



KEENE STATE COLLEGE SUSTAINABILITY PLANNING

Overview, Guiding Documents, Decision-Making Authorities, Goals and Implementation Strategies



KSC VALUES

Teaching and modeling holistic sustainability that embraces human and environmental well-being are strategic priorities for Keene State College (KSC), expressed at the highest levels, beginning with the stated values for the College. The following five provide a strong foundation and framework for KSC's commitment to sustainability (see: <https://www.keene.edu/administration/mission/>):

- ▶ Balanced development of mind, body, and character
- ▶ Diversity, civility, and respect
- ▶ Civic engagement and service to the community
- ▶ **Environmental stewardship and sustainability**
- ▶ Partnerships that enhance the quality of life in the Monadnock region, New Hampshire, and the world.



HIGHEST GUIDING DOCUMENTS AFFECTING SUSTAINABILITY

Sustainability and climate planning and action are values that infuse all levels of the College. Therefore, there is not one single sustainability and climate action plan, but several that work together to form the body of sustainability and climate action planning for Keene State College. Two published Strategic Plans articulate the highest-level sustainability commitments and establish a sustainability planning framework. Additional guiding documents address master planning, energy, and academics. All are official college documents that have been approved by the appropriate governing authority. Most of the plans are published on the KSC web site. Unpublished plans that are approved by the appropriate governing authority carry similar weight to those published on the KSC web site. KSC also considers AASHE STARS to be an official planning tool and published planning document.

The College's 2015 Strategic Plan set a goal of using AASHE STARS and attaining STARS Gold by 2015. Since that time, the STARS report has provided the official, Executive-approved, record of sustainability at KSC. The Office of Sustainability, with the President's Council for a Sustainable Future, uses AASHE STARS to identify goals, develop implementation actions, and track progress. The College uses the AASHE STARS platform to declare new goals that should be achieved by the time of the next submission. The STARS report goes through extensive review throughout the College and in the Provost's and President's Office. Through their signing of the Executive Letter with the STARS report, the goals and actions become the official record. It is the 2015 published Strategic Plan that set this process in motion, including hiring a Director of Campus Sustainability to develop annual AASHE STARS roadmaps (strategic plans) and ensure completion of the AASHE STARS report.

THE TWO MOST IMPORTANT GUIDING DOCUMENTS DIRECTING SUSTAINABILITY AT KSC

Strategic Plan V 4.0: Goals, Objectives, Actions, and Considerations, 2015: Important document that transformed KSC's approach to sustainability by identifying AASHE STARS as the key benchmarking and planning tool, creating a priority collegewide goal based on AASHE STARS, and creating a new Director of Campus Sustainability position to oversee comprehensive sustainability and climate action (see: <https://www.keene.edu/administration/president/svp/planning-archive/planning/strategic-plan/>). Most critical was the following goal:

- **Goal 4: Community and Culture: *Through a consistent practice of shared stewardship, Keene State College will strengthen its community, enrich its campus culture, and advance environmental sustainability.***
 - **Objective 4.5) Promote a culture and instill and communicate policies and practices that value and support environmental sustainability and improve the quality of life locally and globally.**

Actions recommended by the Implementation Planning Group:

4.5.1) Review Sustainability Tracking and Rating System (STARS) data.

4.5.2) Develop and implement a plan to move Keene State to the STARS Gold rating no later than 2020.

Sustainability and Vitality Plan (SVP), 2019: In March 2019, President Treadwell released a draft of the SVP to the entire KSC community. The SVP is a tactical, goal-oriented three-year plan (2019-21) focused on addressing KSC's enrollment and financial deficit with three goals per year and priorities under each goal. The president created the SVP with advice and input from the cabinet, informed by campus listening sessions and a full day retreat in May 2019. Aspects of the 2015 strategic plan that were already in place with implementation strategies under way were continued. This was the case for sustainability as the College implemented a road map to achieve its AASHE STARS Gold by 2020 goal.



