

STATE OF SUSTAINABILITY

—
2017



Colgate University



STATE OF SUSTAINABILITY

2017

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Cover photo: ©2017 Justin Kunz. An action shot from the Willow Plot Harvest in October 2017.

Colgate University
Office of Sustainability



State of sustainability

In 2009, Colgate made a commitment to sustainability and **carbon neutrality by 2019**. This year, staff, students, and faculty worked together to take steps toward this goal.



GROSS EMISSIONS

13,233 MTeCO₂

or 4.62 tons/student

↓ 21%

reduction since 2009



ELECTRICITY

28.8k MWh

or enough to power

2,676 homes for a year

NET EMISSIONS

8,187 MTeCO₂

or 2.9 tons/student

↓ 51%

reduction since 2009



WATER

22,278 gallons

of water/student

MTeCO₂, metric tons of carbon dioxide equivalent; MWh, megawatt-hour.

A year in review

NEW COLGATE CAMPUS APIARY

In May, Colgate welcomed **60,000 honeybees** to its Community Garden with the formation of a campus apiary. This initiative was led by Isabel Dove '19 who started a beekeeping club with the support of the Office of Sustainability, Environmental Studies and Russian Professor, Dr. Ian Helfant and dining service provider Chartwells. The club hopes to provide a healthy habitat for the bees for years to come.

SOUNDSCAPE PROJECT

This past summer, Colgate's hill acted as a living lab, providing an opportunity for students and staff to work with Associate Professor of Biology, Ana Jimenez, to start a longitudinal study of the soundscape of Colgate's forests. The soundscape study will help us to measure the abundance and variety of birds on our hill in order to understand how changes in our local environment and climate affect the health of Colgate's forest.



A year in review

WILLOW PLOT HARVEST

In 2009, Colgate planted **60,000 willow shoots** a mile from campus on a 7.5-acre plot in an effort to grow some of its energy. This year, Colgate harvested willow from this plot for the first time. Over a 20-year period, this plot will yield about 900 dry tons of biomass for the university's woodchip burning facility. This project has been an ongoing topic for student research and will continue to create opportunities for engaged scholarship.



60,000 willow shoots planted will produce
900 dry tons of biomass over 20 years

PATAGONIA EXTENDED STUDY

Twelve students took a field ecology class in the fall to prepare for an extended study trip in Patagonia, Chile. In the winter of 2017, the students departed for a three-week trip with Professor of Biology Eddie Watkins and Director of Sustainability John Pumilio. While there, students learned about forest conservation efforts, conducted research and visited the **Colgate University Forest** – a reforestation plot established as part of Colgate's **carbon-offsetting agreement with Patagonia Sur**.

GREEN REVOLVING LOAN FUND

We are proud to announce Colgate funded its first-ever project through a new and innovative financing structure called a Green Revolving Loan Fund. The loan fund, which was seeded with \$230,000 and ended 2017 with \$1 million, is designed to support upgrades to the campus that demonstrate a clear, measurable **financial payback** and **carbon reductions**. The first loan funded a lighting upgrade in Little Hall.

BUILDINGS

The Class of 1965 Arena received a **LEED Gold Certification** from the U.S. Green Building Council in November. Innovative ice-making practices contributed to this leading third-party certification.

Colgate's Green Building Standards have also been taken into consideration with the construction of Benton Hall and the new residence halls. These buildings are also on track to receive LEED Certification.





LOCAL AND SUSTAINABLE FOOD

Our food service provider, Chartwells, has **partnered with over 40 community-based producers** in central New York in an effort to buy more local and sustainable food. In 2016, Chartwells began tracking food procurement with the ambitious goal of purchasing 30 percent local and community based or third-party-certified food. During the 2016-2017 Academic Year (AY) baseline period, 26 percent of purchases fell into this category – an impressive number when compared to our peers. Chartwells and the Office of Sustainability hope to reach this goal as we finish out the 2017-2018 AY.



