

## UC Santa Cruz



*Credit: Elena Zhukova*

UC Santa Cruz continues to implement innovative solutions to improve sustainability performance across operations. The new mammal pools renovation at the Coastal Science campus implemented a seawater heat recovery system that recovers heat from the flow of 60 to 100 gallons per minute of seawater that constantly discharges from the mammal pools. This heat is then used to preheat the incoming fresh supply of seawater to the mammal pools, saving 15,000 therms of natural gas per year, which is an annual carbon reduction of 80 metric tons.

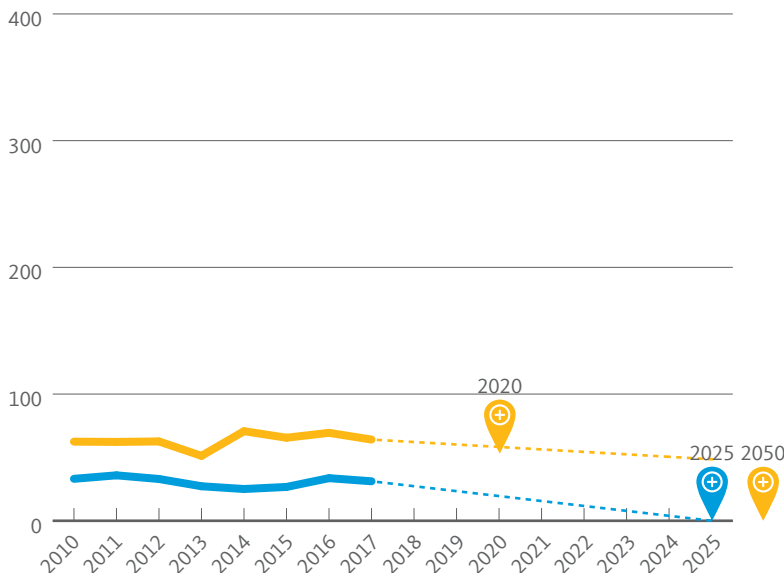
A partnership between campus entities, which includes the student-led Green Labs program, the student-funded Carbon

Fund and UC Santa Cruz faculty, resulted in the replacement of six -80°C ultra-low-temperature freezers with more efficient models. This is the first phase of lab freezer replacements that will replace 46 inefficient freezers over the next year, resulting in annual energy savings of just under 100,000 kilowatt-hours.

The campus's web-based water-metering system, Beacon, is now fully integrated into campus buildings. Over the past year, several significant leaks in homes, residence halls and apartments were quickly identified and repaired as a result of this system's ability to send leak alerts and provide customers real-time access to their water usage.

### GREENHOUSE GAS EMISSIONS

(1,000 metric tons CO2e)



- Scopes 1 (natural gas, campus fleet, fugitive) + 2 (purchased electricity)
- Scopes 1, 2 + 3 (campus commute, business air travel)

**Goal:**

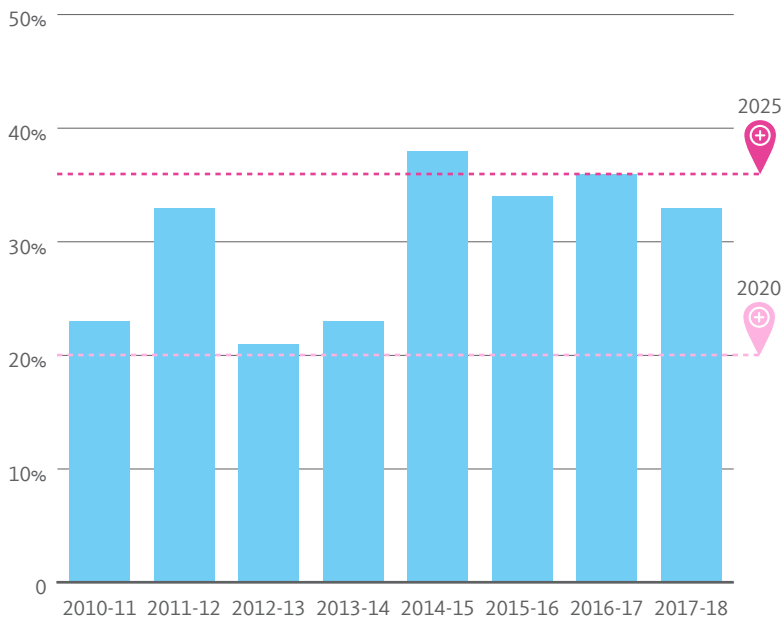
- 1990 levels by 2020 (scopes 1, 2 + 3)
- Carbon neutral by 2025 (scopes 1 + 2)
- Carbon neutral by 2050 (scopes 1, 2 + 3)

