

**Skidmore College
Campus Sustainability Plan
2015-2016 Annual Report**

**Submitted by the Campus Sustainability Subcommittee of the
Institutional Policy and Planning Committee**

November 2016

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Table of Contents

CAMPUS SUSTAINABILITY PLAN: 2015-2016 ANNUAL REPORT	3
DEFINITION OF SUSTAINABILITY.....	4
FOCUS AREA 1: ENERGY.....	5
GOAL 1: 60% OF OUR ELECTRICITY FROM RENEWABLE SOURCES	5
GOAL 2: 60% OF OUR HEATING AND COOLING FROM RENEWABLE SOURCES	6
GOAL 3: 75% REDUCTION IN OUR GHG EMISSIONS.....	6
GOAL 4: 60% REDUCTION IN ENERGY USE FOR HEATING AND COOLING PER STUDENT AND SQUARE FOOT	6
GOAL 5: MAINTAIN ELECTRICITY USE PER STUDENT AND SQUARE FOOT.....	6
RECENT EFFORTS.....	6
FUTURE STEPS.....	7
FOCUS AREA 2: FOOD.....	8
GOAL: 25% SUSTAINABLE FOOD IN DINING SERVICES	8
RECENT EFFORTS.....	9
FUTURE STEPS	9
FOCUS AREA 3: WASTE.....	10
GOAL 1: 60% DIVERSION RATE IN ROUTINE OPERATIONS	10
GOAL 2: 50% DIVERSION RATE FOR SPECIAL PROJECTS	10
RECENT EFFORTS.....	10
FUTURE STEPS	11
FOCUS AREA 4: LANDS AND GROUNDS	12
GOAL: CREATE A COMPREHENSIVE LANDS MANAGEMENT PLAN FOR OUR LANDS AND GROUNDS	12
RECENT EFFORTS.....	12
FUTURE STEPS	13
FOCUS AREA 5: ENGAGEMENT	14
GOAL: MAKE SUSTAINABILITY AN ESSENTIAL FEATURE OF SKIDMORE'S IDENTITY AND A VALUE THAT IS INTEGRATED INTO ALL ASPECTS OF THE COLLEGE.....	14
RECENT EFFORTS.....	14
FUTURE STEPS	15



Skidmore's 54-panel solar thermal array

Campus Sustainability Plan: 2015-2016 Annual Report

Submitted by the Campus Sustainability Subcommittee of the Institutional Policy and Planning Committee

In May 2015, Skidmore College endorsed its first Campus Sustainability Plan. The *2015-2025 Skidmore College Campus Sustainability Plan* includes five key focus areas: energy, food, waste, lands and grounds, and engagement. Working groups composed of members of the Campus Sustainability Subcommittee (CSS) and key stakeholders outside of the subcommittee undertook significant research to develop challenging goals within each focus area that we aim to achieve by 2025. The *2015-2016 Annual Report* updates the Skidmore community regarding our progress toward these goals, and represents the College's continued commitment to sustainability.

Reading the Dials

The tracking dials found in the following sections of this report indicate the progress toward our sustainability goals. The light gray needle found in some dials show our earlier status as reported in the *2015-2025 Skidmore College Campus Sustainability Plan* and illustrates how recent efforts have impacted our overall progress.

Definition of Sustainability

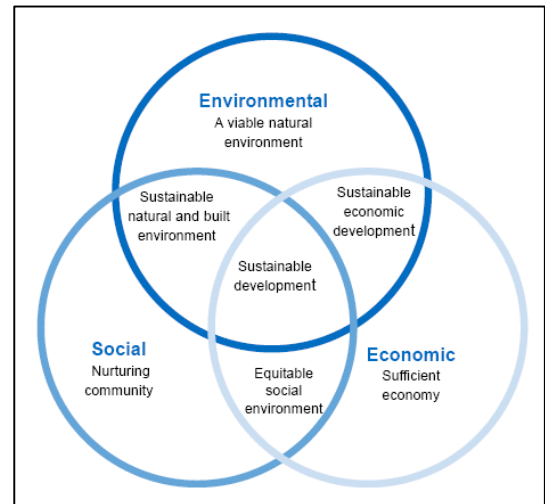
Recognizing environmental limits, and sharing the ethic that present actions should not “compromise the ability of future generations to meet their own needs,”* the Skidmore College community embraces both the concept and practice of sustainability. We endeavor to enact environmentally responsible practices, grounded in economic and social equity, and through our actions to have a positive impact on our community and our planet.