26% of food purchases came from **local and community-based or third-party-certified food** vendors in the 2016-2017 academic year.



Sustained successes

NATIONAL RECOGNITION

For the last three years, Colgate has been ranked in *Sierra Magazine's "Coolest Schools"* issue as one of the greenest institutions in the country, receiving its highest-ever ranking – 15th this year. Colgate has consistently received national recognition for its commitment to sustainability and climate action. In 2011, Colgate received a Climate Leadership Award from Second Nature.

In 2017, Colgate also received a **STARS Gold Rating** from the Association for the Advancement of Sustainability in Higher Education (AASHE) for the second time with its highest-ever score, jumping six points from previous submissions.

Colgate can justly take pride in its rapid emergence as a leader in sustainability among American institutions of higher education.



#15

Colgate University

Score: 683.27

Hamilton, New York





COLGATE COMMUNITY GARDEN

The spring of 2017 marked the Community Garden's eighth growing season. Researched, funded, and managed by Colgate students, Colgate's Community Garden grows farm fresh herbs and vegetables for the community to enjoy. Produce from the half-acre garden is **served on campus, sold to community partners, and donated to the local food cupboard.**

Sustained successes

GREEN BIKES

The Green Bikes Program was taken over by the Office of Sustainability in 2009 and has been a true campus sustainability success. Each season, 30 bikes are rented and enjoyed by Colgate students, faculty, and staff. A student Green Bike manager runs the program each spring, summer, and fall season.



CAMPUS PARTNERSHIPS

Since 2014, Sustainability Director John Pumilio has offered the Foundations of Sustainability discussion course for Colgate employees. For the first time, this year the class was offered twice, once over the summer open to all staff and faculty, and again in the fall specifically oriented toward Buildings and Grounds staff.

To date, the program has graduated over 80 participants who have gone on to advocate for sustainability within their departments, forming sustainability working groups across campus.

PEER-TO-PEER PROGRAMS

Colgate's Office of Sustainability has mentored and employed over 80 student interns since 2009. Each semester, the interns organize and carry out programs and initiatives to engage their peers and foster a culture of sustainability on Colgate's campus.

Student interns in 2017 organized programs like **13 Days of Green**, the **Green Summit**, **RecycleMania**, and the first-year Sustainability Representative (S-Rep) program.

In the fall of 2017, interns and S-Reps worked within the residential commons community to conduct **Colgate Unplugged** – an electricity and water reduction competition. As a result, the metered residence halls used an average of 4 percent less water and 7 percent less electricity than the same period in 2016.



4% less water and **7%** less electricity
used in residence halls during **Colgate Unplugged**
when compared to same time period in 2016



Students and community members planting seeds during the 13 Days of Green 2017 kickoff event

Looking ahead

Taking responsibility for our footprint

Colgate aims to be carbon neutral in 2019. In the coming year, we plan on taking innovative and exciting measures to get there. A large part of our campus's footprint comes from heating and cooling. To address this, in the summer of 2018, Colgate's heating plant will be upgraded to support more carbon-neutral energy sources. This will drastically decrease our reliance on fossil fuels and our carbon footprint. The new Green Revolving Loan Fund will also be tapped to help increase energy efficiency measures across campus for years to come.

In addition to the work above, Colgate is exploring novel forestry and land management practices that will help us take responsibility for our carbon footprint.