SUSTAINABILITY AND VITALITY PLAN (SVP) GOALS

Three goals were identified in the SVP: (1) improve recruitment, retention, and achievement of students and faculty; (2) improve fiscal planning and stewardship; and (3) rethink our work as a student-centered organization. The College strengthened its commitment to sustainability in the SVP under Goal 2, which specifically calls for optimizing energy efficiency and continuing to “introduce green initiatives”:

Goal 2: Improve Fiscal Planning & Stewardship

Priorities: We are focused on streamlining our finance infrastructure and tools and realigning our budget allocation and processes. At Keene State, we are committed to efficient stewardship of our resources while maintaining the quality of our educational offerings and experiences. To remain a viable and strong institution for future learners, we will continue to forge new community partnerships and pursue mutually beneficial co-location opportunities with other institutions. Through our sustainability efforts we will optimize energy efficiency for Keene State’s physical plant and reinvest our savings, and will continue to introduce green initiatives that make the best possible use of our resources.

Implementation and tracking of the SVP is managed by the Director of Strategic Project Management, appointed in fall 2019. In spring 2020, KSC began using Project Charters to define initiatives and to quantify the expected outcomes. The Charters require that priority initiatives have an executive sponsor, a project manager, and defined and measurable outcomes that can be tracked. Sustainability is well represented in the SVP Charters with the approved SIEMENS Sustainability/Energy Services Contract (SESCO) Charter and a draft Zero Waste Management Charter.




ADDITIONAL INSTITUTIONAL GUIDING DOCUMENTS

Keene State College Campus Master Plan, Winter 2014: This 10-year master plan called for a number of sustainability actions, including energy management and environmental stewardship (see: <https://www.keene.edu/administration/mp/>). Capital planning is completed in conjunction with USNH. The Facilities Master Plan (last completed in 2013), undergoes comprehensive review every 10 years in compliance with USNH policy. The Physical Plant Department uses a deferred maintenance database, Sightlines (a national benchmarking study), and departmental requests as the basis for distributing the limited resources for renovation, repair, and small projects.

KSC Master Plan Energy Management Considerations, 2014: Identified overarching Energy and Greenhouse Gas Reduction Goals. Also named energy conservation measures and other facility improvements needed to attain goals. This information was updated in 2020 as part of the Sustainability and Guaranteed Energy Savings Contract (SESCO) currently underway at KSC. Goals established in 2014 included (see: <https://www.keene.edu/administration/mp/>):

- **Enable KSC to be below the peer average for energy use through energy efficiency**
- **Establish energy conservation as a strategic priority**
- **Plan to achieve GHG objectives.**



Academic and Co-Curricular Plan (ACP), 2016: Academic planning is included in the ACP of 2016, which flowed from the 2015 Strategic Plan. The ACP is a broad document with many proposals intended to bring together the students' curricular and co-curricular experiences. KSC prioritized those proposals that focused on the first-year experience. The priorities include advancing KSC's College-Wide Learning Outcomes (CWLO); revisions to the Integrative Studies Program (ISP); and a broad first-year experience program with living-learning communities; an early alert system; and a first-year advising program. All of these initiatives represent avenues for promoting sustainability at KSC, but the development of a Collegewide Learning Outcome that directly addresses sustainability, along with compatible Collegewide that emphasize citizen engagement, multicultural awareness, well-being (all sustainability challenges according to the UN Sustainable Development Goals and the international Earth Charter), ensures that sustainability is infused through all curricular and co-curricular activities on campus.

Faculty at KSC are primarily responsible for curriculum planning using a set of policies and procedures established by the Senate Curriculum Committee (SCC). Course and programs proposals include objectives and learning outcomes, rationale, expected staffing and facilities resources, and advisory opinions from affected programs, together with responses to those advisories. Finalized proposals are reviewed and voted on by the College Senate.



