



Rebuild Hawaii

Partnering with Rebuild America

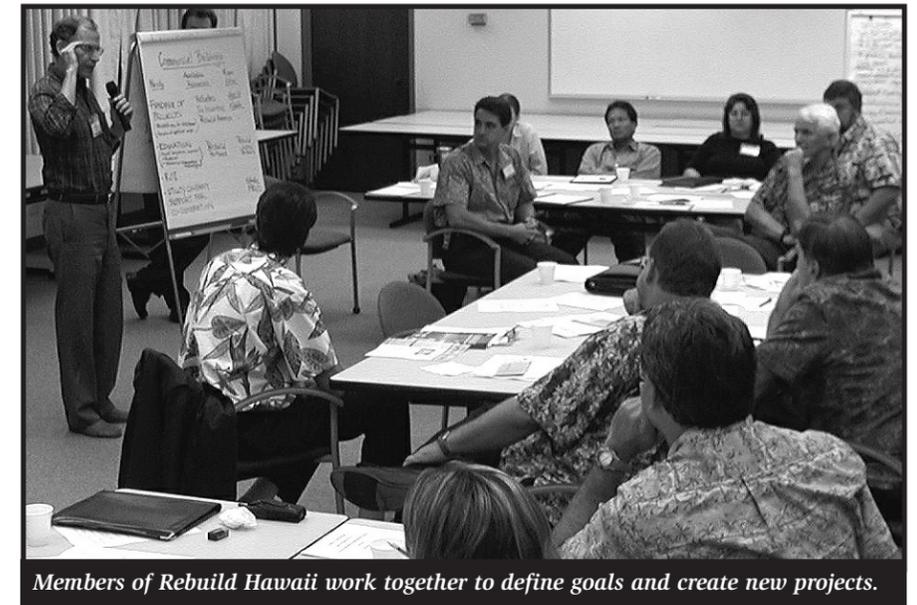
Working together for energy and resource efficiency

New Projects Bloom in Rebuild Hawaii

Spring is a time to clean and to get a fresh start. The Rebuild Hawaii Consortium is starting spring with new ideas for projects. Members updated the needs and goals for Rebuild Hawaii and developed projects to meet those needs and goals. Rebuild Hawaii has successfully completed all of its previous projects and now members are excited to start on some new ones. This momentum is what drives the Consortium to overcome challenges and to get projects going. The project ideas will lead to opportunities for new success.

Members of the Consortium have come up with fifteen new projects. The projects will address needs in the following areas: low-income and residential housing; schools; government buildings; institutional retrofits and new construction; sustainability/design; and education.

Several new projects focus on education, training, and community outreach. A Professional Sustainable Design Tools Workshop will provide a series of workshops and training sessions to architecture and engineering



Members of Rebuild Hawaii work together to define goals and create new projects.

firms in Hawaii. This will help to encourage them to make energy and resource efficiency a standard practice in smart design. Hawaiian Electric Company, Inc. developed a proposal for this project and submitted it to this year's State Energy Program competitive grant program. The University of Hawaii (UH) School of Architecture is working on a project

to restore and update the UH Energy House. In the 1970s the Energy House was an award-winning prototype for climate appropriate and environmental sustainable architectural design. The Department of Education is developing a Green Schools project to increase the use of low-cost and no-cost energy-efficiency measures in public schools. The development of an

Continued on page 3

Inside This Issue

- 1 New Rebuild Hawaii Projects
- 2 Upcoming Events & Meetings
- 2 President's Corner
- 3 Recent Meetings
- 2 Rebuild Hawaii People

Visit our web site at www.hawaii.gov/dbedt/ert/rebuild/index.htm

State of Hawaii
Department of Business, Economic
Development & Tourism
Energy, Resources, and Technology
Division
P.O. Box 2359
Honolulu, Hawaii 96804-2359



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:

Rebuild Hawaii
c/o Department of Business, Economic
Development & Tourism
Energy, Resources, and Technology
Division

State Office Tower
235 South Beretania Street, Room 506

Mailing Address:

