actions		Increase collaboration with non-traditional organizations	Improve STARS score by 5 points every year
Alignment with other plans and policies		STARS	
Responsibility		Sustainability Committee	Sustainability Coordinator

SUSTAINABILITY ACTION PLAN

Category		Coordination, Planning & Governance		
Aspect		Sustainability Program Capacity		
Goal		Provide financial resources necessary to support a sustainability program that is recognized as a leader		
Performance Measure		Spending on sustainability initiatives per student FTE		
Objectives	Aspirational	By 2020 secure \$100,000 in order to create Sustainability Office to coordinate campus-wide sustainability efforts		
	Short-term	By 2015 secure TGIF in order to hire full-time sustainability coordinator		
Priority Strategies		Financial resources	Staffing	Campus participation
Priority Actions		Support campus green fee Partner with Campus Dining	Hire full-time sustainability coordinator	Five Campus Sustainability Committee meetings per semester Semi-annual report to Cabinet Annual report to Board of Trustees
Future Actions		Reallocate funds to pay for Sustainability Coordinator	Create a Sustainability Office	Collaboration between all Sustainability Committees
Alignment with other plans and policies		STARS	STARS	STARS
Responsibility		Sustainability Committee	Chief Sustainability Officer	Sustainability Committee

SUSTAINABILITY ACTION PLAN

Category		Academics	
Aspect		Curriculum	
Goal		Integrate sustainability into research components of the university including specific course offerings	
Performance Measure		Determine percent of courses that incorporate sustainability Determine percent of graduates from programs that have at least one sustainability learning outcome	
Objectives	Aspirational	Increase the amount of courses by 5% that incorporate sustainability annually, to a maximum of 25 courses	
	Short-term	Survey faculty to self-identify sustainability facets of their courses, research, etc.	
Priority Strategies		Plans, policies & procedures	Outreach & education
Priority Actions		<p>Convene working group to assess curriculum based on AASHE STARS and develop recommendations for enhancing sustainability learning outcomes</p> <p>Create Sustainability Cluster & Minor</p>	Submit a proposal for University College's Synergy common book program
Future Actions		Create Sustainability Major	Develop formal academic program (e.g. certificate, major, minor, concentration, etc.) in sustainability
Alignment with other plans and policies		STARS	
Responsibility		Sustainability Committee	Sustainability Committee/Coordinator

SUSTAINABILITY ACTION PLAN

Category		Academics	
Aspect		Research	
Goal		Sustainability as a point of pride for UNC Wilmington faculty/student researchers	
Performance Measure		Determine percent of faculty engaged in sustainability research Determine percent of departments engaged in sustainability research	
Objectives	Aspirational	Increase percent of research faculty engaged in sustainability focused/related topics	
	Short-term	Promote sustainability fund for research	
Priority Strategies		Plans, policies & procedures	Outreach & education
Priority Actions		Convene working group to assess sustainability research activities based on AASHE STARS framework	Annual sustainability research award for students and faculty
Future Actions		Establish and raise funds for sustainability research endowment	Host sustainability research fair
Alignment with other plans and policies		STARS	
Responsibility		Sustainability Committee	

SUSTAINABILITY ACTION PLAN

Category		Campus Engagement				
Aspect		Student Engagement				
Goal		Foster a culture of sustainability				
Performance Measure		Percent of enrolled student that take UNC Wilmington sustainability pledge				
Objectives	Aspirational	Sustainability for freshman and seniors to determine impact				
	Short-term	Promote sustainable events & make sustainability a point at orientations (student/staff/faculty)				
Priority Strategies		General campus presence	Promote through campus life	Promote through student organizations	Promote through residence life	Promote through community service
Priority Actions		Continue new student orientation workshop Sponsor outreach events with emphasis on behavior change (e.g. Recycle Mania) Standardize sustainability logo and expand its use Utilize social media	Identify where sustainability themes are currently represented in campus life programming Expand sustainability-themed programming offered through Department of Campus Life	Develop explicit sustainability programming in the CLES Office Develop a sustainability peer education program Incorporate sustainability practices in student organization sponsored events	Expand residence hall sustainability peer educator program	Develop sustainability focused community service programming
Alignment with other plans and policies		STARS				
Responsibility & Resources		Transitions / Sustainability Committee	Sustainability Committee	Sustainability Committee/CLES Office	Sustainability Committee /HRL	Sustainability Committee/CLES Office

SUSTAINABILITY ACTION PLAN

Category		Campus Engagement
Aspect		Employee Engagement
Goal		Foster culture of sustainability among faculty/staff
Performance Measure		Sustainability survey for faculty/staff
Objectives	Aspirational	Have sustainability goals presented by both faculty senate and staff senate and including courses in the HR training catalog
	Short-term	Sustainability presentation in new employee education
Priority Strategies		Professional development
Priority Actions		New employee orientation
Future Actions		Continuing education credits through "Dare to Learn"
Alignment with other plans and policies		STARS
Responsibility & Resources		Sustainability Committee/Human Resources