Skidmore’s primary mission is education, and the College’s greatest impacts and achievements will be realized as consequences of the lives our graduates lead. As part of an ever-growing population on a finite planet, we are confronted with an increasingly urgent need to address the resulting environmental constraints and social challenges.

Institutional adoption of sustainable practices, informed by an understanding of the complex, interconnected nature of living systems and their physical environment, provides the opportunity for each Skidmore community member to become educated and personally involved in addressing these challenges, and empowered with techniques and strategies that they might apply to make positive changes beyond Skidmore.

We invite Skidmore community members to engage in mindful consideration of their individual and collective ecological, economic and social impacts, to examine their values, and to collaborate in demonstrating their values and principles through action. Teaching, learning and living in accordance with the tenet of sustainability fosters broad education and civic engagement of our community members, and prepares our students to be informed, active citizens and leaders in realizing sustainable futures. The health and wellbeing of future generations is dependent upon their success.

**Brundtland Commission*





Construction begins on Skidmore's third district geothermal system

Focus Area 1: Energy

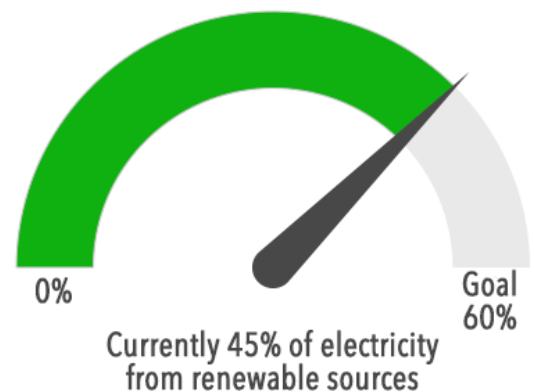
The extraction, transportation, and use of our various energy sources have major environmental, social, and economic impacts, and are a major source of our institutional greenhouse gas (GHG) emissions. As a result, Skidmore has implemented numerous small-scale and large-scale projects that improve our energy efficiency, shift us toward a more renewable energy portfolio, and decrease our GHG emissions. In addition, we have launched many initiatives that help promote the behavioral changes that are equally important to reducing our energy consumption.



Goal 1: 60% of our electricity from renewable sources

Current progress: 45% of our electricity from renewable sources.

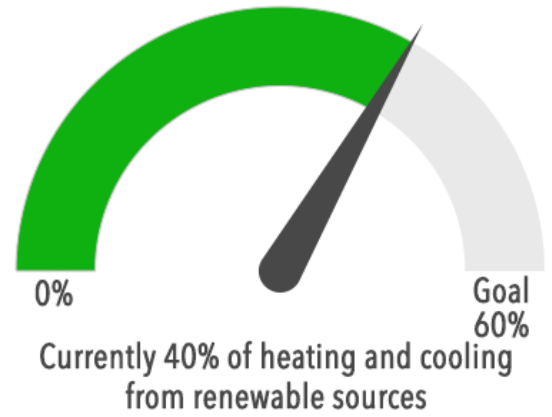
There has been no significant change to Skidmore's electricity portfolio, however, we continue to seek new opportunities to add to our renewable energy portfolio, which already includes a 2.1 MW solar array and small, low-impact historic hydro project.



Goal 2: 60% of our heating and cooling from renewable sources

Current progress: 40% of our heating and cooling from renewable sources.

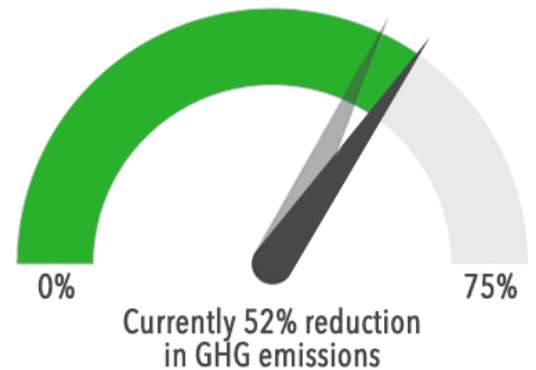
Skidmore is building its third district geothermal field in the Palamountain parking lot. We anticipate this new geothermal system will allow the College to heat and cool over 50% of total campus square footage with geothermal energy.



Goal 3: 75% reduction in our GHG emissions

Current progress: 52% reduction in GHG emissions from 2000 levels.

We have not conducted a full GHG inventory since adding our 2.1 MW solar array, small hydro project, and six solar thermal arrays, but a conservative estimate including these projects brings us to at least a 52% reduction in GHG emissions since 2000. A more accurate calculation of our reduction will be included in our next GHG inventory.