P.O. Box 2359
Honolulu, Hawaii 96804-2359
Telephone: 808-587-3806

Facsimile: 808-587-3820

Or contact: Jennifer Webb at
jenwebb@hawaii.rr.com

Rebuild Hawaii Consortium

City & County of Honolulu
County of Hawaii
County of Kauai
County of Maui
Department of Business, Economic
Development and Tourism
Department of Education
The Gas Company/Citizens
Energy Service
Hawaii Army National Guard
Hawaiian Electric Company, Inc.;
Hawaii Electric Light Co., Inc.;
Maui Electric Company, Inc.
Housing and Community Development
Corporation of Hawaii
Judiciary
Kauai Electric/Citizens Energy Services

Hawaii Public Library System
University of Hawaii Community Colleges
University of Hawaii at Hilo
University of Hawaii at Manoa,
School of Architecture
U.S. Department of Energy, Pacific Liaison
U.S. Department of Housing and
Urban Development

Affiliates

Eco-Lite
Energy Conservation Hawaii
Hawaii Society for Healthcare Engineering
SSFM Engineers International

Rebuild America Business Partner

Academic Capital

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
- ◆ Kauai Lagoons Golf Course Energy Audit
- ◆ Na Makani Energy initiative, a community-sponsored rural project in North Kohala, Hawaii, that is planning for a "soft energy path" in the 21st century based on energy conservation and renewable resources
- ◆ 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



President's Corner



Rebuild Hawaii Consortium
President Steve Holmes

The Rebuild Hawaii Consortium has some good news to announce on Oahu. The City and County of Honolulu is forging ahead on several fronts to increase energy efficiency. In fiscal year 2003, the Mayor budgeted over \$500,000 for a fuel differential to purchase bio-diesel for use by our city's entire diesel fleet (excluding buses). I have also

RBH People

Maurice Kaya wrote an article, Energy Security and the State Energy Program, recently featured in the State Energy Program Conservation Update; find it on the Web at www.eren.doe.gov/buildings/state_energy/connections/feature.cfm.

Elizabeth Raman received a Ph.D. in Management. **David Waller** won the Lou R. Harris Jr. Award for his work in forming successful energy partnerships with Federal Agencies in Hawaii.

Patrina Eiffert, Nate Eisenpress, Kendall Kam, Stephen Meder, and Art Seki were given an Innovative/New Technology Award to Small Groups for their work on a photovoltaic demonstration project at the Ford Island Boathouse in Pearl Harbor.

Alton Miyamoto is new vice president and manager of Kauai Electric.

proposed that the city reduce the county fuel tax on bio-diesel from 16.5¢ to 8.25¢ per gallon to promote this locally-produced alternative fuel.

The city has been retrofitting its traffic signals to LED lights, and is 90% complete. This will reduce the city's associated electrical costs by approximately 74%, or about \$398,000 annually. The new traffic lights are projected to last up to 10 years, which will significantly reduce maintenance costs. The current replacement timetable is every 90 days!

Recently, I met with Brian Minaai, Director of the State Department of Transportation, and discussed the state's participation in this retrofit program. Of the approximately 750 traffic signals on Oahu, about 450 belong to the city and 300 to the state. Currently, on Oahu, the city maintains the lights for the state and the state pays their own electric bill. Should the state agree to the LED retrofit, they will also benefit from savings in electricity and maintenance.

Upcoming Meetings and Events

ASHRAE HVAC DDC Controls Workshop
April 12, 2002
Honolulu, Hawaii
For more information contact
Marsha Saiki at 808-543-4743.

2002 Energy Workshop and Exposition
June 2-5, 2002
Palm Springs, California
For more information contact
1-800-395-8574 or go to
www.energy2002.ee.doe.gov.

Solar 2002 Convention: Sunrise on the Reliable Energy Economy
June 15-20, 2002
Reno, Nevada
For more information contact American Solar Energy Society at 303-443-3130 or go to www.solarenergyforum.com.

A state-wide retrofit would provide additional savings to the state and reduce retrofit costs using economies of scale.

Our Honolulu Hale (City Hall) energy retrofit is swinging into full gear with lighting retrofits. This will be followed by the installation of a new chiller plant over Memorial Day and our new Cogeneration System will be installed shortly thereafter. Our dated equipment needed replacing, and the new energy efficient choices will save \$125,000 annually in energy costs alone, not to mention the improvements in work environment. This project has a guaranteed annual utility cost reduction of 41%.

