

Sustainability Action Plan 2015



Strategic Planning: Key Definitions

Strategic Plan: The strategic plan is designed to guide the College's sustainability efforts. It is a comprehensive approach to normatively and empirically test and steer the process toward specific goals and targets that will significantly reduce the College's ecological footprint, grow "high impact" learning opportunities around sustainability, engender a culture of sustainability and to generate organizational resilience that is capable of sustaining the College on multiple fronts and at scale.

Mission: To pursue and share knowledge through study, inquiry, and creation in order to empower the individual and enrich society. Our mission is our fundamental purpose that supports the vision of who and what we want sustainability at CofC to represent. It combines forward thinking problem-solving to address core systems problems while maintaining a sense of deep history, tradition and character of Charleston and CofC.

Vision: We need to strive for full-spectrum sustainability, which represents the broad constellation of aspects that bear on "sustainability". This strategic plan is in one significant way an attempt to outline precisely what that spectrum is. In developing that vision of sustainability at CofC, it will include:

- Engaging in a continual process of interactive planning, shared visioning, and adaptive management;
- Expanding *knowledge management* as a strategic asset of CofC to improve sustainability processes and practices;
- Effectively implementing total quality management and Best Practices for continuous process improvement;
- Engaging all system stakeholders to build normative content and to understand interlinkages and interrelationships;

- Developing a systems approach based on creative holism that embeds action research and praxis as a structured approach to sustainability
- Linking resilient institutions and programs as a form of social and structural transformation,
- Utilizing regenerative thinking and design in our business & support systems
- Applying Integrative thinking and design, so that problems and learning are approached in transdisciplinary/trans-siloed ways that integrate knowledge and practice.

Goals: Our goals are the ultimate metric for the result we expect to achieve in the long term. In the CAP, we have five (5) goals that represent the results we expect to achieve by 2050. The strategies, objectives and tactics all move toward supporting these goals in support of the mission and vision.

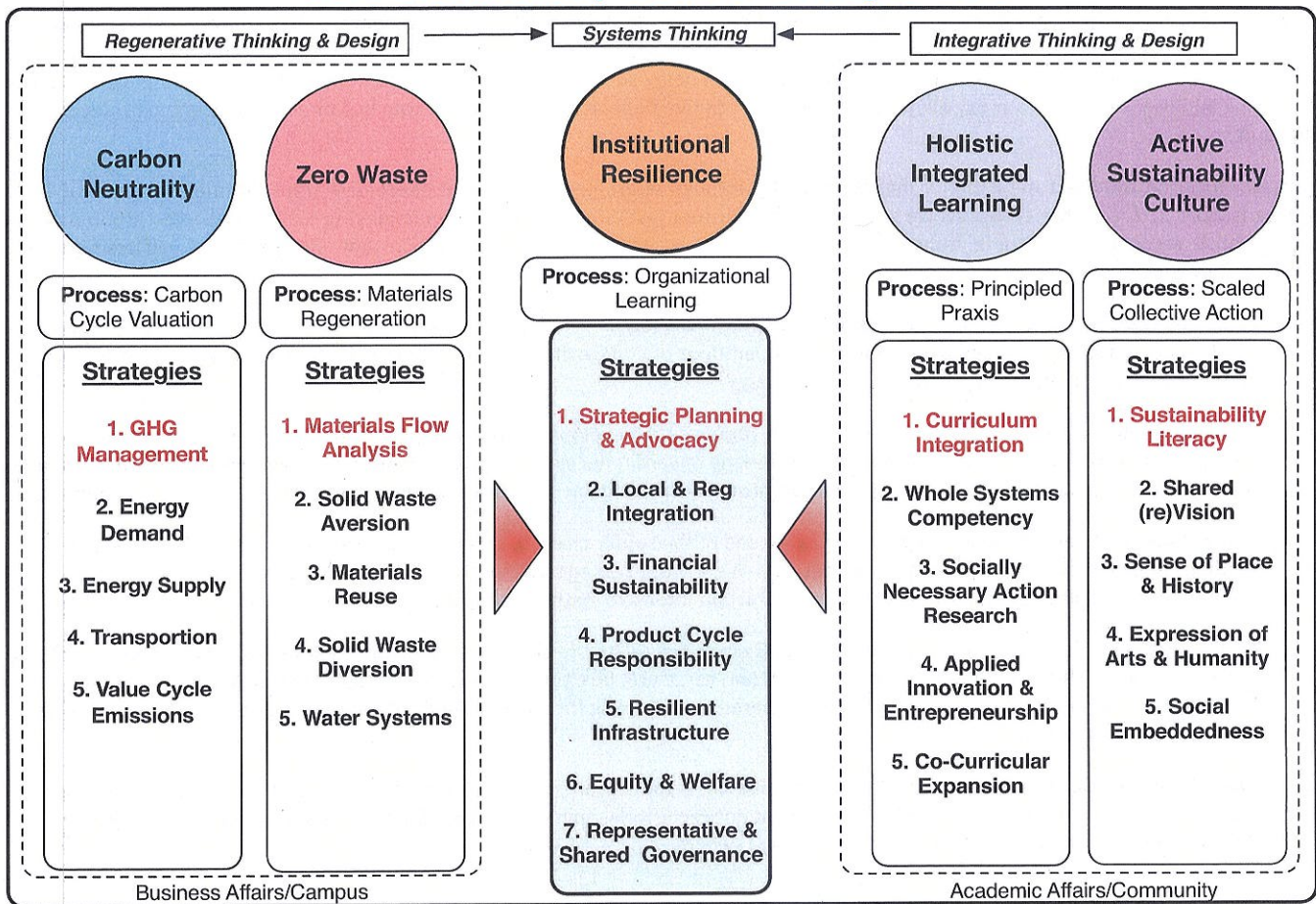
Process v Action: As we strive to reach our goals for sustainability, we must view them from two angles: Process and Action. The process addresses the methods and manners we will utilize to achieve our goal while the actions are specific, action items that will work toward the goal. The interaction is not a strict means (process) to an end (action) toward a goal. In systems and sustainability, the process is the focus that leads naturally to action. This is a constitutive relationship with constant focus on the overarching goals.