SUSTAINABILITY-RELATED COLLEGEWIDE LEARNING OUTCOMES

- ▶ **Sustainability:** Keene State College students will explore their place in interconnected natural and human systems; evaluate the personal, social, and environmental impacts of their choices; and apply their knowledge and skills for building a just, resilient, and thriving world.
- ▶ **Intercultural Competence:** Keene State College students will reflect critically on their own culture and on the intersectionality of culture and social location, demonstrate knowledge of a diversity of cultures, and communicate effectively with people from a variety of backgrounds.
- ▶ **Civic Engagement:** Keene State College students will demonstrate knowledge of one or more social or environmental issues including relevant cultural, political and policy contexts; take action individually or collectively to address issues; and reflect on the ethical dimensions of civic engagement.
- ▶ **Commitment to Well-Being:** Keene State College students will reflect critically on their own well-being and that of the larger world, demonstrate knowledge of issues that impact health and wellness, advocate for themselves, and commit to one or more practices that promote well-being.



SUSTAINABILITY PLANNING AUTHORITIES

- ▶ **President and her Cabinet:** College-wide initiatives requiring significant financial investment require the President's and Cabinet's approval. Campus Sustainability Goals requiring the investment of capital, such as large energy projects, require Cabinet approval.
- ▶ **College Senate:** The Senate is the policy making and legislative body for Keene State College regarding all matters that impact on the quality of education at the College. All proposals for new courses, majors, and other academic programs must receive Senate approval. The Sustainability Collegewide Learning Outcome and new Sustainability Studies major required Senate approval, but not Cabinet.
- ▶ **Vice Presidents:** For initiatives affecting the budgets of their respective Divisions (e.g., purchasing of new totes for recycling), the appropriate Vice President must be briefed and grant approval.
- ▶ **Directors** are granted autonomy for decisions affecting their respective Departments for items that are funded in their budgets and/or that do not need financial investment (e.g., rolling out new campus sustainability education programs like workshops and movie nights).



ADDITIONAL INFORMATION

- ▶ Additional information on sustainability planning is provided in Keene State College's AASHE STARS 2021 report. See Section PA-2, Sustainable Planning.
- ▶ Repository of planning documents is provided at <https://kscsustainability.wixsite.com/kscsustainability/planning>



Attachment A

This Attachment combines two separate approved executive-level sustainability plans: Conservation and Sustainable Energy Plan for Keene State College and the Keene State College Sustainability Academics Plan



Conservation and Sustainable Energy Plan for Keene State College

Integrating Strategic Plan Goals 3 *and* 4: Bringing Financial
and Environmental Sustainability and Resilience to the
Campus

Cabinet Approved Plan (March 26, 2018)

Sustainability Successes



KSC is First College in the U.S. to Heat with Purified Waste Vegetable Oil

Grounds Crew Recognition: AASHE Best Practices



Cool Schools Green Colleges



U.S. DEPARTMENT OF EDUCATION

GreenRibbonSchools



KSC Sustainability: A Strong Foundation & Poised for the Future

- College Mission Statement
- President's Carbon Commitment, 2007-2017
- Keene State College Campus Master Plan, 2014
- College-Wide Learning Outcomes, 2015, 2018
- Keene State College Strategic Plan, 2015
 - **Goal 4.5:** Promote a culture and instill and communicate policies and practices that value and support environmental sustainability and improve the quality of life locally and globally.

Collegewide Learning Outcomes
All Keene State College students gain proficiency in the content of their own major, and they learn academic, career, communication and interpersonal skills to prepare them to pursue meaningful work.
Regardless of major, by the time Keene State College students complete their undergraduate experience they develop critical thinking, creative inquiry, intercultural competence, civic engagement, and commitment to well-being that will serve them as active citizens and lifelong learners.