In the future the city intends to pursue retrofits of all of its facilities--such retrofits not only save energy but also makes good economic sense. Rebuild Hawaii has already seen success on the Neighbor Islands so we are pleased to see the current progress on Oahu.

ASHRAE National Convention
June 22-26, 2002
Honolulu, Hawaii
For more information go to
www.ashrae.org.

Building Life-Cycle Cost Workshop
July 18, 2002
Honolulu, Hawaii
For more information contact
Tom Van Liew at 808-543-4721.

2002 State Energy Program/Rebuild America National Conference
July 29-August 1, 2002
New Orleans, Louisiana
For more information go to
www.2002conference.com.

New Projects

Continued from page 1

Energy Resource Center is a very popular idea with members. The center would serve the Pacific Region as a place for research and development and become a clearinghouse for applied and future technologies.

Solar and photovoltaic projects are also popular with members. Maui Community College proposes to create a project to test solar thermal systems to determine the efficiencies in different systems. The project would also develop and test new prototypes and provide workshops on design and installation. The Hawaii Army National Guard proposes to install a photovoltaic array at the Kalaeloa Recycling Center to support its energy needs. A Solar for Rent project will work to convince landlords on the Big Island that it is in their best economic interest to install solar hot water heaters in their rental units. C.H. Guernsey & Company wants to conduct a project that will test Solar Cooling in a residential home. They also introduced a project that would involve Cogen at Kailua Wastewater Treatment Plant. Generators would be installed to produce electricity from the available methane and use the waste heat for absorption cooling of offices.



Jennifer Vandebroke is excited about new ideas for the Kalaeloa Recycling Center.

Other project ideas address new construction and renovation. One project idea is to provide Building Commissioning to the UH Medical School. Pooling resources from partners would fund expert evaluation of the design process to integrate energy efficient and sustainable design concepts into the project. Another project idea is the Renovation of Kinau Hale (Department of Health Building) that would utilize energy-efficient and sustainable design concepts. The County of Hawaii wants to develop a project for a New Construction Advisory Board. This would be a statewide organization with a membership that includes recognized community and institutional leaders as well as experts in building design and operation. The advisory board will convince project managers and developers to incorporate energy and resource efficiency measures into their new facilities. The Little Grass Shack is a home improvement show that wants to feature a home that incorporates "green" materials and design. A green remodel would expose Hawaii homeowners to the multitude of products, design elements, and strategies available to them.

The progress of these projects will be tracked to ensure needs are addressed and momentum is maintained. Sharing progress benefits all members through lessons learned and problems solved. If you have a project idea you want to share you are encouraged to share it at the Rebuild Hawaii quarterly meetings or contact Rebuild America Hawaii State Representative Elizabeth Raman at eraman@dbedt.hawaii.gov.

Meetings

Next Meeting

April 11, 2002
7:30-12:00
HEI Training Room #2
8th Floor Pacific Tower

Previous Meetings

January 2002

Cyane Dandridge, Strategic Energy Innovations, facilitated a Consortium planning meeting. Consortium members worked together and prioritized needs and resources, discussed goals for the future, and identified potential new projects.

November 2001

Mike Siminovitch from Lawrence Berkeley National Laboratory presented the Berkeley Lamp. Dean Masai spoke about the new Field Guide. P.J. O'Reilly presented ideas for a Rebuild Hawaii video to air on Olelo. Jim Maskrey reported on resources available on the new Rebuild America web site. Jennifer Webb reported on the new Rebuild Hawaii web site.

August 2001

Consortium elected Steve Holmes as President and Jim Maskrey as Vice President. Outgoing President, Maurice Kaya presented what the Consortium accomplished during its first four years. Marlyn Aguilar from Department of Health spoke about how to dispose of light bulbs and ballasts. Howard Wiig presented on HiLites software and the Model Energy Code.

For a copy of minutes

Telephone: (808) 587-3806
Facsimile: (808) 587-3820
Email: eraman@dbedt.hawaii.gov