Strategy: The strategies represent the *means* (as opposed to process) through which we will achieve our goals. We have 27 strategies that are in line to meet the five overarching goals for generating sustainability at the College.

Objective: Our objectives are best characterized as specific transitional targets that guide us over the shorter term. Objectives also provide a pathway for baselining and empiric measurement. They support the means to get to the longer-term goals in support of the mission and vision through empirically tested targets.

Tactic: Our tactics are specific, actionable items or tasks that help to achieve an objective. These action items could be immediately enacted if funding and approval was not an issue. While objectives should be distinct for the strategy and clearly outline what each strategy encompasses. Tactics can and often should overlap as we try to find tactics that can serve multiple objectives.

CofC Sustainability Goals & Strategies 2015



GOAL ONE: CARBON NEUTRALITY (by 2050)

A system that achieves net zero carbon dioxide equivalent emissions. It includes all GHGs (greenhouse gases) in their carbon equivalency. Carbon equivalency is used as proxy for measuring progress on sustainability systems because it easily transcends different operating and support systems: transportation, building design and efficiency, energy sourcing and infrastructure, food systems, landscaping, and product purchasing and use. Using it as a proxy allows us to generate positive benefits to our triple bottom line of ecology, economics/development, and equity.

Process – focusing on direct mitigation v indirect (offsets) through alternative energy and alternative transportation systems, holistically viewing (scopes 1, 2, & 3) the emissions we are responsible for (not just direct on-campus emissions) to lead to net-zero carbon emissions, closed loop & regenerative systems, transparent, consistent and accurate reporting, BMPs, constant explorations of self assessment and process improvement

GHG Management – This strategy focuses on calculating and analyzing emissions, as well as documenting and managing Greenhouse Gas (GHG) emissions generated by the day-to-day operations of College, its employees and students. Offsets are also included in this strategy. Regeneration, regenerative/restorative energy

Energy Demand – The Energy Consumption strategy requires the development of a reliable means of measuring energy demand during day-to-day operations of College and then working toward reducing that consumption. Objectives will be to reduce on-campus demand for energy by percentage per square foot through increasing energy efficiency, eliminating wasted energy consumption, and

Energy Supply – Energy Supply focuses on the other end of the supply chain by creating clean, carbon free or carbon reduced methods of generating electricity for on campus use. We will use two approaches to do this; on-site renewables and off-site production including a strong push to switch to less carbon-intensive methods and more renewable sources.

Transportation – This category seeks to address GHG emissions related to any and all transportation that is done to conduct official College business. This includes all methods of travel (air, car, truck, bus, train, etc.) and all reasons for travel (daily commuting to and from campus, on-campus transportation for daily operations, traveling for meetings and conferences, travel to athletics games, and study abroad travel for CofC students).

Value Cycle Emissions – The focus of Value Cycle Emissions is to measure, track and mitigate the GHG emissions from the products and services we use at the College. This includes, but not exclusively, emissions from refrigerant and fertilizer use, solid waste decomposition and transportation, and from our food system.

GOAL TWO: ZERO WASTE (by 2025)

Optimization of waste diversion and water use systems through the redesign of life cycles so that all products are reused as part of a cyclical process. This requires efficient and cost-effective ways to discard materials in the short run, but more importantly, it embraces an evolving path toward reuse that requires rethinking and redesigning systems to *eliminate* waste. This goal includes guiding behavioral change and practices that embrace zero waste not only as a goal but as part of the culture and way of life for our community. Finally, implicit within this goal is taking responsibility for post-discard accounting and processes to ensure downstream repurposing and maximal reuse.