Strategic Plan
Strategic Plan V 4.0
Goals, Objectives, Actions, and Considerations
July 9, 2015

AASHE STARS Score Card

- **Goal: AASHE Stars Gold by 2020**
- **Where KSC is: 56.42** points, a **SILVER** rating
- **Where KSC needs to be: 65 to 84** points for **GOLD**; **85+** for Platinum
- **How KSC gets there: Action Road Maps for each AASHE STARS Category**
 - **Academics:** Currently 43.52 points out of a possible 58.00
 - **Engagement:** Currently 26.50 out of 41.00
 - **Operations:** Currently 26.98 out of 70.00
 - **Planning and Administration:** Currently 16.40 out of 32.00





Sustainable Energy and Conservation Goals

- ▶ **Greenhouse Gas Reduction:** Reduce greenhouse gases 50% by 2030 and achieve carbon neutrality by 2050
- ▶ **Energy and Water Conservation**
 - ▶ Reduce per capita electricity **and** heat load by 20% by 2020
 - ▶ Water Conservation: Reduce per capita water use by 20% by 2020
- ▶ **Renewable Energy: Power Our Buildings with the Sun and Other Renewables**
 - ▶ 100% renewable electricity for LLC by 2030 to meet its Architecture 2030 goal
 - ▶ 100% solar power for TDS by 2030
 - ▶ 50% of campus powered by renewables by 2030; 100% by 2050 (*This was later changed by the College President to meet the City of Keene's 2018 Sustainable Energy Resolution Goal of 100% by 2030*)
 - ▶ 100% renewable heat plant by 2020
- ▶ **Waste Reduction:** 50% waste diversion rate by 2020 and qualify as a zero-waste campus by 2030



Strategies for Implementing Goals

- **Finalize Goals:** President and/or Cabinet approval of goals
- **Announce Goals and Action Steps:** President and/or Cabinet announcement of goals
- **Charge Work Groups:** President and/or Cabinet appointment of Goal Implementation Work Groups
- **Implement Conservation Strategies**
 - Maximize in-house opportunities
 - Release Energy Services Company (ESCO) RFP
 - Set Temperature and Cooling Policy
 - Remove free washing and drying



Expand Renewables

➤ Solar Electricity

- Maximize On-Site Potential
- Collaborate with PSU, City of Keene, Cheshire Medical, and/or others for Off-Site

➤ Evaluate Additional Renewable Electricity Pathways

- USNH Micro-Hydro Model

➤ Heat Plant



- Ensure resilient, multi-sourced fuels
- Utilize renewable biofuels (e.g., LR-100)
- Integrate Liberty Renewable Natural Gas (RNG) when it becomes available
- Use solar where electric heat is provided



Summary: Cabinet Actions and Timeline

- **Approve and Declare Campus Sustainability Goals:** Formally announce during April Earth Month/Earth Day 2018
- **Office of Campus Sustainability leads implementation in collaboration with President's Council for a Sustainable Future:** Strategies developed NLT May 1, 2018.
- **Empower Standards:** Sustainability Office and Physical Plant Team to set **temperature standards** (heating and cooling policy) for July 1, 2018 implementation
- **Begin Phasing Out Free Laundry Services:** Target implementation fall semester 2019

