



# Connecticut College 2019 Annual Sustainability Report

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## About Connecticut College

Connecticut College is a highly selective, private liberal arts college in the historic seaport of New London. Our 750-acre arboretum campus overlooks Long Island Sound and the Thames River. Founded in 1911, the College enrolls 1,800 students from across the country and around the world. We offer more than 1,000 courses in 30 academic departments and more than 40 traditional majors. Close to 55 percent of our students study abroad, and nearly 80 percent participate in the paid summer internship program. Graduates are creative, adaptive thinkers prepared to take on complex challenges with an academic foundation rooted in integrated study, research opportunities and service learning.

The College completed its first STARS assessment in spring 2018 and received a Silver rating in March.



# From the Office of Sustainability

In the first year of the campus sustainability plan we have made significant advances in many areas. The plan has served as a foundation to focus and align our efforts across campus. In total 32 of the 41 actions assigned to begin in the first year are in progress or completed. Perhaps more importantly, more members of the campus community are engaging with sustainability and participating in our efforts to make Connecticut College more sustainable.

The following pages highlight some of the key accomplishments from the year. These range from increased collection and availability of sustainability data, to increased educational initiatives such as incorporating sustainability modules in first year seminars, to equity issues such as paid parental leave for staff.

At the same time, global events during this year have highlighted an increased urgency for sustainability effort. Natural disasters around the world have illustrated that the initial effects of changing climate are already upon us. A report from the Intergovernmental Panel on Climate Change in Fall 2018 emphasized the necessity of immediate action to avoid catastrophic effects of warming in the coming decades. Thus, while we have made substantial gains in sustainability at Connecticut College in 2018-2019, we must redouble our efforts. Our annual sustainability campaign for the upcoming year (2019-2020), “Putting the Liberal Arts into Climate Action,” provides an opportunity for us to focus on educating the members of the college community and acting to reduce the climate impacts of the College itself. This will require a collaborative effort and new ideas, even while we continue to work to advance the initiatives in the Connecticut College Sustainability Plan. Because of this increased urgency, the Office of Sustainability and the Environmental Model Committee jointly recommend increasing our greenhouse gas emission reduction goal to a 45% decrease by 2030. This goal is ambitious, but we believe that it is achievable through the collective action of the campus community.

*Chad Jones*

Chad Jones  
Suzi Oppenheimer '56 Faculty Director of Sustainability

*Margaret Bounds*

Margaret Bounds  
Assistant Director of Sustainability

# Campus Sustainability Plan Overview

The Campus Sustainability Plan, adopted in 2018, is intended as a comprehensive vision for advancing sustainability at Connecticut College over the next 10 years. Each focus area has both broad goals and specific action items that will contribute to the transformation of our campus. An implementation plan at the end of this document breaks down a timeline for achieving these goals over ten years.

The focus areas and goals are:

## 1. Energy and Climate

- 1.1. Utilize more efficient forms of energy generation
- 1.2. Increase energy efficiency and conservation at the College through systems upgrades and by increasing awareness of energy issues among students, faculty and staff
- 1.3. Develop renewable and cleaner sources of energy production to reduce emissions by 5 percent
- 1.4. Permanently protect the Arboretum for habitat conservation and carbon sequestration
- 1.5. Develop a detailed Climate Action Plan based on this plan

## 2. Academics and Education

- 2.1. Educate students, faculty and staff on sustainability and the connections between social, economic and environmental justice
- 2.2. Increase awareness of sustainability policies, practices and accomplishments at the College
- 2.3. Incorporate sustainability more broadly into the curriculum
- 2.4. Provide access to the College's sustainability-related data for use in courses
- 2.5. Expand and strengthen reciprocal partnerships with sustainability related community organizations

## 3. Campus Operations

- 3.1. Reduce total waste by 20 percent by 2028 from the 2017 baseline
- 3.2. Reduce water consumption on campus by 5 percent by 2023 and 8 percent by 2028 from the 2017 baseline
- 3.3. Increase the amount of local, organic and fair trade food purchased across campus to 10 percent by 2023 and 20 percent by 2028 from a 2017 baseline of 5.86 percent
- 3.4. Increase the percentage of sustainable and fair labor practice goods purchased by the College

## 4. Planning and Construction

- 4.1. Create sustainable residential facilities
- 4.2. Improve the health and sustainability of the arboretum campus landscape
- 4.3. Expand and develop programs to support the use of sustainable forms of transportation
- 4.4. Increase campus accessibility for those with limited mobility

