

# Energy and Greenhouse Gases

## Reducing UCSC's Carbon Footprint



Reducing greenhouse gas (GHG) emissions to 1990 levels by 2020 continues to be the campus's overarching vision, as mandated by the UC Policy on Sustainable Practices and California Assembly Bill 32. Through energy efficiency projects, expanded renewable energy use, and changing behaviors in the campus community, UCSC achieved 2000 GHG levels in 2012, well ahead of the 2014 target.

UCSC's success has been the result of many collaborations between students, staff, faculty, and private companies. Partnerships with on- and off-campus

stakeholders remain a top priority as the campus seeks innovative ways to fund its energy programs. The campus Carbon Fund provides financial support for projects that reduce GHGs on campus and in the community, and has awarded 23 grants to date. UCSC also piloted a Green Revolving Loan Fund that provides up-front capital for efficiency projects.

Campus energy initiatives comprise projects from UCSC's Strategic Energy Partnership with PG&E, efforts by PowerSave Green Campus, the Green Labs and Green Office Programs, and student-led projects. Together, these initiatives are reducing GHGs by 2,843

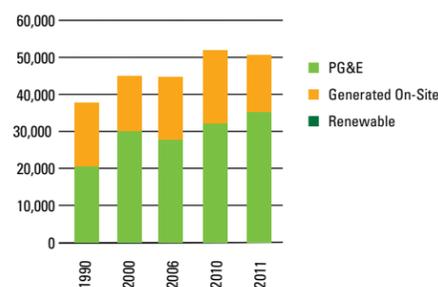
metric tons per year. UCSC has also partnered with PG&E's Savings by Design Program on all new construction projects and will install 250 kW of solar photovoltaics at McHenry Library. The campus has established a Climate Action Manager position to implement and update UCSC's current Climate Action Plan.

In 2013–16, UCSC will build on these accomplishments, further reducing the campus's carbon footprint through education and behavior change programs, as well as through energy efficiency, cleaner energy supply and technology, and expanded staff and fiscal capacity to effectively implement energy initia-

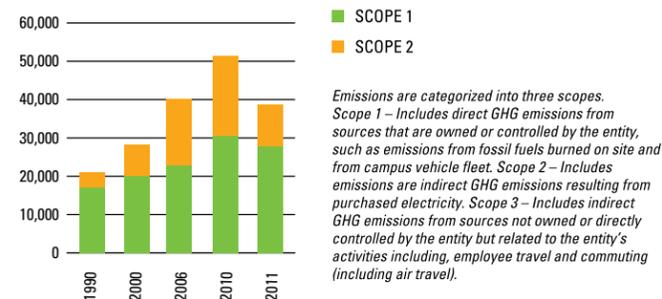
GOALS	OBJECTIVES
1. Collaborate with internal and external stakeholders to reduce the campus carbon footprint through education and behavior change programs.	<p>Develop and begin implementation of a prescribed curriculum for campuswide, energy-focused behavior change program, including development of educational videos, to support the execution of the 2013 Climate Action Plan.</p> <p>Create consortium focused on energy research with specific goal of reducing energy use and GHG emissions through application of existing technologies.</p> <p>Actively pursue funding opportunities to support four intern positions within staff departments to help accomplish energy initiatives by 2016.</p>
2. Reduce GHG emissions and overall energy consumption through energy efficiency, cleaner energy supply, and technology.	<p>Develop strategic energy plan for 2015-20 that reduces campus energy use by at least 15%</p> <p>Procure electricity for UCSC that has a Renewable Portfolio Standard (RPS) 15% higher than state required minimum (25%) by 2016.</p> <p>Procure biogas that reduces the annual campus stationary combustion emissions to less than or equal to 20,000 metric tons by 2015..</p>
3. Build staff and fiscal capacity to effectively implement energy initiatives.	<p>Establish Green Revolving Loan Fund of at least \$250,000 by Fall 2013, with first applications received in Winter 2014.</p> <p>Actively pursue funding opportunities to hire at least one full-time dedicated staff to work on energy efficiency in auxiliary units by 2015.</p> <p>Identify permanent funding source to continue to employ staff currently funded by the Strategic Energy Partnership (SEP) by 2015.</p>

## Key Metrics

Electricity Consumption by Source



GHG Emissions by Scope



Emissions are categorized into three scopes. Scope 1 – Includes direct GHG emissions from sources that are owned or controlled by the entity, such as emissions from fossil fuels burned on site and from campus vehicle fleet. Scope 2 – Includes emissions that are indirect GHG emissions resulting from purchased electricity. Scope 3 – Includes indirect GHG emissions from sources not owned or directly controlled by the entity but related to the entity's activities including, employee travel and commuting (including air travel).

## Scope and Purpose

Reduce campus greenhouse gas (GHG) emissions and energy use through conservation and distributive energy generation.