Approve New Hire for Sustainability Engagement

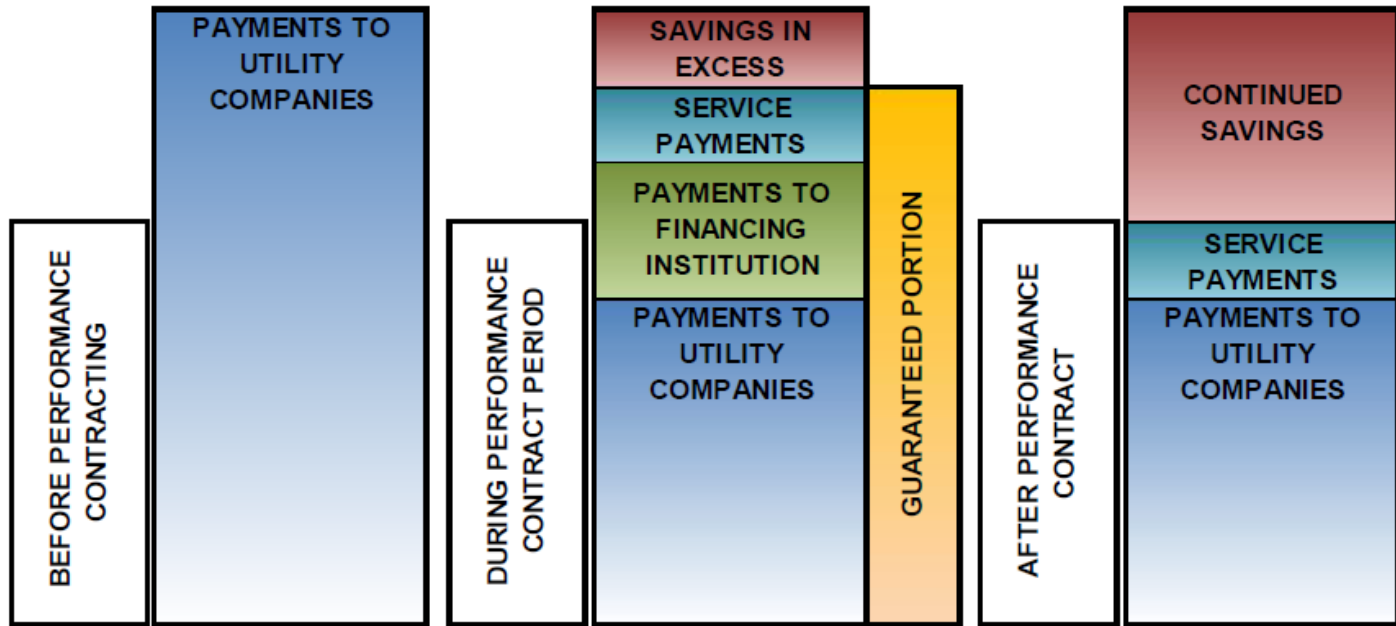
AASHE STARS CATEGORY	TOTAL POSSIBLE AASHE POINTS (% of total)	CURRENT KSC AASHE STARS POINTS (Total: 56.42, Silver Rating)	Office of Sustainability Staff Support (FTE)
ACADEMICS	58 (29%)	43.52	0.4
ENGAGEMENT 	41 (20%)	26.50	0.2 
OPERATIONS	70 (35%)	26.98	3.0 *
PLANNING AND ADMINISTRATION	32 (16%)	16.40	Director's time; encompassed in the Operations and Academics budgets.



Pursue Guaranteed Energy Savings Contract (ESCO)

Essential to meeting Campus Energy and Conservation Goals

Pursue an ESCO to Meet Energy and Other Conservation Goals



% Annual Savings	Savings per Year	Term	Project Potential
15%	\$590,917	15	\$ 7,534,187
20%	\$787,889	15	\$ 10,045,582
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20%	\$787,889	20	\$ 13,394,110

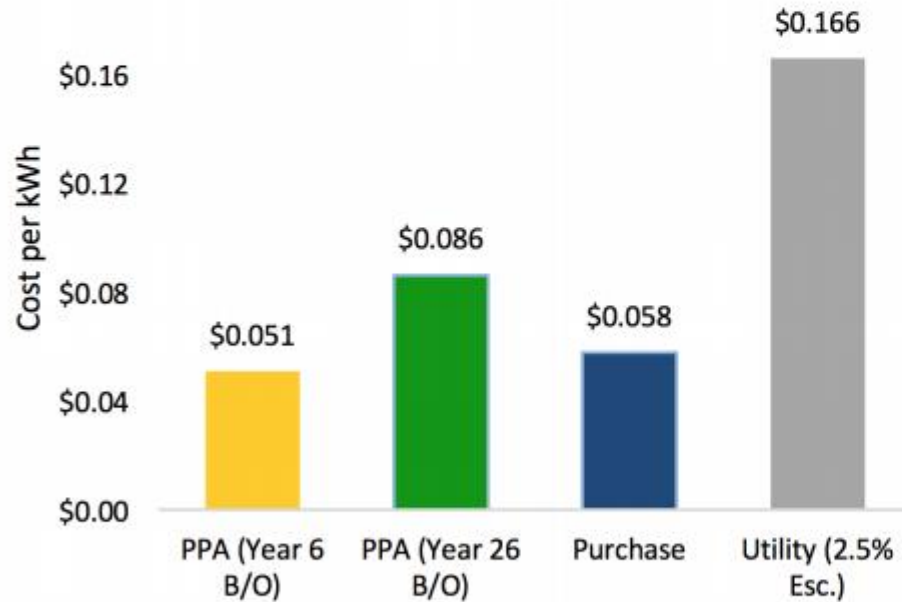


Pursue Solar Power Purchase Agreement(s)

