

Rebuild Hawaii

Partnering with Rebuild America



Working together for energy and resource efficiency

School Decision-Maker Forum

A Forum on “Techniques and Tools to Enhance the Learning Environment” sponsored by Rebuild America Energy Smart Schools was held October 30, 2002 at the Oahu Country Club to address ways to improve how Hawaii’s schools are designed. The forum targeted key decision makers from the State of Hawaii Departments of Education (DOE) and Accounting and General Services (DAGS). The day started with opening remarks from Pat Hamamoto, Superintendent of Education, and Jackie Erickson, Vice-President Customer Operations for Hawaiian Electric Company. Hamamoto spoke about the importance of forming partnerships that are committed to improving school environments. Erickson expressed that energy efficiency should form the background to improved learning and presented the Hawaii Department of Education (HDOE) with a symbolic check representing the \$399,000 that HECO has paid the Department in rebates for retrofitting to high efficiency lighting in schools.

Several guest speakers presented including:

- ◆ Charles Eley, Eley Associates, discussed design guidelines for building High Performance Schools.
- ◆ Patricia Plympton, National Renewable Energy Laboratory, spoke about EnergySmart Schools Program.
- ◆ Steve Meder, University of Hawaii School of Architecture, presented an update on his project to develop guidelines for cooling portable classrooms in Hawaii.

Following the presentations, attendees formed working group sessions that covered: design feedback on Kapolei High School; pre-engineered solutions for daylighting, lighting, insulation, and HVAC; retrofits, repair and maintenance; and effective educational specifications.

“The Forum was a huge step in re-establishing dialogue between the two agencies responsible for school design. We are working on a follow-up project that will lead to federal and State support for additional design assistance that focuses on the unique challenges for schools in our climate” comments Rebuild Hawaii vice president Jim Maskrey. Maskrey, along with Eileen Yoshinaka and Elizabeth Raman, coordinated the forum.

Key participants in the Forum included Acting Comptroller Mary Alice Evans and Senator Brian Taniguchi as well as representatives from State of Hawaii Department of Education, Department of Accounting & General Services, Hawaiian Electric Company, Department of Business, Economic Development & Tourism, National Association of State Energy Officials, National Renewable Energy Laboratory, and U.S. Department of Energy.

For a copy of forum notes and presentations visit the Rebuild Hawaii web site at <http://www.hawaii.gov/dbedt/ert/rebuild/projects/k12s.html>.

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Jackie Erickson (left) from Hawaiian Electric Company, Inc. presented a rebate check for \$399,000 to Hawaii Department of Education during the recent School Decision Makers Forum. HDOE is currently retrofitting schools to high efficiency lighting.

President's Corner



*Rebuild Hawaii Consortium
President Steve Holmes*

My term as City Councilmember is up and so I'm transitioning from life as an elected official to a full-on energy guy. I look forward to my new job as the City's Energy Coordinator/Rebuild Honolulu Coordinator. The City and County of Honolulu, while a formal Rebuild partner, has never had an energy champion on staff. The outer islands have had coordinators for years.

I'll be working on a number of distributed energy projects for the Department of Environmental Services. They are in charge of landfills and wastewater treatment plants on Oahu. One project I'll be focusing on is the Kailua Wastewater Treatment Plant for Biogas Utilization. The engineering work for this demonstration project was completed and now I need to work on actually getting the project up and running. Currently the plant flares off \$1,000 a day of usable gas. The plant will instead use that gas to provide power for its operations. Projected payback for the project is 5 years, making it very attractive. The plant uses about \$1 million/ year in electricity now. Another priority project is to get the landfill gas to energy plant at Kapaa back up and running. The operation shut down after an equipment failure and the City no longer gets royalties from the sales of power.

I'm going to request a name change for the partnership to Rebuild Honolulu. This name will better follow how other municipal level partnerships elsewhere in the state and country are named under Rebuild America and will provide marketing advantages. I see Rebuild Honolulu growing, yet still directly connected to the Rebuild Hawaii Consortium. This is in keeping with our organizational workshop earlier in 2002.