**Progress:**

**Total renewable energy installed (MW): 0.25**

### PERCENT REDUCTION IN PER CAPITA POTABLE WATER CONSUMPTION

(% reduction in per capita potable water use)



**Goal:**

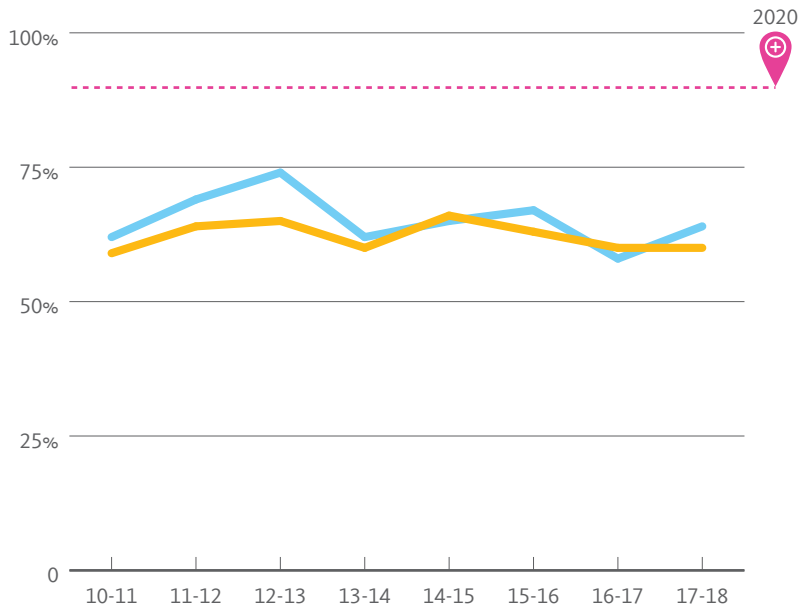
- 20% reduction from baseline in per capita potable water use by 2020
- 36% reduction from baseline in per capita potable water use by 2025

**Progress:**

- 2020 goal met

**2017-18 gallons per capita: 9,316**

### SOLID WASTE DIVERTED FROM LANDFILL



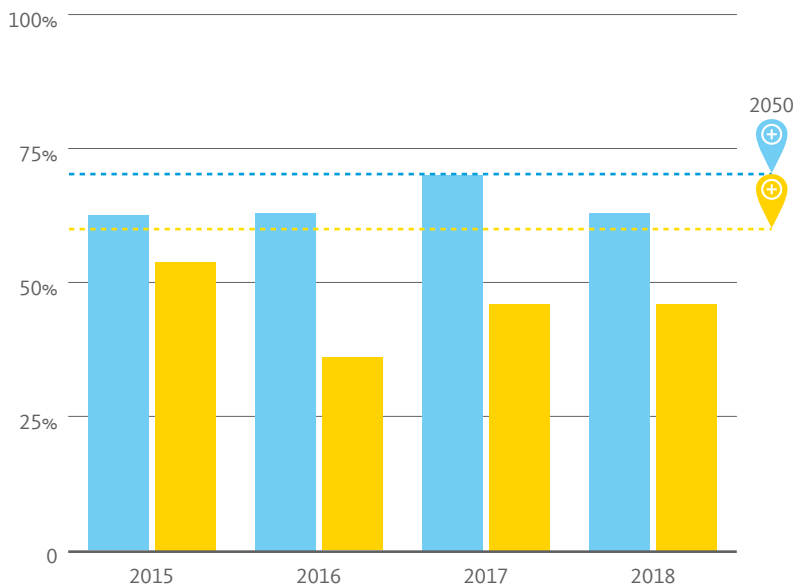
- Without construction and demolition
- With construction and demolition