SUSTAINABILITY ACTION PLAN

Category		Climate & Energy		
Aspect		Climate Mitigation & Adaptation		
Goal		Achieve climate neutrality and increase climate resilience		
Performance Measure		Total net GHG emissions (GHG Inventory Scopes 1, 2 & 3)		
Objectives	Aspirational	Reduce or offset all GHG emissions by 2050 per		
	Short-term	Reduce or offset GHGs by 5% by 2020 vs 2014 baseline		
Priority Strategies		Plans, policies & procedures	Outreach & education	Offsets
Priority Actions		<p>Adopt a policy that establishes GHG reduction and climate resiliency goals</p> <p>Develop a detailed Climate Mitigation Plan that prescribes specific measures to achieve GHG reduction goals</p>	<p>Prepare and publish an annual GHG inventory that includes evaluation of progress toward meeting GHGs reduction and climate resiliency goals</p>	<p>Compile report on carbon offsetting practices at colleges and universities</p> <p>Develop special event carbon offset program</p>
Future Actions		<p>Adopt a Climate Adaptation Plan that describes strategies to increase resiliency to climate change risks</p>	<p>Host speakers and programming to educate about coastal living and climate change</p>	<p>Partner with community to implement local energy efficiency projects beyond university boundaries to "offset" GHGs</p>
Alignment with other plans and policies		UNC-GA Sustainability Policy	STARS	UNC-GA Sustainability Policy
Responsibility		Sustainability Committee		

SUSTAINABILITY ACTION PLAN

Category		Climate & Energy		
Aspect		Clean Energy		
Goal		Support the development and use of energy from clean and renewable resources		
Performance Measure		Determine percent of all energy consumption from clean energy sources		
Objectives	Aspirational	Carbon neutrality by 2050		
	Short-term	Produce or procure renewable energy equal to 500kW of by 2020		
Priority Strategies		Plans, policies & procedures	On-campus renewable energy projects	Off-campus renewable energy projects
Priority Actions		Adopt a policy that provides the structure for establishing and achieving GHG reduction goals	<p>Perform campus-wide renewable energy feasibility study</p> <p>Compile a research report on innovative public-private financing models (e.g. ground lease)</p>	<p>Investigate opportunities purchase of renewable energy certificates</p> <p>UNC System wide renewable energy projects</p>
Future Actions		Develop siting guidelines for on-campus renewable energy projects	Implement a pilot/demonstration project	Investigate opportunities to develop a "community solar" project
Alignment with other plans and policies		Sustainability Policy Draft	UNC-GA Sustainability Policy	UNC-GA Sustainability Policy
Responsibility		Sustainability Committee/Facilities		

SUSTAINABILITY ACTION PLAN

Category		Climate & Energy			
Aspect		Building Energy Consumption			
Goal		Net zero energy campus			
Performance Measure		Net building energy consumption (i.e. electricity and natural gas) measured in MmBtu			
Objectives	Aspirational	UNC Wilmington campus is a net zero energy consumer by 2050			
	Short-term	Reduce building energy consumption by 50% by 2020 using 2002/03 baseline			
Priority Strategies		Plans, policies & procedures	Public education & engagement	Energy efficiency and conservation	Construction technology & materials
Priority Actions		Written green building policy included in design and construction guidelines Formalize energy performance standards for new equipment purchases	Signage to promote what sustainability efforts are already taking place on campus	Retro commission Execute 2nd performance contract Strategic energy plan to identify cost-effective energy efficiency and conservation measures	Compile report on construction technology & materials that reduce life-cycle energy use
Future Actions		New building built to meet or exceed LEED Gold	Utilize campus as a living laboratory	Investigate feasibility of combined heat and power applications	New building built to meet or exceed LEED Gold
Alignment with other plans and policies		STARS			
Responsibility & Resources		Sustainability Committee/Facilities	Sustainability Committee	Sustainability Committee/Facilities	Sustainability Committee/Facilities