I look forward to focusing my efforts entirely on energy related issues and using my knowledge gained over the last 12 years on the Council to hit the floor running.

Neighbor Island CHP Workshops a Huge Success



*Speakers at the Big Island
Workshop included
Senator Lorraine Inouye.*

In December, The Gas Company and the Counties of Hawaii, Kauai and Maui co-sponsored and coordinated workshops on Combined Heat and Power (CHP) systems. The workshops were held on the neighbor islands and targeted policy makers, hotels, hospitals and other large energy users to update them on CHP systems. Approximately 125 people attended the workshops. Co-sponsors included: U.S. Department of Energy – Rebuild America; U.S. Environmental Protection Agency; Hawaii State Department of Business, Economic Development & Tourism; and the Rebuild Hawaii Consortium.

The workshop speakers were from diverse backgrounds and presented a wide-range of perspectives including that of governmental agencies, locally based energy utilities and CHP engineers, contractors and CHP customers. Topics covered included an introduction to CHP, the role of the utility companies, an EPA CHP partnership, and a review of CHP projects in Hawaii. Workshops also explored a CHP Working Group Initiative for Hawaii and the collaborative processes and goals established by the California Alliance for Distributed Energy Resources (CADER).

Speakers emphasized the important role that CHP can play in meeting Hawaii's increasing electrical demand while improving overall energy efficiency and saving consumers money. According to Eric Wong of Cummins West, CHP is "undisputedly the winner in lowest delivered cost and emissions impact."

On the Island of Hawaii, the highlight of the Workshop was the presentation of a prestigious EPA Award to the Orchid at Mauna Lani for its energy-efficient, environmentally friendly CHP installation, which is fueled by propane.

Navy Region Hawaii Hires REMs

Navy Region Hawaii (NRH) recently implemented a new energy management program, known as Resource Efficiency Management (REM). Under this program, two full-time, on-site Resource Efficiency Managers (REMs) are supporting the Navy's efforts to reduce energy consumption and to meet its Federally mandated energy conservation goals. The objective of the REM program is to identify and implement easily attained cost saving initiatives in energy, water, and resource conservation. The REM analyzes energy use and distribution systems, identifies new opportunities for energy and emission reductions, conducts awareness training, and develops and manages resource saving projects.

The REM program augments existing Navy resources and focuses on no/low cost opportunities to reduce consumption. These include behavioral aspects of resource end uses, operation and maintenance, and energy awareness, training, and accounting. REM integrates environmentally sound, performance-based technology and management solutions in order to reduce energy and water use.

A key feature of the program is that it is economically self-sustaining through energy cost savings and utility rebates. Savings are much greater than the implementation cost. As a goal, the program looks to provide a return on investment of greater than 200 percent.

The Lead REM for NRH is Chris Lippert from Tetra Tech EM Inc. Tetra Tech uses an integrated program management approach to REM. This approach mandates communication between individual REMs and REM programs. Tetra Tech REMs function as a team. Technical expertise, lessons learned, and successful technology and management solutions are leveraged across REM programs. The force multiplier effect of this management approach provides a depth and range of services to each program that no single REM can supply on their own.

For more information, contact Chris Lippert at Chris.Lippert@ttemi.com or 808-441-6619.

Upcoming Meetings and Events

Rebuild Hawaii Consortium Planning New Projects

January 29, 2003
7:30-3:30
HEI Training Room #2
8th Floor Pacific Tower
For more information contact
Elizabeth Raman at
eraman@dbedt.hawaii.gov
or phone 808-587-3806

Life-Cycle Costing Workshops

February 4 & 5, 2003
February 6 & 7, 2003
Honolulu, Hawaii
For more information contact
Eileen Yoshinaka at
eileen.yoshinaka@ee.doe.gov
or phone 808-541-2564

Performance Contracting Workshop

Mid-February 2003
Honolulu, Hawaii
For more information contact
Allyn Lee at C&C of Honolulu
Alee2@co.honolulu.hi.us
or phone 808-523-4106

Rebuild America Peer Exchange

March 18-20, 2003
Santa Monica, California
For more information contact
Elizabeth Raman at
eraman@dbedt.hawaii.gov
or phone 808-587-3806

Rebuild Hawaii

Rebuild Hawaii is a statewide consortium dedicated to promoting efficient energy and resource utilization.