**Goal:**  
Zero waste by 2020

**Progress:**  
2017-18 lbs per capita per day: 1.13

### TRANSPORTATION

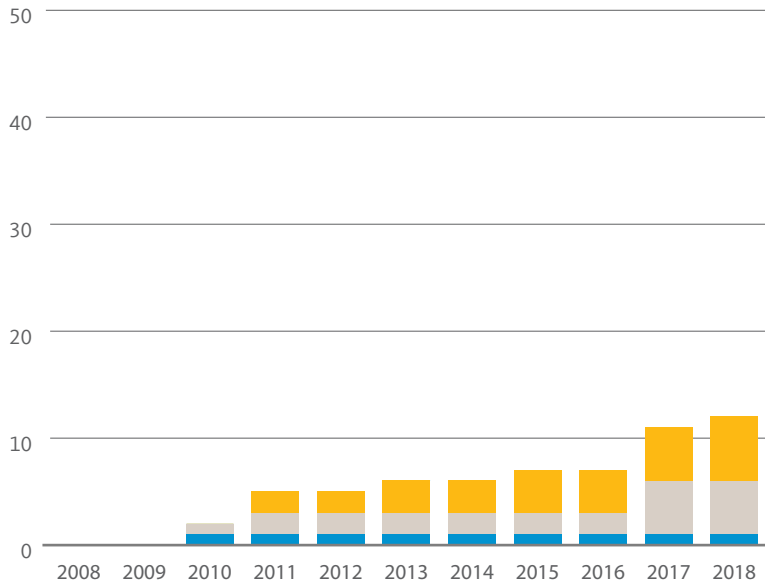
(% alternative commute)



- Overall alternative commute
- Employee alternative commute

**Goal:**  
By 2050, no more than 40% of employees and no more than 30% of all employees and students will commute by single-occupancy vehicle. In other words, 60% of employees and 70% of employees and students will use alternative commute modes to get to campus.

### TOTAL NUMBER OF LEED CERTIFICATIONS



- Platinum
- Gold
- Silver
- Certified

**Goal:**

- LEED Silver minimum for all new construction; LEED Certified for renovation >\$5 million
- Exceed the California building energy code by 20%

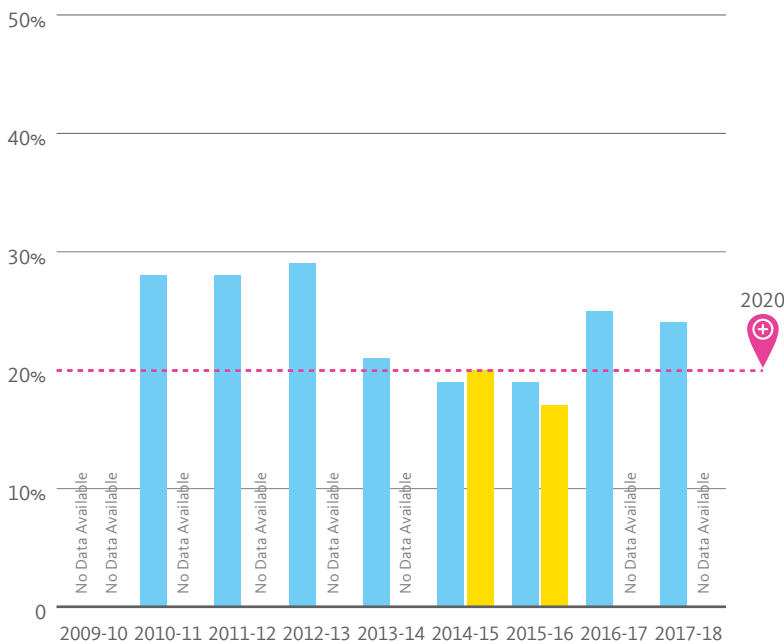
**Progress:**

UC Santa Cruz certified 1 new LEED Gold project in 2018.

**Average % beyond code of new projects in 2017-18:** 26%

### SUSTAINABLE FOOD PURCHASES

(% of food spend)



- Residential
- Retail

**Goal:**

- 20% of food service spend will be from sustainable products by 2020
- Certify at least one facility as a green business

**Progress:**

- 2020 goal met for residential