## 5. Administration

- 5.1. Use our investments to support a just and sustainable society
- 5.2. Increase the Sustainability Revolving Fund to \$1 million by 2023
- 5.3. Promote an equitable work environment
- 5.4. Improve the efficiency of our workforce and reduce paper use
- 5.5. Expand and strengthen support for the Office of Sustainability and campuswide sustainability coordination

# Energy and Climate

*Reduce carbon emissions by 26 percent by 2025.*

## Goals

## Progress in 2018-2019

### 1. Utilize more efficient forms of energy generation

#### 1.1 Install efficient on-site electricity generation and interconnect campus to form a microgrid

A natural gas fuel cell was installed on campus in fall 2019 and started operating in early October. While this system will not include a microgrid as originally planned, and still uses a fossil fuel, it will represent a reduction in greenhouse gas emissions from our past electricity provider. Financial savings from the fuel cell will be used for needed energy efficiency projects.

### 2. Increase energy efficiency and conservation at the College through systems upgrades and by increasing awareness of energy issues among students, faculty and staff

#### 2.5 Add smart submeters to all buildings on campus over 5,000 square feet and publicize the data collected

Existing smart submeters that were never fully installed are now being brought online to provide building-level data to promote energy efficiency and identify outliers that may signal mechanical problems.

Funding from the SGA Sustainable Projects Fund and Facilities will allow us to install smart submeters in Crozier-Williams and one other building this year. The baseline data collected will be used to inform the design of Cro and to verify energy efficiency savings from sustainability projects.



The College has reduced greenhouse gas emissions by

**16%**

since 2005

### 3. Develop renewable energy and clean energy alternatives campus

We are currently pursuing a unique collaboration between students, faculty, staff and an alumnus to have students design a solar installation for the Service Building roof.



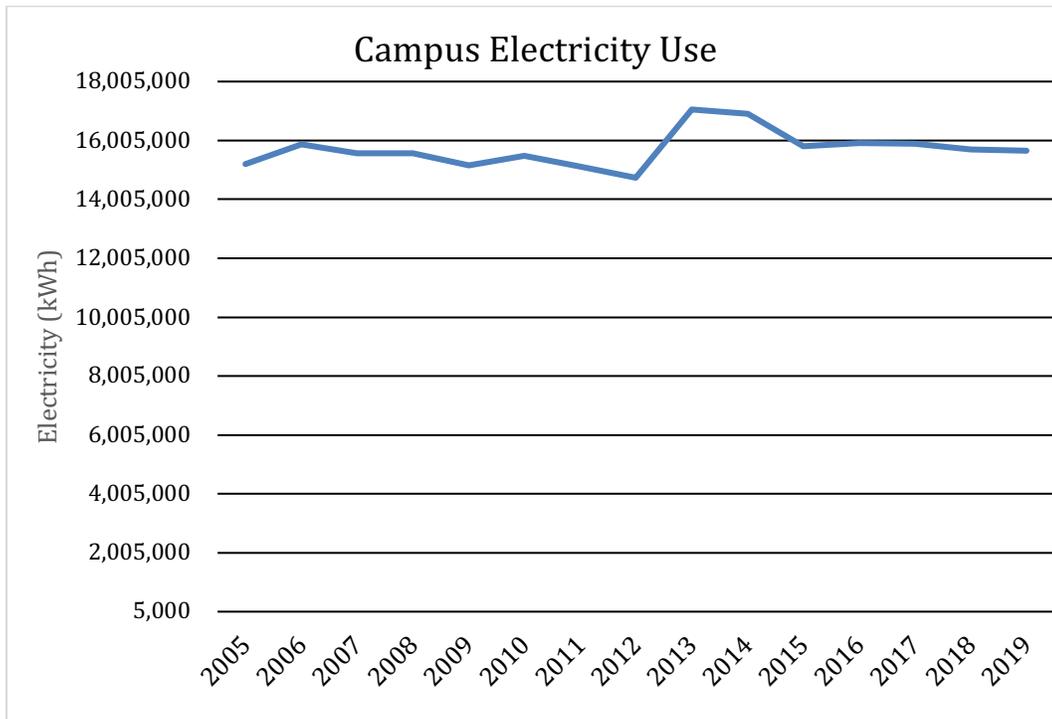
The same alumnus, Rocky Ackroyd, built a solar demonstration trailer that we brought to campus from April 14-23. Students from the Office of Sustainability assisted in assembling the solar array. The students also held an Earth Day event on April 22 using the solar energy produced by the array to power a sound system and a cotton candy machine.