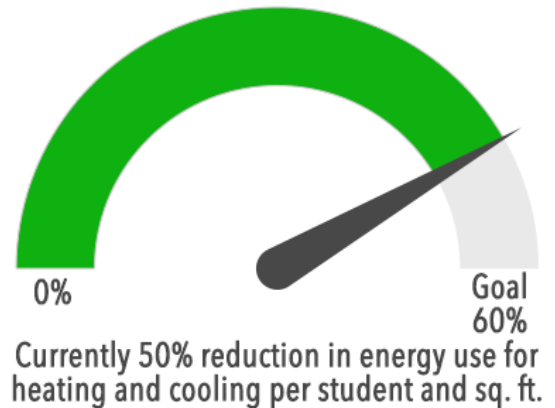


Goal 4: 60% reduction in energy use for heating and cooling per student and square foot

Current progress: 50% reduction in energy use for heating and cooling per student and square foot from 2000 levels.

Goal 5: Maintain electricity use per student and square foot.

Current progress: We have managed to maintain electricity use per student (approximately 9,500 kWh/student) and electricity use per square foot (approximately 14.5 kWh/sq. ft.) from 2000 to 2015.



Recent Efforts

To reach our energy-related goals, Skidmore:

- installed a 54-panel solar thermal array on the Murray-Aikins Dining Hall;
- completed a LED lighting retrofit in the Williamson Sports Center swimming pool, saving 134,000 kWh each year;
- improved the thermal envelope and installed super high efficiency heating and cooling systems in the Surrey Inn and Pine Cottage;
- made numerous efficiency and conservation improvements to the Waring House, the new location of Admissions;
- began constructing our third district geothermal field; and
- continued to explore energy metering opportunities in campus buildings.

Future Steps

Future steps will, in many ways, be influenced by grant and incentive dollars and new, innovative partnerships, but possible strategies for meeting Goals 1-3 might include:

- develop additional renewable energy projects, possibly including a second solar or small-hydro project;
- implement individual building metering with connection to a common, comprehensive dashboard;
- additional lighting retrofits;
- revisit the campus-wide temperature policy; and
- develop additional campaigns, programs, and training to promote behavioral changes.



Students inoculate logs with Shiitake mushroom spawn

Focus Area 2: Food

Food production, processing, and distribution methods are integrally connected to both ecosystem health and human health. Dining Services is already engaged in many initiatives to advance more sustainable food purchasing and is open to exploring additional opportunities to reduce our GHG emission and support sustainable agriculture.

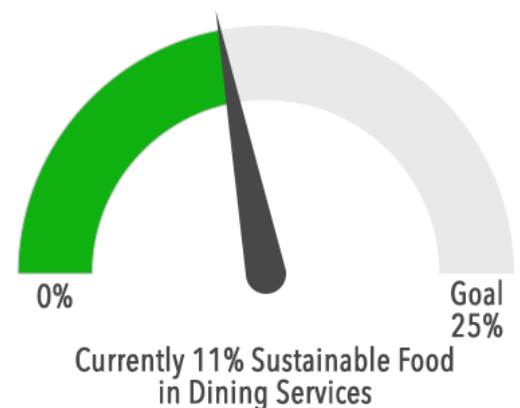
Goal: 25% Sustainable Food in Dining Services

Current Progress: 11% Sustainable Food in Dining Services.

We expect to complete the 2015 Sustainable Food Inventory in December 2016, and we will report our progress toward this goal in the 2016-2017 Annual Report.

Sustainable Food is primarily defined by the following criteria (updated Spring 2016):

- **Local and Community-Based:** These foods can be traced to farms and businesses that are locally owned and operated (within 250 miles). Sourcing local and community-based foods supports the local economy and builds community relations. Foods travel fewer miles to reach consumers. Seasonal foods, when fresh, often have a higher nutrient content.



- **Fair:** Individuals involved in food production, distribution, preparation--and other parts of the food system—work in safe and fair conditions; receive a living wage; are ensured the right to organize and the right to a grievance process; and have equal opportunity for employment. Fair food builds community capacity and ensures and promotes socially just practices in the food system.
- **Ecologically Sound:** Farms, businesses, and other operations involved with food production practice environmental stewardship that conserves biodiversity and preserves natural resources, including energy, wildlife, water, air, and soil. Production practices should minimize toxic substances as well as direct and indirect petroleum inputs.
- **Humane:** Animals can express natural behavior in a low-stress environment and are raised with no hormones or unnecessary medication.
- **Conscientious:** Business operations are guided by the principles of sustainability. The Food Working Group will consider Certified Benefit Corporations and organizations that routinely publish Social Responsibility Reports proving consistent ethical and transparent business practices.

