

UC San Diego Gains 'Cool Planet' Membership for Cutting-Edge Energy Efficiency

June 30, 2010

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The University of California, San Diego has been named a member of the Cool Planet Project in recognition of its use of a cutting-edge technology called an Energy Dashboard to improve the efficiency of its operations, reduce energy use, and reduce emissions of greenhouse gases.

The Energy Dashboard provides continually updated energy information for the facilities and equipment at the university. The dashboard informs UC San Diego's comprehensive energy-efficiency program, which is saving \$900,000 a year, reducing energy consumption by 19 million kilowatt hours, and reducing 9,600 metric tons of greenhouse gases.

As part of its commitment to take action on climate change through improved energy efficiency, UC San Diego participates in numerous programs sponsored by SDG&E, including the Cool Planet Project, which rewards customers who install significant energy-efficiency projects by providing assistance in measuring, monitoring, and reducing their greenhouse gas emissions through The Climate Registry. The Cool Planet Program is funded by California utility customers under the auspices of the California Public Utility Commission.

In a UC San Diego project facilitated by a San Diego Gas & Electric (SDG&E) incentive program, the university used information provided by the Energy Dashboard to identify inefficiencies in its computer servers. The Energy Dashboard grew out of a simple premise by Yuvraj Agarwal, a research scientist in the Jacobs School of Engineering's Computer Science and Engineering department, that if the campus can measure energy use, it can do a better job reducing it.

The dashboard provides campus microgrid managers with data on energy use by building, floors within buildings and in some cases rooms on a given floor -- a level of detail that is helping the campus reduce energy consumption by \$900,000 a year.

With the help of data provided by the Energy Dashboard, UC San Diego replaced 514 older computer servers with 270 energy-efficient models. The project reduced energy consumption by 7.9 million kilowatt-hours, saving the university \$680,000 annually, preventing 2,600 metric tons of greenhouse gases from being released into the atmosphere annually.

"UC San Diego's application of forward-thinking technology and their holistic approach to energy efficiency and environmental stewardship efforts makes the university a role model in reducing energy usage, greenhouse gas emissions and costs," said Mark Gaines, director of customer programs for SDG&E.

"UC San Diego knows energy efficiency is the most cost-effective and immediate way to reduce greenhouse gas emissions. We are committed to leading the way to lower carbon emissions in the future and are proud to be part of the Cool Planet Project," said Gary Matthews, vice chancellor of resource management and planning at UC San Diego. "The Energy Dashboard is a useful tool for tracking and comparing energy use, to help modify behaviors that can lead to meaningful changes at the personal as well as campus levels."

In 2005, UC San Diego completed \$60 million in energy-saving improvements that cut electricity consumption by 20 percent, saving the university more than \$12 million annually. This year, the campus is using \$73 million in utility incentives and low-interest bonds as part of a multi-year program to reduce energy consumption in 25 of its older buildings by a combined \$6 million a year.

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