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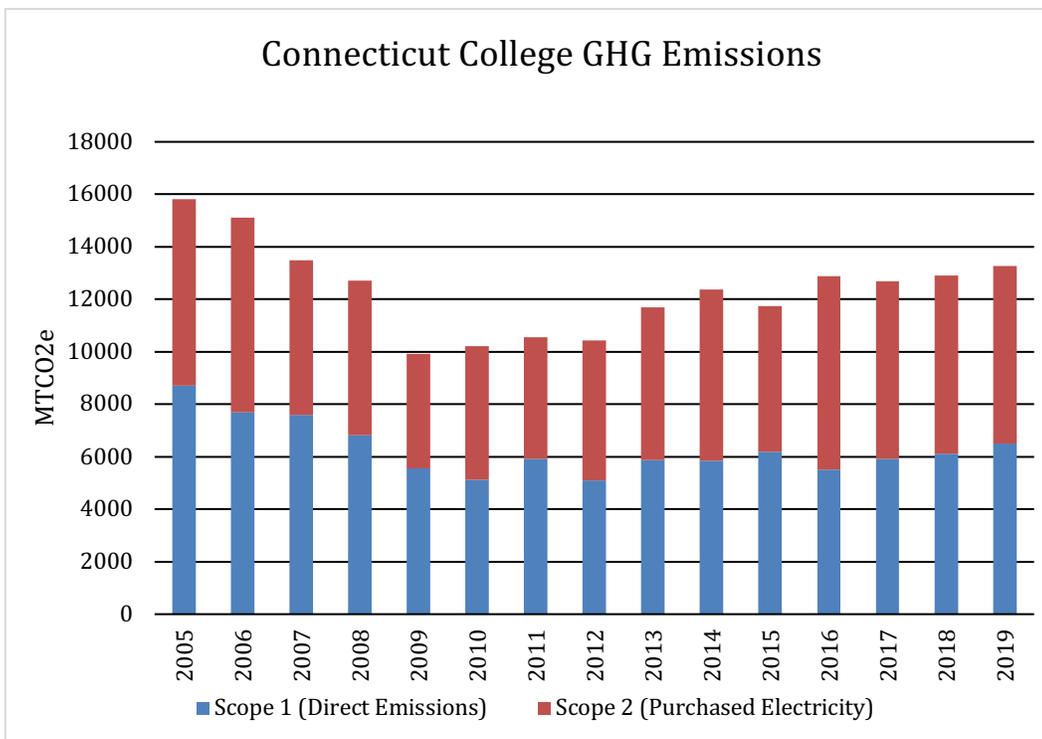
### 5. Develop a detailed Climate Action Plan based on this plan

The Environmental Model Committee (EMC) has spent this academic year creating an initial draft of a Climate Action Plan. As part of this work they also did some preliminary investigation of the carbon offset potential of the Arboretum.

During the 2018-2019 academic year, the Office of Sustainability compiled as much electricity, propane, oil and natural gas usage data from 1990 to the present as possible. This information was used to calculate our total campus energy use and campus Scope 1 and Scope 2 greenhouse emissions so that we have an accurate record of how our energy use and emissions have changed over time. We have decided to use 2005 as our baseline year going forward because this is the baseline year called for in the Paris Climate Agreement. Based on current progress from 2005, and the recent IPCC report, the EMC and the Office of Sustainability recommend a new goal of reducing greenhouse gas emissions by 45% by 2030.



This graph shows campus electricity use from our 2005 baseline year through FY2019. We believe that the spike seen in 2013 is related to the renovation of and addition to New London Hall. Our electricity use has been declining since 2016.



This graph shows the campus Scope 1 and Scope 2 greenhouse gas emissions over time, starting with the 2005 baseline. Scope 1 emissions are those associated with on-campus generation (the power plant, campus fleet vehicles, generators). Scope 2 emissions are those from our purchased electricity. While we have seen a 16% decline in emissions since 2005, our emissions have increased over the past three years.

# Academics and Education

*Integrate sustainability into the campus culture.*

## Goals

1. Educate students, faculty and staff about sustainability and the connections between social, economic and environmental justice



## Progress in 2018-2019

- 1.1 Implement diversity, cultural literacy and sustainability training for all new faculty and staff, phase in training for current employees and enhance current trainings for students

A short sustainability presentation was included in a session for the full first year class during Orientation for the first time in 2018. Three other sustainability related events were also held throughout Orientation weekend.