SUSTAINABILITY ACTION PLAN

Category		Transportation			
Aspect		Commute			
Goal		Improve the comfort and convenience of commuting options such as walking, bicycling, and carpooling in order to reduce the impacts of driving alone.			
Performance Measure		Percent of commute trips that occur via alternative transportation mode			
Objectives	Aspirational	By 2025, 50% of percent of commute trips will occur via alternative transportation mode			
	Short-term	Increase the percent of commute trips via alternative transportation 10% by 2020 and 15% by 2025			
Priority Strategies		Improve campus walkability & bike ability	Transportation Demand Management (TDM)	Outreach & education	Enhance transit options
Priority Actions		<p>Implement facility and safety upgrades suggested in 2014 Multi-modal Study</p> <p>Investigate bike share program & Zimride</p>	<p>Review parking pricing (e.g. reduce carpool fees)</p> <p>Provide faculty/staff emergency ride home point-to-point shuttle</p>	<p>Commute challenge</p> <p>Breakfast on the Cross-City Trail</p> <p>Start bike/ped "club" and work with local business to offer discounts</p>	<p>Add digital information displays at bus stops</p>
Future Actions		<p>Improve on and off-campus network of sidewalks, bike lanes, etc.</p> <p>Develop end trip facilities (e.g. showers and clothes locker)</p>	<p>Review fringe benefits for opportunity to incentivize alternative commuter choices</p> <p>Implement congestion parking pricing</p>	<p>Collaborate with businesses and organizations on the Cross-City Trail</p>	<p>Expand shuttle routes beyond 1-mile radius</p>
Alignment with other plans and policies		<p>2010 Campus Master Plan</p> <p>2014 Multi-modal Transportation Study (Multi-modal Study)</p>			
Responsibility		Auxiliary Services			

SUSTAINABILITY ACTION PLAN

Category		Landscapes		
Aspect		Developed & Managed Natural Landscapes		
Goal		Strive to have the most natural and maintenance free landscape while being aesthetically pleasing		
Performance Measure		Number of acres (non-structural) managed in accordance with sustainable landscape management practices		
Objectives	Aspirational	Implement sustainable landscape practices in 100% of managed grounds by 2030		
	Short-term	Identify and pilot at least 5 sustainable landscape practices by 2016		
Priority Strategies		Plans, policies & procedures	Integrated pest management	Vegetation management
Priority Actions		Adopt a sustainable landscape policy that formalizes the University's commitment to implement sustainable landscape practices for irrigation, vegetation selection, integrated pest management, and fertilizer use	<p>Develop and publish written IPM plan, update bi-annually</p> <p>Eliminate the use of the neonicotinoid pesticides imidacloprid, clothianidin, thiamethoxam, acetamiprid and dinotefuran</p> <p>Public notice and posting provided at least 24 hrs. prior to pesticide application</p> <p>Pilot alternative weed management strategies (e.g. flame weeding, mulching, etc.)</p>	<p>Develop pilot turf replacement initiative</p> <p>Expand use of organic fertilizers</p>
Future Actions		Develop a Sustainable Campus Master Plan to guide the preservation and enhancement of campus landscapes	Certify IPM under IPM Institute's Green Shield Certification scheme	Composting facility
Alignment with other plans and policies		STARS		
Responsibility		Sustainability Committee/Landscaping		

SUSTAINABILITY ACTION PLAN

Category		Landscapes		
Aspect		Natural Areas		
Goal		Preserve and enhance high value University-owned natural areas for educational purposes and ecosystem health		
Performance Measure		Annual and cumulative number of acres of University-owned natural areas enhanced Annual number of academic uses (e.g. field trips, labs, etc.)		
Objectives	Aspirational	All high-value University-owned natural areas preserved and enhanced to maximize ecosystem health		
	Short-term	Complete enhancement activities in Bluethenal Natural Area and Ev-Henwood by 2018 (signage, maps, GIS, kiosks) CMS enhancements (walkway, signage, path, picnic area, outdoor classroom)		
Priority Strategies		Plans, policies & procedures	Ecosystem enhancements	Educational enhancements
Priority Actions		Adopt a policy recognizing the high educational and ecosystem value of the Main Campus Forest and designating core areas (at least 120 acres) as an "outdoor learning laboratory" protected from future development Develop a Natural Areas Stewardship Master	Prescribed burns in Main Campus Forest Longleaf pine restoration and reforestation Ev-Henwood old field succession project (by 2020) Clear roads and soil piles	Develop a designated trail system in Main Campus Forest
Future Actions		Plan, based on site specific assessments, to guide the preservation and enhancement of University-owned natural areas	Develop plan	Implement ecosystem health monitoring lab
Alignment with other plans and policies		Campus Environmental Stewardship Committee Recommendations for UNC Wilmington Natural Areas		
Responsibility & Resources		Sustainability Committee/Landscaping		

