Hawai‘i Institute of Marine Biology to house state-of-the-art solar energy project

Landmark agreement expected to save the university $2.3 million

The University of Hawai‘i at Mānoa has signed a power purchasing agreement (PPA) with SolarCity to provide renewable solar energy to the Hawai‘i Institute of Marine Biology on Coconut Island for the next 20 years. The university’s participation was enabled by financial support from the Center for a Sustainable Future.

As part of the agreement, SolarCity has begun to install, and will own and maintain, a series of photovoltaic systems on the rooftops of marine institute buildings to provide solar-generated electricity to the Institute at a discount to utility rates.

UH Mānoa will pay nothing up front and benefit from locking in a below-market electricity rate, significantly easing budgeting uncertainties from fluctuating electricity rates.

The system will consist of solar panels and will have approximately 260 kilowatts (kW) of generation capacity, sufficient to provide an estimated 25 percent of the energy needs of the Hawai‘i Institute of Marine Biology. This percentage is expected to increase as the institute’s infrastructure undergoes efficiency retrofits and energy conservation measures are introduced. Savings to UH Mānoa over the life of the contract are expected to be as much as $2.3 million.

Said UH Mānoa Chancellor Tom Apple, “This landmark achievement is a model for how we will proceed in the future. We have the unique opportunity to draw on the wealth of expertise on our campus, as well as our partners throughout the state, to set an example on what can be done to achieve significant energy savings. We’re making progress toward our goal of having 25 percent of campus-wide energy use supplied by renewable sources by 2020.”

“This project is helping UH Mānoa to meet their long-term energy goals,” added Jon Yoshimura, director of government affairs for SolarCity. “Power purchasing agreements like this one make solar both logical and affordable.”

Power purchase agreements for renewable energy are gaining popularity in Hawai‘i, where abundant sunshine, wind and waves make them a natural fit. The Center for a Sustainable Future, a non-profit funded by the Edwin W. Pauley Foundation and the Harold K.L. Castle Foundation, provided a grant to the University of Hawai‘i Foundation to work with Newcomb, Anderson, McCormick, a consulting firm with extensive experience with PPAs, to guide the university through the contract process, one of the first of its kind in Hawai‘i.

Dr. Stephen Pauley, whose family’s philanthropy allowed the university to obtain Coconut Island, said, “This solar energy agreement is the right thing to do for Moku o Lo‘e (Coconut Island) and the university, not only in terms of energy cost savings but in principle. We need
to support the work of our marine scientists with clean, renewable energy. Clean solar energy will not emit CO2 that warms the Earth and acidifies the oceans. The use of wind and solar energy on a large scale will give our children and grandchildren a quality of life that is slowly slipping away.”

The UH Sea Grant College Program Center for Smart Building and Community Design worked in concert with the State of Hawai‘i Department of Transportation and the Department of Business, Economic Development and Tourism to include the Hawai‘i Institute of Marine Biology site in a larger project for renewable energy adoption throughout the state.

Instrumental in bringing this agreement to a close was Stephen Meder, UH Mānoa Interim Associate Vice Chancellor for Physical, Environmental and Long Range Planning, Director of the UH Sea Grant Center for Smart Building and Community Design, and a professor and national leader in green architecture. Said Meder, “It is the mission of this university, through its teaching, research, outreach and operations of its facilities, to develop and demonstrate solutions for the looming issues of the 21st century. This project is an important step toward moving Coconut Island specifically, and the Hawaiian Islands by extension, toward a sustainable future.”

For more information, please contact Meder at smeder@hawaii.edu or (808) 956-8018.

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The University of Hawai‘i Sea Grant College Program is part of the University of Hawai‘i at Mānoa’s prestigious School of Ocean and Earth Science and Technology. It supports an innovative program of research, education and extension services directed to the improved understanding and stewardship of coastal and marine resources of the state, region and nation. Science serving Hawai‘i and the Pacific for over 40 years.

The University of Hawai‘i at Mānoa serves approximately 20,000 students pursuing more than 225 different degrees. Coming from every Hawaiian island, every state in the nation, and more than 100 countries, UH Mānoa students thrive in an enriching environment for the global exchange of ideas. For more information, visit http://manoa.hawaii.edu and http://manoa.hawaii.edu/media/. Follow us on Facebook http://www.facebook.com/uhmanoa and Twitter http://twitter.com/UHManoaNews.