



Energy Commission Awards \$1.25 Million for Cool Roof Research

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Lawrence Berkeley National Laboratory to Explore Energy-Saving Technology

SACRAMENTO - The California Energy Commission today awarded \$1.253 million to the Lawrence Berkeley National Laboratory (LBNL) for a three-year grant to develop, deploy, and validate "cool roof" technology.

This project will accelerate the acceptance of cool roofs through rebate programs sponsored by utility companies; expand the quantity of cool roofing products available to consumers by working with manufacturers; create more effective roofing materials; obtain labels from the Cool Roof Rating Council; and assist in marketing the new roofing products. Additionally, the funding allows the LBNL to conduct large-scale experiments to demonstrate the energy savings benefits of cool roofs to potential utility partners.

"I have been an advocate for cool roof technology for many years because it makes sense -- practical sense and economic sense, stated Commissioner Art Rosenfeld. "A dark roof can add 20 percent more to the cooling costs of the building and the State needs to do everything it can to reduce air conditioning use on hot summer afternoons. I am pleased that California utilities already offer rebates for this important energy efficiency technology."

While certain European and Middle Eastern cultures, like Greece and Spain, have long known the benefits of white residential roofs, North Americans generally consider such a feature unattractive. With recent technology, however, it is now possible to have a cool roof in colors other than white. A previous Energy Commission research project involving LBNL, Oakridge National Laboratory, and eight industrial partners, produced dark colored roofing materials that decreased energy usage while still looking attractive. These materials included tiles, coated tiles, shingles, and metal panels.

Another benefit of cool roof technology includes smog reduction, reduced heat islands, and lower atmospheric carbon levels.

Funding for the project comes from the Energy Commission's Public Interest Energy Research (PIER) program. The program supports energy research, development and demonstration (RD&D) projects that improve the quality of life in California by bringing

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environmentally safe, affordable and reliable energy services and products to the marketplace. The PIER Program annually awards up to \$62 million to conduct public interest energy research.

This research funding supports the state's 2004 Integrated Energy Policy Report Update by leveraging energy efficiency improvements on new and existing buildings. It also supports the 2003 Energy Action Plan by reducing peak cooling loads in residential buildings and validating and quantifying the energy benefits of cool roofs to utility incentive representatives.

Created by the Legislature in 1974, the California Energy Commission is the state's primary energy policy and planning agency. The Energy Commission has five major responsibilities: forecasting future energy needs and keeping historical energy data; licensing thermal power plants 50 megawatts or larger; promoting energy efficiency through appliance and building standards; developing energy technologies and supporting renewable energy; and planning for and directing state response to energy emergency.

Members of the Energy Commission include: Chairman Joseph Desmond; Vice Chair Jackalyne Pfannenstiel; Commissioners James Boyd; John Geesman; and Dr. Arthur Rosenfeld.