SUSTAINABILITY ACTION PLAN

Category		Water		
Aspect		Water Consumption		
Goal		Minimize to the maximum extant practical potable water use in buildings and landscapes		
Performance Measure		Per capita potable water consumption in buildings (Energy) Per capita potable water consumption in landscapes (Landscaping)		
Objectives	Aspirational	Eliminate potable water use in mechanical systems & landscape applications by 2050 Reduce indoor water use by 50% by 2030		
	Short-term	Reduce indoor potable water use by 50% below 2002/03 levels by 2020 Reduce outdoor potable water use by 50% below 2002/03 levels by 2020		
Priority Strategies		Plans, policies & procedures	Indoor water efficiency and conservation	Outdoor water efficiency and conservation
Priority Actions		Adopt a policy that provides the structure for establishing and achieving water management goals Conduct a campus-wide audit to establish a water consumption baseline Adopt minimum specifications for new commercial kitchen appliances, plumbing fixtures, irrigation equipment, mechanical systems, and laboratory equipment	Compile report on best management practices of indoor water efficiency and conservation measures for kitchen appliances, plumbing fixtures, mechanical systems, and laboratory equipment Switch mechanical systems to non-potable water source per Energy Savings Performance Contract	Compile report on best management practices of water efficiency and conservation measures for landscape maintenance Complete an irrigation audit by a U.S. EPA WaterSense certified professional
Future Actions		Establish a plan that identifies and prioritizes cost-effective water efficiency and conservation	Retrofit fixtures with WaterSense models Retrofit appliance with EnergyStar models	Install "smart" irrigation controllers Expand use of recycled water sources for irrigation
Alignment with other plans		STARS/Stormwater Master Plan		
Responsibility		Committee/Landscaping/Facilities		

SUSTAINABILITY ACTION PLAN

Category		Materials Management			
Aspect		Solid Waste			
Goal		Zero-waste			
Performance Measure		Percentage of solid waste landfilled or incinerated			
Objectives	Aspirational	30% solid waste diversion rate by 2020			
	Short-term	50% solid waste diversion rate by 2025			
Priority Strategies		Program management	Waste minimization	Maximize recovery of recyclable materials	Maximize recovery of organics
Priority Actions		<p>Develop an integrated solid waste reduction plan</p> <p>Improve understanding of waste characterization and volumes</p>	<p>Expand water bottle filling stations</p> <p>Work with ITSD to institutionalize two-sided printing</p> <p>Develop plan to recycle dorm "moving day" waste</p>	Recyclemania	Begin campus composting program
Future Actions		Consolidate solid waste services under a "zero waste" program	Reduce number of trash cans and increase recycling/composting	Consider switch to comingled recycling	Build "Zero-Waste" facility
Alignment with other plans and policies		STARS/Recycling Report			
Responsibility		Sustainability Committee/Recycling/Facilities			

SUSTAINABILITY ACTION PLAN

Category		Diversity		
Aspect		Racial/Ethnic Minorities, People with disabilities, people of various religions, ages, economic & social classes, LGBT, gender, & military		
Goal		Integrate nurturance of diversity into core operations while increasing the diversity among the student, faculty and staff		
Performance Measure		Increase the percent of diversity in student, faculty & staff who have taken cultural competency workshops		
Objectives	Aspirational	Increase the nurturance of diversity in the campus culture		
	Short-term	Hire a Chief Diversity Officer		
Priority Strategies		Promote diversity through workshops	Integrate diversity into the culture of campus	Research possibilities
Priority Actions		Promote cultural competency workshop Promote students studying abroad	Include diversity education into UNI 101 classes Recruit and retain diverse faculty, staff and student body Expand Health and Human Sciences diversity committee to other colleges Increase collaboration between UNCW Diversity Centers	Create research interest group Compare data between graduation and retention rates for diverse groups
Future Actions		Expand Diversity courses for all majors (esp. social sciences)	Organize a diversity nurturance survey	Create a bias response policy/team
Alignment with other plans and policies		STARS		
Responsibility		TBD		

SUSTAINABILITY ACTION PLAN

Category		Access and Affordability			
Aspect		Low-Income Students, Financial Need, Loans & Scholarships			
Goal		Increase enrollment of low-income students with academic promise			
Performance Measure		Number of students graduated Pell Grant eligible entering and graduating			
Objectives	Aspirational	75% students Pell Grant eligible at graduation			
	Short-term	50% students Pell Grant eligible at graduation			
Priority Strategies		Policies and Programs	Scholarship	Track/Record	Support
Priority Actions		Expand the SOAR program, Seahawk Scholars, and SOAR ambassadors	Increase the availability of scholarships based on academic promise for low-income students	Graduation/success rate for low-income students The percentage of students graduating with no interest-bearing loans debt	Establish and on-site child care facility or partner with a local facility to help meet the child care needs of students
Future Actions		Create program to prepare low-income students for higher education	Create scholarship specifically for low-income students with academic promise	Use records to create action plan	Create programs to equip institution to better serve low-income students
Alignment with other plans and policies		STARS			
Responsibility		Sustainability Committee/Office of Scholarships and Financial Aid			