Process – Identify target materials and locations in the materials flow where highest impact changes can be made – Explore and integrate the use of close loop and regenerative systems into the College’s waste management with a focus on transparency, consistent and accurate reporting, BMPs, continual explorations of self assessment and process improvement, -Work to eliminate the concept of “waste” at the College and in the processes used here.

Materials Flow Analysis – The first step to developing an effective Zero Waste policy is to identify and track existing waste streams and establish baselines from which to measure change. This strategy establishes goals to track all waste streams at the College, from landfill waste to recycling to hazardous wastes.

Solid Waste Aversion – One of the most neglected but most important aspects to Zero Waste is to reduce the amount of waste that is produced in the first place. Waste Aversion works to avert materials from waste streams all together with methods such as eliminating single-use items and focusing on re-use and up-cycling to create better quality items.

Solid Waste Diversion – Through waste diversion, waste is diverted from the landfill through reuse of materials. Our objectives for this strategy focus around measuring and increasing diversion rates for campus waste.

Systems Regeneration – creating materials and processes in our systems that recapturing or exceed embodied energy, thereby eliminating the concept of waste. These are closed loop, cyclical processes that renew or revitalize their own sources of energy and/or materials. It is building holistic systems with absolute effectiveness. Starting points would be in food, landscaping, materials on campus.

Water Flow Analysis – Reducing water waste is an integral part to a Zero Waste policy and this strategy works to reduce the amount we use on campus. This will be a double-pronged effort focused on water reduction technologies coupled with behavioral modification campaigns that reduce usage. This will allow us to address both structural and behavioral issues surrounding water waste.

GOAL THREE: INSTITUTIONAL RESILIENCE (IR)

Achieved through *organizational alignment* of sustainability goals through collaboration with individuals across campus and the region to enhance resilience of the institution. It works to weave sustainability into every part of our campus – from financial sustainability, eco-efficient infrastructure, full-cycle responsibility for products used on campus to enhancing social capital and work environments to enhance vestedness and to connect to the community and region. This requires Integrating disciplines, operations, and services to optimize performance and cost effectiveness at all scales. IR operates through organizational learning and process improvement to increase the institution’s ability to cope with threats, vulnerabilities and shock to its surrounding systems. It includes physical, biophysical, social systems and structures, including rules, norms, and routines that are embedded within institutional processes and decision-making.

Process – An organization must continue to adapt and change if it is to remain viable. *Organizational Learning* provides that readiness to meet that future change through a continual practice of assessing our processes and the progress we are making through them with the goal of improving process improvement to meet new or updated goals and objectives.

Strategic Planning & Advocacy – Uses knowledge, experience and buy-in built at the College to collaborate with other stakeholders in sustainability to challenge unsustainable systems and their resultant implications. In this strategy, the College seeks to “empower individuals to transform society” by influencing decision-making, resources allocation and policies that ground norms and informal rules that guide people, community and society. This strategy requires strategic planning, anticipatory competence, and normative vision to align the interests of the College in a strategic way with that of the community and society.

Local/Regional Integration – Local/Regional Integration works to entwine sustainability into local and regional systems while connecting and anchoring the College of Charleston within them. Collaboration with local and regional governments, not-for-profit organizations and other regional sustainability hubs will be key to this strategy.

Financial Sustainability – This is based on the capacity to thrive (as an organization) over the long-term; that is, to build financially viable pathway to perpetual prosperity. This requires understanding how to sustain the financial model into the future while increasing value at same or less cost.

Product Cycle Responsibility – Create transparency in and full life-cycle accountability for our products and services both before they get to the College, and after they leave our physical campus. This includes Environmentally Preferred Purchasing, and developing a vendor code of conduct that requires anyone doing business on campus to incorporate our sustainability principles into their business practices.

Eco-Effective Infrastructure – Builds sustainability into our physical space through sustainable methods, practices & design. Through this strategy we will identify and develop means to address our vulnerabilities and risks to our infrastructure while preserving and enhancing the historic integrity of our campus. With a resilient infrastructure, the College will be able to change and adapt as the

physical, social, educational, & economic environments change. It also seeks to create new connecting spaces on campus to enhance well-being, productivity and the culture.

Equity & Welfare – A holistic focus on creating pathways, policies, and norms to enhance individual and departmental prosperity & well-being so that we can build healthy, safe and resilient communities. It is accomplished through fostering equality and social justice, accepting and encouraging diversity, inclusiveness, and belonging. It also emphasizes the importance of public health and well-being. It also includes creating a secure and vibrant working and learning environment to facilitate individual and community to contribute to both sustainability culture and institutional resilience.