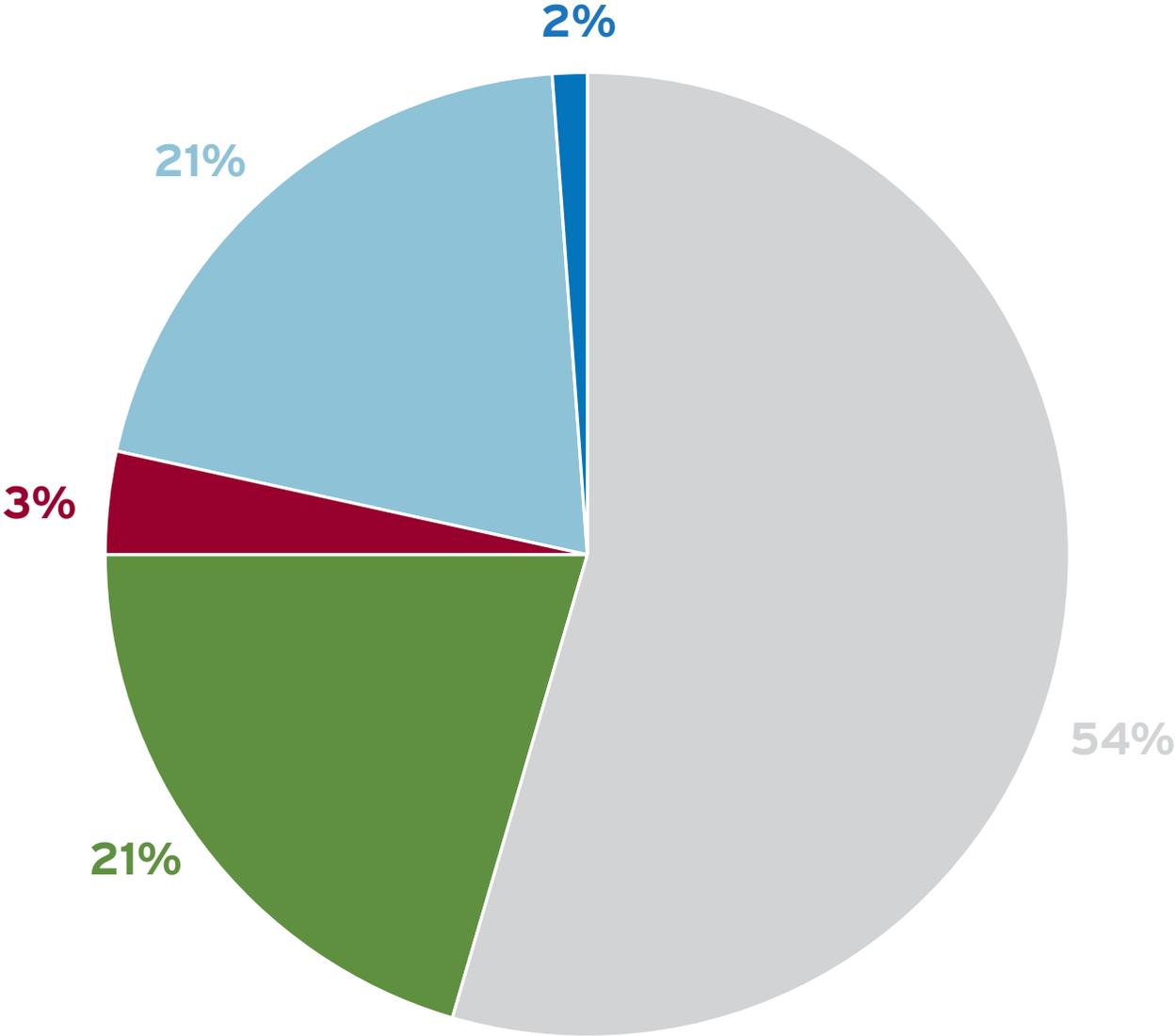


Our emissions distribution for 2016-2017

(MTeCO₂)

| | |
|--|--------|
| HEATING | 7,923 |
| AIR TRAVEL | 3,046 |
| ELECTRICITY | 391 |
| VEHICLES, COMMUTING & GROUND TRAVEL | 3,101 |
| MISCELLANEOUS | 306 |
| BIOGENIC EMISSIONS | -1,487 |

Our carbon emissions



HEATING
VEHICLES, COMMUTING & GROUND TRAVEL

AIR TRAVEL
MISCELLANEOUS

ELECTRICITY

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