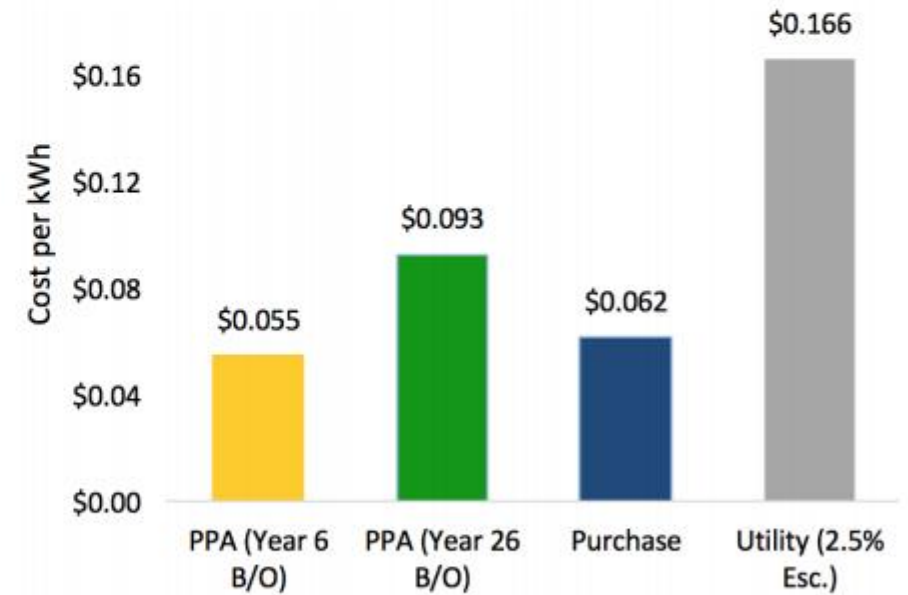
KSC Solar Electricity Cost

40 Year Cost of Electricity vs. Utility

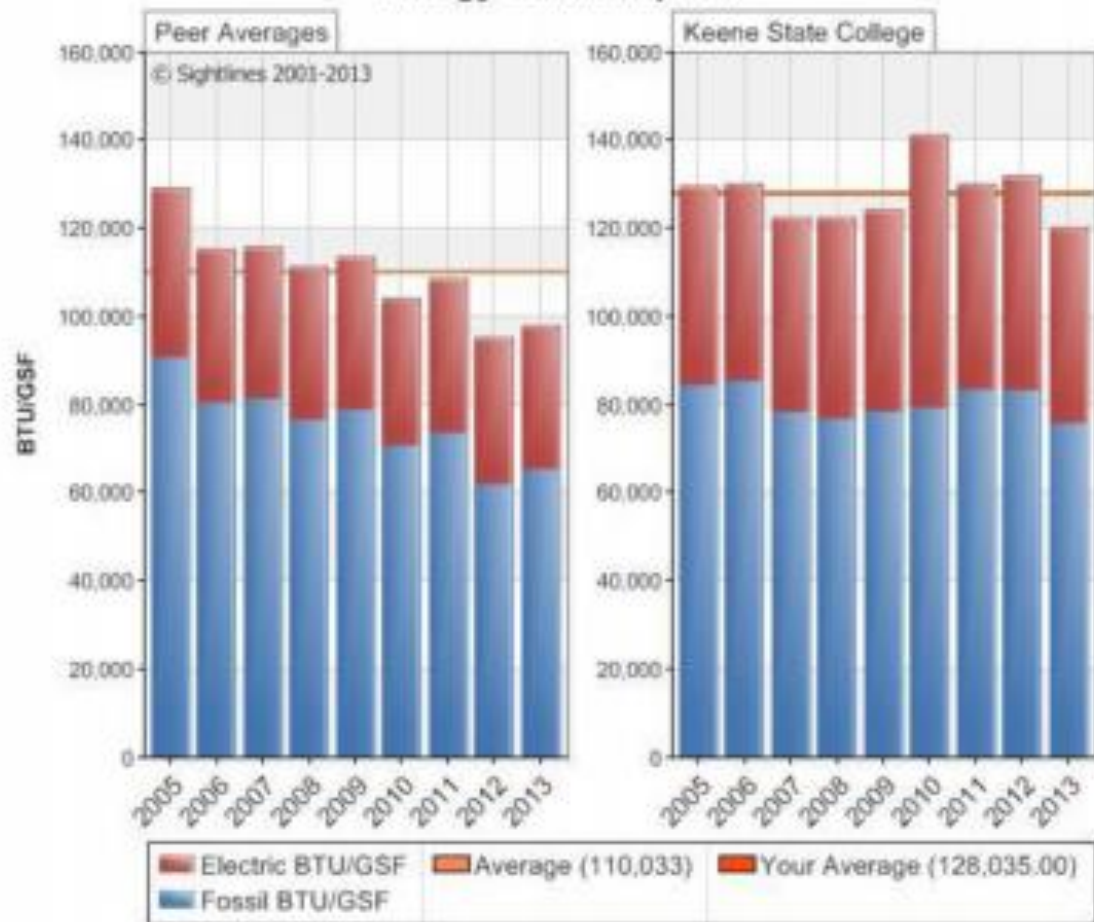
Spaulding Gym



Pondside III Dorm



Energy Consumption



The stated Keene State College energy goal is to be below peer averages for energy use. Keene State has monitored energy performance relative to peers through a third-party benchmarking service. The chart above illustrates where KSC is relative to its peers with respect to energy performance. The chart illustrates that since 2005 KSC's peers have reduced campus energy consumption to less than 100,000 BTU/GSF while KSC has held constant at around 130,000 BTU/GSF. The renovations, demolitions, and new construction associated with the master plan will give KSC an opportunity to improve campus energy conservation.



Keene State College Sustainability Academics Plan

Provost Briefing and Approval Document
Approved with Revisions on June 27, 2018

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Creating a Culture of Sustainability Education at KSC

Sustainability CWLO

- *Sustainability Collegewide Learning Outcome
- *Competencies by year (SCWLO Rubric)—sustainability across the curriculum and co-curriculum
- * Pledge (all 1st years/New Hires)
- * Sustainability Literacy Assessment (1st year and graduation)
- * Sustainability champion award program (model after Eagle Scout)

Orientations/Trainings/Courses

- * Orientation Trainings (staff, faculty, student)
- * First Year Experience
- * ISP Pathway(s)
- * Majors, Minors, Certificates
- *Internships
- * Alternative breaks
- *Sustainability Office Workshops (Series on key topics throughout year)
- * Online Green Living @ KSC 101 class

Eco-Reps/Eco-Ambassadors

- *Create Eco-Ambassador program to complement thriving Eco-Reps
- *Support Workshops and Orientations
- * Promote Green Office, Classroom, Home/Room, and Events certifications
- *Class raps
- * Info-graphics
- * Themed months (Energy, Recyclemania, Water)