Representative & Shared Governance – Fair and equitable representation of all parties within the community is required. Creating greater inter-division pathways to build trust, generate clearer understanding of the problems, and enhanced communication are necessary to shared governance structure. Balanced sharing of responsibilities is necessary to ensure effective governance.

GOAL FOUR: HOLISTIC INTEGRATED LEARNING

Holistic Integrated Learning is to create an advanced platform for sustainability education that will lay the foundation for developing a culture of sustainability established in Goal 5 (Active Sustainability Culture). We will create a robust and comprehensive yet holistic approach to sustainability that makes CofC an example of both institutional and societal sustainability. We should seek to enhance learning opportunities in sustainability through action-based, "high impact" methods in developing concepts, curriculum, and research.

Process: *Principled Praxis* is an approach that seeks transdisciplinary (and disciplinary) approaches to bridge theory and action to actuate social justice and change. The foundation is individual empowerment, and connecting in meaningful ways to other people and institutions principled and ethical ways that enrich the community and society.

Curriculum Integration – A prescriptive series of connected and integrated courses and experiences that develop skills, relevant knowledge, divergent thinking, and focused practice that enable the principled praxis of sustainability.

Whole Systems Competence (WSC) – A focus on generating distinct competencies (of holistic thinking) that generate distinctly marketable skills but are also aligned to societal needs for greater sustainability. It is a set of competencies that lead to growth in four distinct areas: leadership & decision making; adaptability; innovation; and collaboration. This can be actualized through professional development, experiential internships, and high-impact learning opportunities.

Socially-Necessary Action Research – Research at the College is a critical foundation for furthering knowledge and applicability of sustainability. Through applied learning that is consistently grounded in empiric research that works to solve the complex problems of the 21st Century, we can create research that can be operationalized as solutions. We can advance the current knowledge, but also to develop research in action-based, socially relevant ways that advance both practitioner and community.

Applied Innovation and Entrepreneurship – The core of sustainability in action is achieved through systems thinking and collaboration (or forms of connecting) but they are done through innovation and entrepreneurial mindset. They provide the foundation for "sustainability doing." It will provide tangible, visual examples of sustainability that is crucial to ground theory in practice, how to empirically measure outcomes, progress and success, and most importantly to innovate solutions and to understand how to implement those solutions. This strategy works to actively involve campus members and greater community members in making sustainability a reality on campus through on-site projects. These projects also provide first-hand, "real-world" experience.

Co-Curricular Expansion – Generate immersive and experiential learning opportunities for students that parallel and integrate with the formal curriculum. These opportunities bridge critical gaps between theory and practice as well as between student and teacher. Here, the strategy is to create opportunities for not only sustainability praxis but for students to design, develop and teach their particular sustainability approach(es) around particular themes, groups, or ideas.

GOAL FIVE: ACTIVE SUSTAINABILITY CULTURE

Collective development and practice generates a distinct culture of sustainability. It is the process of cultivation of sustainability in ways that generate rules, norms, and practices that guide both structure and behavior of sustainability. Culture is a driver of sustainability that facilitates everything else. Culture is an enabler for sustainable development, rootedness, innovation and resilience, and it is the most significant influence on individual values and lifestyles—allowing for sustainability to be scaled.

Process – *Scaled Collective Action (Expression)* is a form of synergized action by a collective (beyond collaboration). The three key variables to collective action: social capital, base knowledge production, and stakeholder investment. These are essential to forming and ultimately sustaining this culture.

Sustainability Literacy – This is strategy seeks to create the base knowledge of sustainability and to develop the necessary components to communicate effectively, think critically and ultimately practice sustainability. A critical, but missing, aspect is how to measure let alone produce baseline literacy of sustainability. Ultimately, this strategy would be scaled—applied to the community and region.

Shared Sustainability Vision – Establish a common vision of sustainability that includes objectives and aspirations for the campus community. This requires consistent engagement of sustainability issues – working together to achieve sustainability goals. It allows us to amplify the local with a global purpose; that is, to actualize this vision locally to influence the world.

Sense of Place & History – History and place are critical to understand WHAT to sustain. It is only by understanding of who we are – formed in our own history and place, that we can understand how to move forward. We must preserve while innovating. We must recognize our past while engaging our future. We must honor our place to understand our “fit” which promotes rootedness and cultural exchange. It guides our community and instructs us to invest in itself.

Expression of Art & Humanity – The culture of sustainability should be support by the creative arts and expression of human thought and debate. Reflective practice generates mindfulness, empathy and compassion allows for deeper connectivity and understanding of that expression. It also facilitates the scaling of that creative expression to amplify beyond our community.

Social Embeddedness – An inclusive perspective that seeks to help activate members of the community as active citizens and practitioners of sustainability. It is the daily practice of sustainable acts embedded in strategic ways. Collaboration and connectivity are critical to generating social capital necessary for system and institutional resilience.