Foods that contain ingredients that have been proven harmful to human health or are produced under egregious labor conditions will not be considered Sustainable Food.

(adopted from the Real Food Calculator, 2014)

Recent Efforts

To reach our food goal, Skidmore:

- updated the Sustainable Food metrics;
- formalized a three-credit Sustainable Food Internship through the Sustainability Office, Dining Services, and Environmental Studies and Sciences Program to track Sustainable Food purchases and recommend new practices;
- developed new relationships with local and regional producers;
- piloted a Sustainable Food Day;
- participated in the second annual New York Campus Crunch;
- grew and served over 1000 pounds of produce from the Skidmore Community Garden; and
- became a Marine Stewardship Council Chain of Custody certified institution.

Future Steps

Strategies that may be implemented to achieve our Food goal include:

- hire a student intern to work 12 months a year to accurately measure Sustainable Food purchasing;
- expand sustainability-themed dining events;
- enhance communications efforts to increase awareness of sustainable food procurement in the Murray-Aikins Dining Hall;
- continue to identify partnerships with local growers and distributors; and
- improve supply chain transparency with current providers.



Give+Go volunteers gather before move-out

Focus Area 3: Waste

Waste reduction is broad in scope in that it affects all offices and operations across campus, as well as the surrounding community and environment. With over 2,500 students and 1,100 staff and faculty, Skidmore produces general municipal solid waste, hazardous materials, as well as compost and recyclables. With such a large waste stream and many stakeholders, there are numerous opportunities for improvements. The goals outlined below aim to make improvements in different areas of the college.

Goal 1: 60% diversion rate in routine operations

Current progress: 31% diversion rate in routine operations.

Skidmore's 2015-2016 diversion rate is now 31%, an increase from our diversion rate of 27% in 2014. It is worth noting that we hit our peak diversion rate of 33% during the 2014-2015 Academic Year.

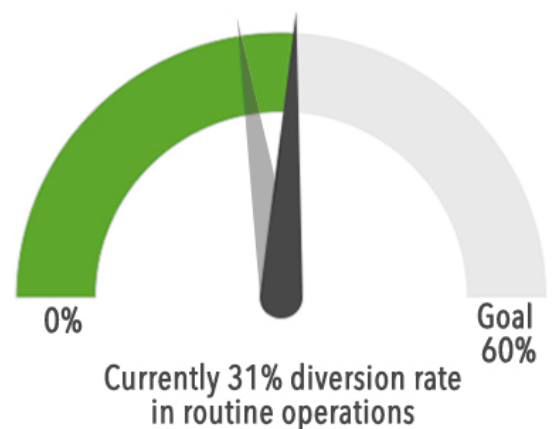
Goal 2: 50% diversion rate for special projects

Current progress: The Campus Sustainability Subcommittee will research and suggest appropriate waste reduction and diversion policies for special projects and will identify mechanisms to track progress toward this goal.

Recent Efforts

To reduce waste and increase our diversion rate, Skidmore:

- improved waste and recycling infrastructure in the Williamson Sports Center;
- installed numerous water-bottle refill stations across campus;
- conducted two campus waste audits;



- composted over 11,000 pounds of food scraps and coffee grounds;
- donated over 3,500 pounds of surplus food to a local food pantry;
- implemented a campus-wide recycling education campaign;
- constructed a larger-scale composting site to manage horse manure, lands and grounds debris, and coffee grounds from Dining Services;
- provided opportunities to trade and donate unwanted items throughout the Academic Year; and
- expanded Give+Go efforts to include summer residents.

Future Steps

Possible strategies for meeting Goals 1 and 2 include:

- schedule frequent meetings with our waste hauler to improve communication and enhance our waste programs;
- create a quantitative assessment system of food waste on campus;
- conduct food waste audits to determine the feasibility of composting food scraps;
- incorporate resource management language in contracts and ensure contractors are following recycling guidelines;
- identify methods to accurately measure the amount of material that is donated by Skidmore College;
- continue outreach and education about waste management and recycling among Skidmore community members with trainings, educational campaigns, and print and/or electronic materials;
- investigate feasibility of reusable containers on campus;
- expand composting capabilities at larger-scale site; and
- provide avenues for students to borrow or sell items to fellow or incoming students to reduce the amount of new items purchased, as well as ways for students to donate unwanted items to local organizations.