- 1.2 Have a major sustainability awareness campaign each academic year

Our first campaign – Pass on Plastic – was held during Campus Sustainability Week in October 2018 to raise awareness about the use of single-use plastics on campus.

This campaign led to the creation of the Bottled Water Task Force that met throughout the fall semester. Successes of the task force include:

- Eliminating bottled water from Grab 'N Go
- Removing bottled water from Admissions panels and lunches during visit days
- Purchasing a portable water station, using the Sustainable Projects Fund, to be used at Floralia and other large outdoor events (pictured at left)

## Goals

**2. Increase awareness of sustainability policies, practices and accomplishments at the College**

## Progress in 2018-2019

**2.1 Update and bring all sustainable building and operations policies through official approval channels and then publicize them to the campus**

All current sustainability policies are now housed on the new sustainability website under the Environmental Model Committee tab.

**2.3 Create a standard design for and install sustainability signage across campus**

The Office of Sustainability and Communications are collaborating on a standard sign template that can be used to identify sustainability projects across campus and to develop a sustainability walking tour.

**3. Incorporate sustainability more broadly into the curriculum**

**3.4 Develop a first-year seminar (FYS) module on sustainability that engages students with the campus' sustainable features**

Two different sustainability modules were offered to First Year Seminars in Fall 2018. Eight seminars chose to include one or both of the modules in their syllabus.

**5. Expand and strengthen reciprocal partnerships with sustainability related community organizations**

**5.5 Establish a full-time position to coordinate and develop partnerships in the area of sustainable food, assist with the advising of the Sprout Garden and teach related courses in the Botany Department**

A new Visiting Professor of Botany with specialization in Sustainable Agriculture position was established this year and the new professor, Eric Vukicevich, started in July. A new expansion of Sprout Garden is now underway under his guidance. This position also allows time for advising the Sprout Garden Managers and working to strengthen community partnerships around food.

At left, students make pesto with basil grown in Sprout at an event in September 2018.



# Campus Operations

*Reduce the environmental impact of the College's operations.*

## Goals

## Progress in 2018-2019

1. Reduce total waste by 20 percent by 2028 from a 2017 baseline

- 1.1 Install standard, highly visible signage at all paired recycling and trash bins

Standardized recycling signage has been installed in Cro and Shain. The sign holders for this pilot, which were funded by the SGA Sustainable Projects Fund, attach to both recycling and trash bins for clearer labeling.

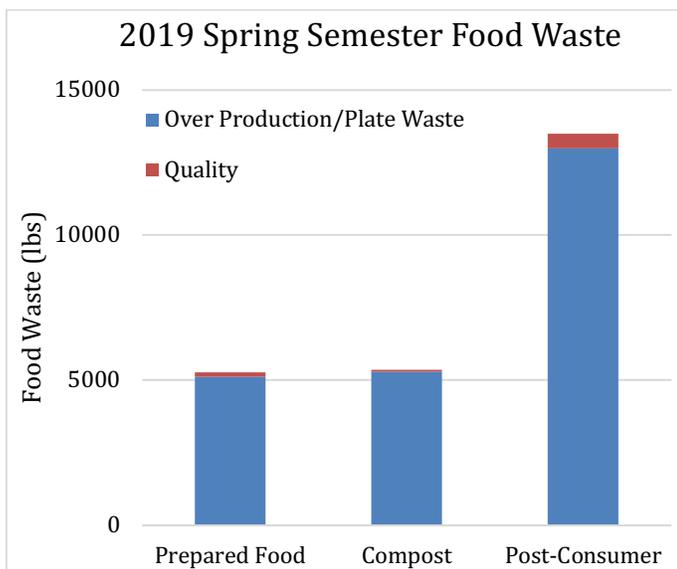
- 1.4 Expand the reach of the Office Swap program by establishing a permanent office-supply closet and by creating a catalog in the forthcoming eProcurement system

Office Swap is now a catalog in the CTW OneSource purchasing platform. We have seen a large increase in orders this year due to the ease of ordering and better visibility of available supplies.

- 1.5 Implement food-waste tracking software in the dining halls

The Phood tracking system was installed in the Harris kitchen in Summer 2018. Dining began to fully track waste in February 2019. The tracking system has allowed us to have accurate measurements for detailed categories including post-consumer plate waste, kitchen scraps, and specific food items.

The chart to the left shows how many pounds of food waste were logged in three general categories: Post-consumer (plate waste), Compost (vegetable scraps from kitchen preparation), and Prepared Food. Post-consumer waste is more than double the amount of the other categories, showing that working with students will be key to reductions. All food waste is sent to the Secchiaroli Farm for reuse as animal feed.

