

GRID Alternatives, University of California lab partner on research to improve off-grid electricity access in remote areas

UC Berkeley research will be integrated into GRID projects in developing areas

OAKLAND, CA: JULY 27, 2016: GRID Alternatives has announced a partnership with the University of California, Berkeley's Renewable and Appropriate Energy Laboratory (RAEL), to integrate research into GRID Alternatives projects providing solar power to communities around the world that lack access to electricity.

RAEL researchers will work with GRID Alternatives staff and partners to study off-grid solar projects by GRID Alternatives in Nicaragua, Nepal, and tribal communities in the United States. The research will evaluate project models and outcomes to inform energy access practices worldwide. RAEL is part of UC Berkeley's Energy and Resources Group and was founded by Professor Dan Kammen with a mission to design and implement environmentally sustainable development in culturally and socially appropriate ways. The GRID-RAEL partnership builds on more than four years of informal collaboration with UC Berkeley students interested in renewable energy.

"Getting electricity to the 1.2 billion people who still lack access is about more than cutting edge technologies. It's about finding solutions that are culturally, socially and economically appropriate, and are really solving the problem they are intended to solve," said Dr. Kammen, Class of 1935 Distinguished Professor of Energy with parallel appointments in ERG and the Goldman School of Public Policy. "Partnering with organizations like GRID doing this work on the ground is a great opportunity to study what's working and why, and get that information to the people who can use it."

Through its international program, GRID Alternatives has installed more than <u>70 solar PV systems in Nicaragua</u> to-date, and continues to ensure the systems remain online and provide long-term benefits to residents. GRID Alternatives is also developing <u>a 16-kilowatt solar-powered microgrid project</u> in Dhapchung, Nepal to provide electricity to the community's school, 40 families, and several businesses to aid in earthquake recovery and create a sustainable economy.

"GRID's volunteer-based model has long provided a way for people interested in renewable energy work--from industry representatives to academics and the general public--to get hands-on with solar technology and see how it makes a difference for underserved communities," said GRID Alternatives co-founder and CEO Erica Mackie. "This partnership will help us go a step further and contribute to a global body of knowledge around how to maximize impact and ensure that projects are sustainable for the long term."

The partnership will provide direct and indirect benefits through GRID Alternatives' energy access projects and help expand off-grid solar internationally. RAEL researchers will participate in and have access to beneficiaries of GRID Alternatives' projects, and RAEL will work with GRID to secure funding for research projects as appropriate. RAEL will conduct system modeling and design research, technical potential analysis, qualitative surveys, and impact analysis with a focus on social and cultural issues.

Dr. Kammen is a member of <u>GRID's National Advisory Council</u>, was recently appointed <u>U.S. Science</u> <u>Envoy</u> for the U.S. State Department, and has been a leading voice in renewable energy deployment globally.

ABOUT GRID ALTERNATIVES

GRID Alternatives is an international nonprofit solar installer bringing clean energy technology and job training to low-income families and underserved communities through a network of community partners, volunteers, and philanthropic supporters. GRID has installed more than 7,000 rooftop solar systems with a combined installed capacity of nearly 25MW, saving \$192 million in lifetime electricity costs, preventing more than 537,000 tons of greenhouse gas emissions, and providing more than 27,000 people with solar training. For more information, visit www.gridalternatives.org

ABOUT RAEL

Based at the University of California, Berkeley, since 1999, RAEL has focused on systems approaches to fostering sustainable development at the household, community, and national levels. With a mixture of students, post-doctoral fellows and visiting scholars and practitioners, RAEL is currently active in the Balkans, China, Central America, East Africa, Southeast Asia, across North America in the design of technical and analytic approaches to clean energy systems. For more information see rael.berkeley.edu.

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