Invasive plant species are replaced with native varieties

Focus Area 4: Lands and Grounds

Skidmore currently owns about 1200 acres of land that is distributed across multiple properties with different identities. The North Woods, which is adjacent to the developed portion of campus, is used both by the College for teaching and research and by the Saratoga Springs community for education and recreation. Off campus parcels include the Denton Road property, site of Skidmore's solar farm, and several wooded properties to the north and west of campus. The campus master plan, *The 2007 Campus Plan: A Vision for the Future*, itself due for revision soon, outlines some of the potential future development that could be undertaken on the main campus and adjacent areas.



Goal: Create a comprehensive lands management plan for our lands and grounds

Current progress: The Campus Sustainability Subcommittee will begin developing a comprehensive lands management plan during the 2016-2017 Academic Year.

Recent Efforts

To encourage and practice better stewardship of our land, Skidmore:

- became a Tree Campus USA institution;
- built an additional boardwalk in the North Woods to improve safety and minimize soil erosion;

- removed over 80 invasive plants from the developed portion of campus and replaced them with native species; and
- continued management and removal of several large communities of Japanese knotweed.

Future Steps

To develop a comprehensive land management plan for our lands and grounds, we will:

- develop additional maps of Skidmore properties where needed;
- provide input to the campus master plan, although we recognize that the development of a new campus master plan is outside the purview of the CSS;
- engage various stakeholders in conversations about the recreational, academic, and operational potential of Skidmore's wooded parcels;
- create stewardship plans for Skidmore's wooded parcels; and
- enhance student engagement, possibly in partnership with other organizations, including the New York State Department of Environmental Conservation, to implement the recommendations put forth in our stewardship plan.



Students promote Skidmore Unplugged on Case Green

Focus Area 5: Engagement

We must ensure that our community holds a deep understanding of sustainability, and that collectively we are aware of the progress already achieved on campus and beyond. We must strive to be recognized as an institution that values and practices sustainability in our daily operations and decision-making. While we already have 70 courses focused on sustainability, we will continue to offer new educational opportunities and increase our communication efforts to promote sustainability initiatives across campus and in the greater community.

Goal: Make sustainability an essential feature of Skidmore's identity and a value that is integrated into all aspects of the College

Recent Efforts

To enhance the education of our community and advance sustainability at Skidmore and beyond, Skidmore:

- included sustainability as a key goal in *Creating Pathways to Excellence: The Plan for Skidmore College 2015-2025*;
- launched a successful crowd-funding campaign to support our sixth solar thermal project;



- applied to the New York State Energy Research Development Authority (NYSERDA) Energy to Lead Competition, an effort that engaged students, faculty, staff, and local businesses;
- applied to NYSEDA's Reforming the Energy Vision Challenge,
- presented Skidmore's innovative approach to energy conservation, efficiency, and renewable energy utilization at the Association for the Advancement for Sustainability in Higher Education national conference;
- provided targeted educational resources about our Zero-Sort recycling program to Skidmore community members;
- developed an interactive campus sustainability map;
- developed a 3-credit sustainable food internship;
- hired 25 students to work with the Sustainability Office in paid student leadership positions or academic internships, and engaged numerous other students in campus events and volunteer opportunities;
- produced videos that feature campus sustainability programs;
- partnered with local groups to host sustainability-related events and discussions on campus; and
- developed Sustainable Service Day to engage students, staff, and faculty in service opportunities on campus, and with local and regional organizations.

Future Steps

To ensure sustainability is an essential feature of Skidmore's identity, we will:

- continue to complete annual progress reports to track progress toward the College's sustainability goals;
- complete the Association for the Advancement of Sustainability in Higher Education's Sustainability Tracking, Assessment & Rating System (STARS) report;
- design and implement creative communication materials for the College's sustainability projects and initiatives, including informative campus signage;
- expand curricular integration through faculty development opportunities, such as informal lunch meetings with facilitated conversations around specific sustainability-focused topics;
- increase Skidmore's presence in local, regional, and national publications and recognition opportunities;
- conduct campus surveys to assess sustainability literacy among our community members;
- identify methods to track community engagement and participation in sustainability;
- identify methods to track how sustainability efforts have influenced the lives and decisions of our students after graduation; and
- conduct sustainability surveys within the greater community to assess the perception of Skidmore and its relationship to sustainability.

While we should celebrate our recent accomplishments, we have more work to do. We hope to build upon yet another successful year, and we look forward to sharing our continued progress in the *2016-2017 Annual Report*.