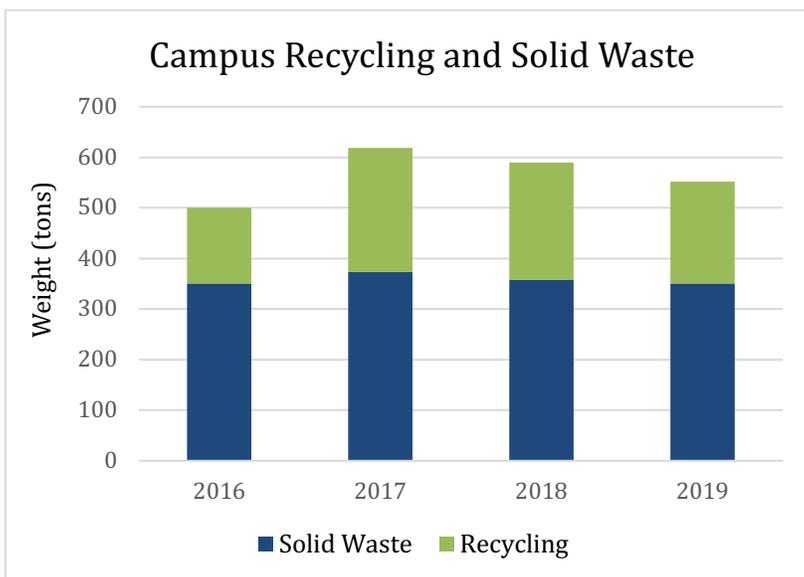




**1.7 Set up a system for collecting small amounts of compost from events, student-run coffee shops and independent living facilities**

Students from the Office of Sustainability began a program to collect food waste and compost it using the Earth Tub in Sprout Garden (pictured left). 13 students in Independent Living participated in the program this spring. SGA has also allocated funds from the Sustainable Projects Fund to help expand composting in Sprout in the future.

The Office of Sustainability continues to manage the Give ‘N Go donation program to reduce waste from student move-out. Over 11,000 lbs. of donations including clothing, furniture, mini-fridges, and other residence hall room supplies were collected this year. The majority of the items are distributed to local agencies at two agency pick-up days (pictured right). Other items are saved for a yard sale for new students during Orientation. This sale was held for the first time in August 2018 and was held for the second time in August 2019. Both years the sale has raised enough money to cover the cost of Uhaul rentals for Give ‘N Go and provided new and returning students with useful items at a low cost.



Our overall goal related to waste is to reduce total waste by 20% from 2017. The chart on the left shows that we have seen decreases in the past two years. Comparing 2019 to 2017, we have seen a 10% decrease in total waste.

In 2017 and 2018 the College achieved a 40% diversion rate, meaning that 40% of our total waste was recycled or otherwise diverted from the incinerator. In 2019, our diversion rate was 36%. This decrease in diversion was mainly caused by a ban on plastic bags that was implemented by our transfer station in October 2018. While we have now switched to paper bags, the initial changeover caused a decrease in the amount of recycling collected.

# Planning and Construction

*Embed sustainability in the campus landscape, buildings and infrastructure.*

## Goals

## Progress in 2018-2019

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**2. Improve the health and sustainability of the arboretum campus landscape**

**2.1 Enhance collaboration between Grounds Management and the Arboretum to make best use of resources and expertise**

A new Arboretum Director started at the College in August 2019. As part of the search process, conversations about collaboration between Grounds and the Arboretum began and are continuing.

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**4. Increase campus accessibility for those with limited mobility**

**4.1 Consolidate student and guest facing offices into buildings with elevators to make them fully accessible**

An elevator was added to Fanning Hall during the Career Center renovation. This elevator brings accessibility to all four floors, importantly including the Dean's offices on the second floor.

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Many of the other goals and action items in this section are under current discussion, but will take more time to be implemented because of the long lead time for construction and major renovation projects.

# Administration

*Consider sustainability in high-level decision making at the College.*

## Goals

## Progress 2018-2019

### **2. Increase the Sustainability Revolving Fund to \$1 million by 2023**

A referendum to update and extend the Sustainable Projects Fund included new procedures for using the leftover funds. After one year in a rollover fund available to SGA to use for projects, any remaining funds will be transferred to the Sustainability Revolving Fund. Existing rollover funds from multiple years will be added to the Revolving Fund at the end of this fiscal year.

The Revolving Fund will contain approximately \$150,000 for the academic year 2019-2020.