Sustainability Academic Goals

ACADEMIC COURSES AND UNDERGRADUATE/GRADUATE PROGRAM

- ▶ **Create Sustainability Major and Minor** (no dates specified).
- ▶ **Sustainability Pathways and Course Inventory:** Develop clear descriptions including pathway overviews, and a searchable online course catalog, of undergraduate and graduate sustainability courses across all disciplines (sustainability-focus *and* include sustainability) by 2020.
- ▶ **Green Leaf Courses:** By June 2020, clearly identify sustainability courses using a “green leaf” endorsement.
- ▶ **Comprehensive Sustainability Education:** Ensure that 75% of all academic departments offer at least one sustainability course by 2020 and 90% by 2030. Complete gap analysis of current sustainability courses by department by fall 2019.
- ▶ **Work Force Development:** Create 5 new Work Force Development Certificate Programs (designed for undergraduate, graduate and/or professionals)
 - ▶ Green Building Leadership Institute: Minor/Professional Certificate Program for May 2019 launch
 - ▶ Certificates and/or new minors, majors in some of the following green building areas: construction and building managers, inspectors, appraisers, real estate agents, insurance focusing on green and resilient
 - ▶ Recycling Coordinator/Sustainable Materials Management
 - ▶ Sustainable Energy Management
 - ▶ Sustainability Specialist



LEARNING OUTCOMES

- ▶ By 2020, both Schools at KSC will have adopted a Sustainability Learning Outcome (School of Sciences, Sustainability, and Health and School of Art, Education, and Humanities).
- ▶ By 2020, 75% of all academic departments will offer a Sustainability Learning Outcome, or related Collegewide Learning Outcomes; and 100% by 2030.
- ▶ By 2020, 100% of existing sustainability programs (i.e., majors, minors, concentrations, certificates, and other academic designations) and/or courses will have a published, Sustainability Learning Outcome, or related Collegewide Learning Outcomes.
- ▶ By 2020, a synthesis of all KSC sustainability learning outcomes will be compiled and published.
- ▶ By 2020, every student will have a transcriptable experience (course, seminar, field experience, internship) related to sustainability before graduating from KSC.
- ▶ Every Academic Department offers at least one course that relates to sustainability from the unique perspective of that department (e.g., “The Literature of Sustainability”).



IMMERSIVE EXPERIENCE

- ▶ By 2020, KSC students will have access to seasonal immersive sustainability experiences through new student orientations, welcome days, alternative winter and spring breaks, and internships.
- ▶ Formalize the informal Office of Sustainability Post-Graduate Fellowships and Summer Student Fellowships: Spring 2021




SUSTAINABILITY LITERACY

- ▶ **Sustainability Literacy:** Keene State College will conduct an assessment of the sustainability literacy of its students beginning with the entering class 2019. Assessment will be conducted during Opening Days and then again during Senior Year.
 - ▶ 100% of the entering Class of 2023 will take a sustainability literacy assessment during Orientation and upon graduation.



INCENTIVES FOR DEVELOPING GRANTS

- ▶ By Summer 2020, the Keene State College Provost Office will offer a suite of faculty incentives to encourage new courses and/or innovative teaching on the Collegewide Learning Outcomes, emphasizing sustainability topics.
 - ▶ Faculty training: All faculty will be invited to participate in workshops on sustainability concepts and Keene State College commitment. Workshops will be offered in collaboration with the Provost's Office in the fall of 2021.
- 



CAMPUS AS LIVING LAB

- ▶ **Develop a Campus-Based Course that integrates all of the Collegewide Learning Outcomes** in solving a contemporary challenge affecting Keene State College (e.g., Implementing a Carbon-Free Future).
- ▶ **Sustainability Research/Class/Capstone Project Inventory:** Beginning Fall 2018 and updated annual thereafter, the Office of Sustainability will prepare an inventory of campus-based sustainability research projects for coordination with faculty across departments.



SUSTAINABILITY RESEARCH

- ▶ **Conduct Sustainability Research:** By 2025, 75% or more of Departments (staff and faculty) *that conduct research* will be engaged in research that addresses the Sustainability Learning Outcome, or related Collegewide Learning Outcomes.
- ▶ **Support for Student Research:** Beginning April 2019 (Earth Month), the Office of Sustainability will sponsor a fall research scholarship for Junior/Senior Cap Stone Projects:
 - ▶ **Support for Student Research:** The KSC Office of Sustainability will provide two \$500 student research grants for sustainability projects beginning Fall 2019.
- ▶ With the Mason Library, by 2020, develop sustainability reference section.