Rebuild Hawaii is working with Rebuild America, a U.S. Department of Energy program, to help community partnerships make profitable investments in existing buildings through energy-efficient technologies.

The partnering of public and private business interests enables Rebuild Hawaii to employ innovative solutions to promote economic growth, lower energy costs, create jobs, and protect the environment.

There is opportunity for anyone to join Rebuild Hawaii. It is a voluntary program with no membership fee.

For more information contact:

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Economic Development &
Tourism
Energy, Resources, and
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Or contact:

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Visit our web site at:

www.hawaii.gov/dbedt/ert/rebuild/index.html

Rebuild Hawaii Projects

Rebuild Hawaii currently supports the following projects:

- ◆ University of Hawaii School of Architecture Portable Classroom Cooling Design Guidelines
- ◆ Hawaiian Electric Company Energy Smart Schools project to increase awareness of energy efficiency in schools and communities on the islands of Oahu and Maui
- ◆ Hawaii County Energy Smart Schools project at West Hawaii Exploration Academy; Hawaii County Department of Water Supply Energy Conservation project
- ◆ Kauai Lagoons Golf Course Energy Audit
- ◆ A series of four sustainability workshops aimed at the planning, architectural, and engineering communities
- ◆ Greening The Campuses, a project to implement resource efficiency at the community colleges
- ◆ Green Office exhibit and awareness program
- ◆ Workshops and technical seminars
- ◆ Multi-disciplinary programs to teach energy and resource management skills at universities and schools

Consortium Members

Counties

City & County of Honolulu*
County of Hawaii*
County of Kauai*
County of Maui*

State

Department of Business, Economic
Development & Tourism*
Department of Education*
Housing & Community Development
Corporation of Hawaii*
Judiciary
Hawaii Army National Guard
Hawaii Public Library System*
Maui Community College*
University of Hawaii
Community Colleges*
University of Hawaii at Hilo
University of Hawaii at Manoa,
School of Architecture*

Federal

Army
Coast Guard
Hickam Air Force Base
Marine Corps Base Hawaii
Navy Public Works Center Pearl Harbor
Navy Region Hawaii Pearl Harbor
Pacific Division Naval Facilities
Engineering Command
Pearl Harbor Naval Shipyard
Intermediate Maintenance Facility
U.S. Department of Energy, Pacific Liaison
U.S. Department of Housing & Urban
Development

Utilities

The Gas Company/Citizens Energy Service*
Hawaiian Electric Company, Inc.*
Hawaii Electric Light Company, Inc.
Maui Electric Company, Inc.

Private Sector

Chaney, Brooks & Company, Inc.
Eco-Lite
Energy Conservation Hawaii
Global Energy Partners, LLC
Hawaii Society for Healthcare Engineering
Illuminating Engineering Society
of North America
Scheibert Energy Company
SSFM Engineers International

* Rebuild America Partner

Next Meeting

January 29, 2003
7:30-3:30
HEI Training Room #2
8th Floor Pacific Tower

Previous Meeting

November 2002

Andrea Gill, DBEDT, reported on the Na Makani Solar Water Heating Project. Ron Tolleson, Queen's Medical Center, spoke about energy saving projects at the Queen's Medical Center. Larry Leetzow, MagnaRay International, presented on how white light affects your bottom line.

For a copy of minutes

Visit: <http://www.hawaii.gov/dbedt/ert/rebuild/news.html>

or Email: eraman@dbedt.hawaii.gov