#### **2.1 Allocate 30 percent of utility savings from the fuel cells to the Revolving Fund over the next 10 years**

Once the fuel cell goes online this fall, we will work with Facilities to develop a system to use a portion of the savings for energy efficiency projects.

### **3. Promote an equitable work environment**

#### **3.2 Promote Faculty/Staff equity through coordinated information sharing and decision-making**

The new Faculty and Staff Meetings have brought the two groups together monthly to receive information and ask questions of the Administration. Approximately 150 staff and faculty attended each of the meetings. Positive feedback about the information shared and the sense of community at the meetings has been received from faculty and staff.

#### **3.4 Implement paid parental leave for staff**

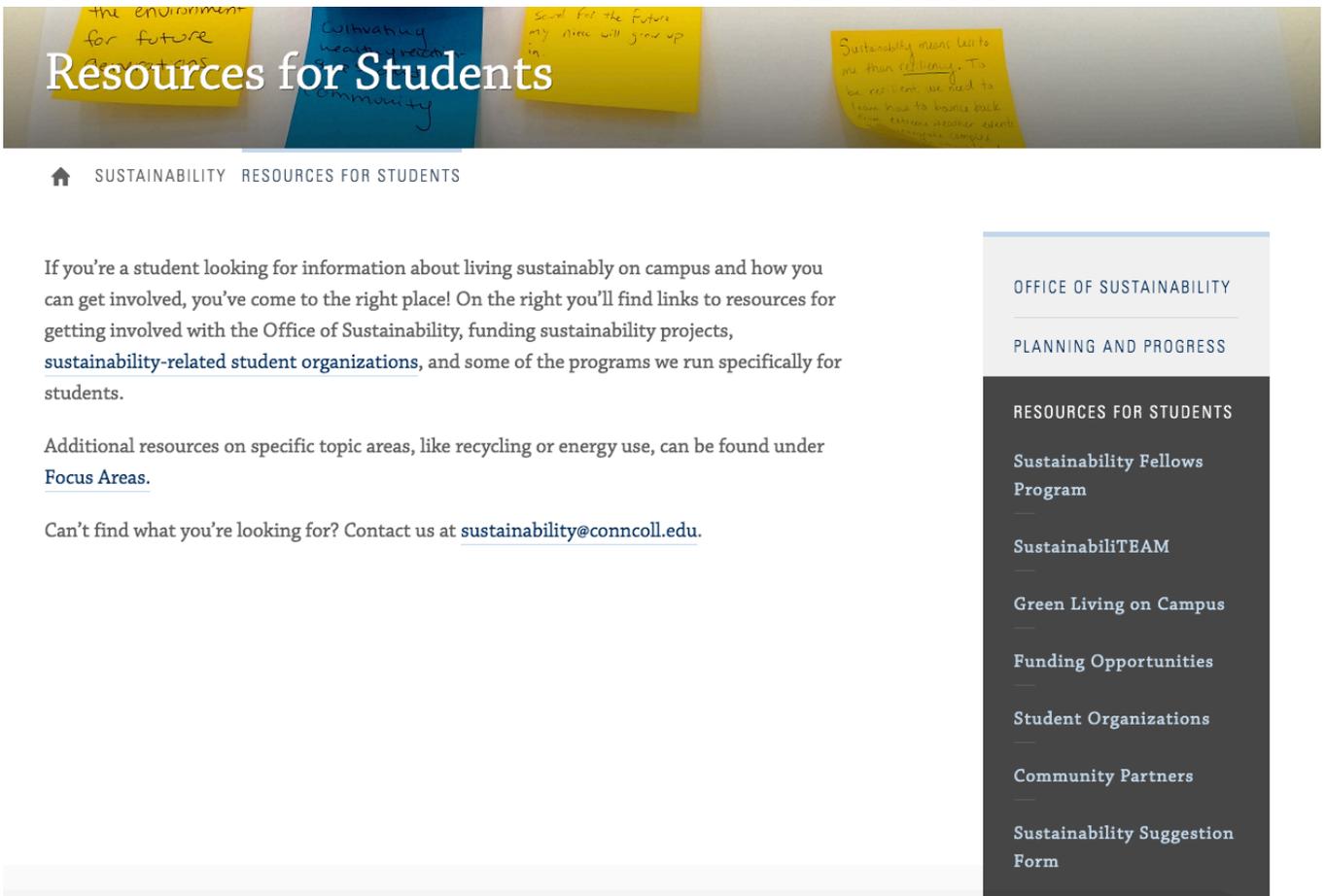
A Paid Parental Leave Policy, effective on June 1, 2018, provides four weeks of full-pay parental leave to eligible staff members.

