

ARRA Energy Awards for the State of Hawaii

Federal Energy Management

PACOM: In a competitive grant approach across the services and commands, PACOM was awarded \$3,000,000 from the Department of Energy. This award will be dedicated to technical assistance projects aimed at bringing the most advanced energy efficiency, renewable power generation and micro-grid technologies to DOD installations in Hawaii and throughout the Pacific region. This effort will guide billions of dollars of future DOD investments.

Renewable Energy Integration

HECO: On July 16th, Hawaiian Electric Company was awarded \$750,000 for the Hawaii Utility Integration Initiatives (H.U.I.) to enable wind integration in Hawaii. HECO was one of 28 new wind energy projects selected to receive for up to \$13.8 million in funding – including \$12.8 million in Recovery Act funds. These projects will help address market and deployment challenges including wind turbine research and testing and transmission analysis, planning, assessments. The money to HECO is Recovery Act funding to address three areas of renewable energy development on the Hawaiian Islands.

Weatherization

State of Hawaii: On August 13th, the state received an award of \$1,616,984 in initial weatherization funds. Hawaii will use its Recovery Act weatherization funds to weatherize more than 650 homes across the state over the next three years. The Hawaii Office of Community Services (OCS) will administer the program through two local community action organizations. Honolulu Community Action Program, Inc. will carry out the weatherization assistance in the city and county of Honolulu, and Maui Economic Opportunity, Inc. will conduct weatherization assistance in the three remaining counties of Hawaii, Kauai, and Maui. The Hawaii OCS will help provide training and technical assistance for the local agencies to ensure that the weatherization workforce is able to successfully carry out the goals of the program: reducing energy consumption and utility bills for low-income families, while creating and retaining jobs across the state.

After demonstrating successful implementation of its plan, the state will receive an additional \$2 million, for a total \$4,041,461.

State Energy Program

State of Hawaii: The State Energy Program (SEP) provides grants to states and directs funding to state energy offices from technology programs in DOE's Office of Energy Efficiency and Renewable Energy. States use grants to address their energy priorities and program funding to adopt emerging renewable energy and energy efficiency technologies. Hawaii is eligible for \$25,930,000 from the Recovery Act in 2009. Hawaii has received 50% of these funds to date. Hawaii will use its Recovery Act funding for the SEP to improve energy efficiency and expand the deployment of renewable energy technologies, which will help advance mutual state and national goals for creating and maintaining jobs, reducing oil dependence, and reducing greenhouse gas emissions. Hawaii's energy efficiency strategy will directly fund high performance buildings, government and residential building retrofits, and energy efficiency

measures in the state's hospitality industry. The program will also provide technical assistance and training to building owners, developers, design professionals, and county building code officials to ensure that new and renovated buildings are designed and built with high efficiency measures. Hawaii will target bringing buildings to ENERGY STAR and Leadership in Energy and Environmental Design (LEED) standards.

The SEP funding may be used to provide for residential energy audits or other energy-saving improvements, to develop renewable energy and alternative fuel projects, to promote Energy STAR® products, to upgrade the energy efficiency of state and local government buildings, and other innovative state efforts to help families save money on their energy bills.

Energy Efficiency and Conservation Block Grants

State of Hawaii: Energy Efficiency and Conservation Block Grants is a program developed in the Energy Investment and Security Act on 2007. The American Recovery and Reinvestment Act of 2009 established for the first time an appropriation of funds to support these grants. Over \$2.6 billion in formula grants are now available to states, U.S. territories, local governments and Indian tribes under the Energy Efficiency and Conservation Block Grants (EECBG) Program. Federal grants may be used to reduce energy use and fossil fuel emissions, and for improvements in energy efficiency. The EECBG Program is administered by the Office of Weatherization and Intergovernmental Programs in the Office of Energy Efficiency and Renewable Energy of the U.S. Department of Energy (DOE).

The State of Hawaii is eligible for \$9,593,500 in EECBG funds and the counties of Hawaii, Maui, Kauai and the City of Honolulu are eligible for an additional \$5,474,700 allocated based on population and other factors. These applications are being reviewed and negotiated with the State and local officials to deliver the funds to the Islands as quickly as possible.

Emergency Preparedness

State of Hawaii: On August 12th, the State was awarded \$318,196 to improve state emergency preparedness planning and energy assurance capabilities, helping to ensure quick recovery and restoration from any energy supply disruptions.

Smart Grid

UH-HNEI: The University of Hawaii at Manoa-Hawaii Natural Energy Institute won an award of \$5,548,585 for a dispatchable Distribution Feeder for Peak Load Reduction and Wind Farming. The University of Hawaii will explore the management of distribution system resources for improved service quality and reliability, transmission congestion relief, and grid support functions.

HECO: On October 27th, Hawaiian Electric Company won an award of \$5,347,596 from the DOE Office of Electricity to automate high load distribution circuits feeding eastern Oahu, reducing outage duration and community impacts. The award will enable workforce retraining and preserve jobs through cross-training and creation of new skill sets within the utility.

Bioenergy Technologies

UOP: On December 4th, UOP, a Honeywell affiliate company, won an award of \$25,000,000 from the DOE office of Energy Efficiency and Renewable Energy. The award is to integrate existing technology

from Ensyn, a rapid pyrolysis technology company from Canada, and UOP to produce green gasoline, diesel, and jet fuel from agricultural residue, woody biomass, dedicated energy crops, and algae. The project will take place in Kapolei, HI.

ClearFuels: On December 4th, Hawaii-based ClearFuels won a \$23,000,000 award for a plant in Commerce City, CO to produce renewable diesel and jet fuel from woody biomass by integrating ClearFuels' and Rentech's conversion technologies. The facility will also evaluate the conversion of bagasse and biomass mixtures to fuels.

Recovery Act awards from Department of Energy only

HI	EERE	Modify Integrated Biorefinery Solicitation Program for Pilot and Demonstration Scale Biorefineries	Competitive Grant	\$25,285	\$25,285	\$3,612
HI	EERE	EE Conservation Block Grant Program - Formula	Formula Grant	\$15,068,200	\$15,068,200	\$0
HI	EERE	Weatherization Assistance Program	Formula Grant	\$4,041,461	\$4,041,461	\$471,614
HI	EERE	State Energy Program	Formula Grant	\$25,930,000	\$25,930,000	\$47,372
HI	EERE	EE Appliance Rebate Programs	Formula Grant	\$1,235,985	\$123,600	\$0
HI	EERE	Wind Energy Technology R&D and Testing	Competitive Grant	\$750,000	\$0	\$0
HI	EERE	Hydroelectric Facility Modernization Program	Competitive Grant	\$600,000	\$0	\$0
HI	OE	Smart Grid Investment Grant Program (EISA 1306)	Competitive Grant	\$5,347,598	\$5,548,585	\$0
HI	OE	State Assistance on Electricity Policies	Formula Grant	\$782,834	\$782,834	\$0
HI	OE	Enhancing State and Local Governments Energy Assurance	Formula Grant	\$318,196	\$318,196	\$0
HI Total				\$54,099,559	\$51,838,161	\$522,598