5. Expand and strengthen support for the Office of Sustainability and campuswide sustainability coordination

5.3 Update the sustainability website with current goals and resources for students, faculty and staff and audit how sustainability appears on other College pages

A new sustainability website went live in August 2018. The updated site includes new pages dedicated to resources for students and for faculty and staff. It also includes more details about the focus areas of the Campus Sustainability Plan and how community members can get involved with those issues on campus.

The screenshot below shows the new landing page for students searching for information on sustainability.



# Implementation Plan

Achieving the goals in this plan will take the work of many departments across campus over the next ten years. The implementation plan below lays out how we envision sequencing these goals based on current funding and capacity. We have paid particular attention to the sequence of the first three years, which will be critical for building toward our goal of achieving STARS Gold when we resubmit for certification in 2021.

The action items are numbered according to their focus area, goal and action item number in the document above. For a quick reference, refer to the Plan Overview on page 5. Office of Sustainability is abbreviated OoS in the coordinating office column.

We have indicated below whether action items have been completed (green), are in progress (yellow) or have not yet been started (red) as of October 2019. Please note that not all of the action items in progress were highlighted in the report above. For more information about any of the work referenced in this annual report, please contact the Office of Sustainability.

Phase		Action Item	Coordinating Office
Phase 1 (2018-2021)	Spring 2018 (In Progress)	1.3.3 Include solar/green roofs in Master Plan	Facilities, Sasaki
		3.4.2 Include sustainability in Procurement Services trainings	Procurement Services
		3.4.4 Include sustainability in supplier review meetings	Procurement Services
		5.4.2 Reduce use of personal printers by 50%	F&A, OoS
		5.5.3 Update the sustainability website	OoS, Communications
	Summer 2018	1.2.4 Implement Sustainable Building Guidelines	Facilities
		1.2.5 Add submeters to campus buildings	Facilities, OoS
		2.3.4 Develop sustainability focused FYS module	OoS, Dean of First Years
		2.4.1 Track and report sustainability data	OoS
		3.1.5 Implement food-waste tracking software	Dining Services, OoS
		3.3.2 Formalize partnership between Sprout Garden and Dining	Dining Services, OoS
		3.4.1 Establish a baseline for sustainable purchases using FY18	Procurement Services
		4.2.1 Enhance collaboration between Grounds and Arboretum	Grounds, Arboretum
		5.3.4 Implement paid parental leave for staff	HR
	Fall 2018	1.5 Develop a Climate Action Plan	EMC, OoS
		2.1.1 Sustainability training for new students and employees	OoS, DIEI, Student Engagement
		2.1.4 Have a sustainability awareness campaign	OoS
		2.2.1 Update and publicize sustainability policies	OoS, EMC
		2.2.3 Install sustainability signage	OoS, Communications
		3.1.1 Install standardized, highly visible recycling signage	OoS, Communications
		3.1.2 Minimize the use of paper towels	Facilities, OoS
		3.1.4 Expand the reach of the Office Swap program	OoS
		3.1.7 Set up a system for collecting small amounts of compost	OoS
		3.4.3 Make sustainable products the default in the eMarketplace	Procurement Services

		5.2.2 Advertise Revolving Fund to donors	Advancement
		5.3.2 Promote Faculty/Staff equity	FSCC, Staff Council
	Spring 2019	2.1.3 Administer sustainability literacy survey	OoS, Institutional Research
		2.2.2 Prepare an annual sustainability report	OoS
		3.4.5 Join Fair Labor Association or Workers Rights Consortium	Procurement Services, OoS
		4.3.1 Expand the number of staff and faculty who carpool	OoS
		5.1.1 Create a Committee of Investor Responsibility	F&A, Board of Trustees, CC Divest
		5.3.1 Administer a bi-annual campus climate survey	Institutional Research, HR, DIEI
		5.5.1 Create a Sustainability Steering Committee	OoS, EMC
		Summer 2019	1.1.1 Install fuel cells
	2.1.2 Develop employee peer-to-peer sustainability program		OoS
	2.3.1 Create sustainability learning objectives		OoS, Dean of the College
	2.3.2 Host summer workshop for faculty		OoS, Dean of the Faculty
	2.4.2 Adopt the model of "campus as a living lab"		OoS, Dean of the Faculty
	3.1.3 Recycle construction and demolition waste		Facilities
	4.3.4 Enhance support for Spokespeople		OoS, Student Engagement
	5.1.2 Develop a sustainable investment policy		F&A, Board of Trustees, CC Divest
	2019-2020		1.3.1 Assess renewable energy options
		2.1.5 Include sustainability in existing events	OoS, REAL, Student Engagement
		2.5.1 Assess current sustainability partnerships	Community Partnerships, OoS
		2.5.2 Develop key sustainability partnerships	Community Partnerships, OoS
		2.5.5 Establish Sprout/Botany position	Botany, OoS
		3.1.6 Maximize catering efficiency	Events and Catering, F&A
		3.2.4 Install water meters on residential buildings	Facilities
		4.3.3 Implement a campus-wide bike share program	OoS, Dean of Students
		4.3.7 Audit campus fleet for efficiency	Facilities
		5.3.3 Recruit and support staff from underrepresented groups	DIEI
	2020-2021	2.2.4 Achieve STARS Gold	OoS
		3.2.3 Implement a water conservation campaign	OoS
		5.4.1 Implement online timesheets and payroll system	F&A
Phase 2 (2022-2025)	1.2.1 Undertake \$750K in energy efficiency projects	Facilities, OoS	
	1.2.2 Identify low-use times for buildings	Facilities	
	1.3.2 Implement selected renewable energy option	Facilities	
	1.4.1 Permanently protect the Arboretum	Arboretum, Board of Trustees	
	1.4.2 Assess carbon sequestration options for Arboretum	Arboretum, OoS	
	2.3.3 Develop network of sustainability alumni	OoS, Alumni Engagement	
	2.5.3 Implement Civic Action Plan	Community Partnerships	
	2.5.4 Include community in infrastructure planning	Facilities	
	3.2.1 Replace the dishwashing machine in Harris	Dining, Facilities	
	3.2.2 Install low flow fixtures to maximize water efficiency	Facilities	
	3.2.5 Collect rainwater or greywater	Facilities	
	3.3.1 Increase Dining budget	Dining, F&A	

	4.1.1 Transform residential buildings into sustainable houses	Facilities, REAL
	4.2.2 Develop and implement a vegetation plan	Grounds, Arboretum
	4.2.3 Make efforts to reduce stormwater runoff	Grounds, Arboretum
	4.2.4 Reduce the amount of high-maintenance landscape	Grounds
	4.3.2 Install an electric charging station with solar array	Facilities, OoS
	4.3.5 Create better bike facilities	Facilities, Spokespeople, OoS
	4.3.6 Add new sidewalks to expand pedestrian connectivity	Facilities
	4.4.2 Create more accessible gathering spaces	Facilities, Accessibility Services
	4.4.3 Increase the capacity to fulfill accessibility accommodations	Facilities, Accessibility Services
	5.2.1 Allocate utility savings from the fuel cells to Revolving Fund	F&A
	5.4.3 Provide materials electronically as a default	OoS
	5.5.2 Move the Office of Sustainability to a central location	OoS, Facilities
	5.5.4 Advance staff position to Director, Office of Sustainability	F&A, HR
	Phase 3 (2025- 2028)	1.2.3 Consolidate building use
4.1.2 Incorporate green design into a new residence hall		Facilities, OoS
4.4.1 Consolidate offices into accessible buildings		Facilities
5.5.5 Add Program Coordinator to Office of Sustainability		OoS, HR

# Acknowledgements

We would like to gratefully acknowledge the hard work that many staff and faculty members from across the college have put into implementing the goals in this plan. We would also like to acknowledge the Student Government Association, which allocated funding from the Sustainable Projects Fund to pilot several of the projects mentioned in this report.

Finally, we would like to recognize our student Sustainability Fellows, whose projects have helped propel many of these goals forward. The Sustainability Fellows for 2018-2019 were:

Ariane Buckenmeyer '19	Ashlyn Healey '20
Eric Dawson '19	Liam Lofgren '20
Lucy Grey '19	Esteban Melendez '20
Hannah King '19	Katheryn Moya '20
Sydney Krisanda '19	Jade Mueller-Galbraith '20
Maggie Newell '19	Jennifer Rojas '20
Blake O'Neal '19	Avatar Simpson '20
Emilio Pallares '19	Venezio Terranova '20
Sydney Rentsch '19	Paula Torres '20
Evan Roy '19	Theresa Beardell '21
Megan Webber '19	Hans Horst-Martz '21
Sami Ashton '20	
Emma Brooks '20	
Jonathan Gomez-Pereira '20	