

Rebuild Hawaii Consortium Meeting
January 29, 2003

*You can find copies of these notes and presentations on the Internet at
<http://www.hawaii.gov/dbedt/ert/rebuild/news.html>.*

Attendees:

ARM—Ken Plummer; **Carter & Burgess**— Michael Krijnen, Pericles Manthos; **C.H. Guernsey & Co.**— Scott Bly; **City & County of Honolulu**— Steve Holmes, Allyn Lee; **County of Hawaii**— Raymond Carr; **County of Kauai**— Glenn Sato; **Department of Accounting & General Services**—Richard Yasunaga; **Department of Business, Economic Development & Tourism (DBEDT)** – Maurice Kaya, Liz Raman; **Department of Education, Facilities**—Nick Nichols; **Eco-Lite**— Tom Brennan; **Global Energy Partners, LLC**—Bettina Foster; **Hawaiian Electric Company, Inc. (HECO)** – Norris Creveston, Jim Maskrey, Sam Nichols, Tom Van Liew; **HSI Mechanical**—Bill Short; **Hickam Air Force Base**—Dave Stiner; **Johnson Controls**—Michael Chang; **Navy PWC Pearl**—Nate Eisenpress, Glenn Todd, Kevin Saito; **Navy PWC Pearl**—Greg Gebhardt; **Scheibert Energy Company**—Todd Scheibert; **Strategic Energy Innovations**— Cyane Dandridge, Jennifer Tosaki; **The Gas Company**—Charlie Senning; **U.S. Department of Energy**—Paul Johnson; **U.S. Department of Energy Pacific Liaison**— Eileen Yoshinaka; **U.S. Department of Housing & Urban Development**—Michael Flores, Ramona Mullahey; **University of Hawaii Community Colleges**—Rodney Yim, **University of Hawaii Maui Community College**—Don Ainsworth; **University of Hawaii School of Architecture** – Steve Meder, Olivier Pennetier.

Meeting Purpose: The purpose of the meeting was to discuss and develop new projects.

Consortium President **Steve Holmes** gave a brief overview on Consortium achievements and its current status. **Maurice Kaya** explained the roles of STEAB and NASEO and provided information on State Initiatives. **Paul Johnson** presented on the USDOE Communities Programs. **Cyane Dandridge** provided snapshots of successful Rebuild America partnership activities across the nation ([view presentation](#)). **Jim Maskrey** reviewed the mission and objectives of the Consortium. **Elizabeth Raman** presented the Rebuild Hawaii Consortium Action Plan ([view presentation](#)). View a copy of the [Rebuild Hawaii Action Plan](#).

Developing a Project

Kevin Saito presented on steps he took to develop projects for the Navy. **Jennifer Tosaki** and **Sam Nichols** spoke about steps to develop the Hawaiian Electric Company Energy Smart Schools project ([view presentation](#)).

The following table is a general breakdown of steps to developing a project (meeting handout).

	Program example: Building Retrofit	Program example: Energy Smart Schools
Identify Project Champion		
Identify Project Scope		
1. ID mission/ critical needs	Benchmark buildings	ID need: State wants to educate youth on energy, Utility wants better outreach to small businesses
2. ID project elements to solve needs	Audit of select buildings, (from walk through to investment grade, depending on needs and building type), including building stakeholders like the building manager and utility rep	Review available programs (e.g. Green Schools, NEED, DOE Energy Smart Schools program), retain appealing elements
3. ID project scope	Write action plan	Outline scope of work
Define Project Resources		
1. ID available resources: Look at program components, and how to potentially fund individual components while at the same time looking to fund the whole project as a system	Capital funds? Performance contract approach?	Grants? Open solicitations?
2. Match available resources with your needs	Availability of capital? Implications of a performance contract?	Grant requirements?
3. Write project budget		
4. Select dedicated project manager	Represents Owner	Represents Program
5. Line up project partners: Identify both partners and champions		
6. Sell to decision makers (ID all stakeholders)	Obtain funds to proceed with project	Finalize program components
Obtain Resources		
1. Write Scope of Work	Specify exactly what you want in an RFP format	Write the grant—match components exactly to grant requirements
2. Identify project roles and timeline		
3. Obtain resources to implement project	Send project out to bid; have stakeholders help with the bid process	Send out proposal. Have stakeholders/partners help ID funding sources, and write letters of support

Manage Project		
1. Finalize project design		
2. Secure project staff	Hire contractors	Hire staff, secure subcontractors, define roles and responsibilities
3. Manage resources		
4. Start/Complete project	Project manager has strict oversight of project, commissions the project	Project manager works with all stakeholder, manages deliverables and timeline
Evaluate Project		
1. Establish baseline		
2. Track savings		
3. Evaluate	Have evaluation built into contract: measure and evaluate savings, do an annual reconciliation	Include parameters in scope to measure success

Project Development

The following tables (on pages 4-6) summarize the project development table sessions. Members identified a project champion, scope of work, resources, partners, and 5 steps to desired outcomes.

Project: Pacific Energy & Resource Center	
Champion	Norris Creveston
Scope of Work	<ul style="list-style-type: none"> • Existing site • Solar analysis • Commercial space integrated (classroom, offices) • Ventilation (non-conditioned/ conditioned spaces) • Multi-use Building—serving community • Seminar Space • Demonstration space of technologies • Transitional demonstration of technologies • Research showroom <p>*Cost?</p> <ul style="list-style-type: none"> • Living demo of green office/house • See-through concept • What are other energy centers doing? • Location, location, location • High tech facilities (tourism/showcase) • “Bringing in” the volcano • Video conferencing space • Scale of mechanical systems • Scale/visualization of mechanical systems • Schools, children—work area/space • Long term operation funding (office space renting? Key businesses) • Type/kind of businesses? • Feasibility study funding • Government funding—hydrogen fuel cells • Transportation Issues? Alternative fuel station • Seawater cooling?
Resources	Funding (seed)—feasibility study <ul style="list-style-type: none"> • FEMA • Homeland Security • EPA • DOE • Tourism Authority • Private Business • HECO • UH • City & County of Honolulu • DBEDT • Board of Water Supply • US DOT
Partners	HECO, GASCO, Rebuild America/ DOE, UH, City & County of Honolulu, State of Hawaii, EPRI, GTI
Next Steps	<ol style="list-style-type: none"> 1. Secure funds for feasibility study/business plan 2. Request for qualification 3. Select contract 4. Select business plan 5. Present to Rebuild partners 6. Secure funding 7. Party!

Project: Performance Standards for University of Hawaii Buildings	
Champion	Steve Meder
Scope of Work	<ul style="list-style-type: none"> • Reference Documents (Codes, Commercial Guidelines, Act 77) • Areas to address: energy use; water use; waste reduction; bio-climatic comfort zone-ASHRAE comfort zone; IAQ, transportation; and green material use. • Energy use for new facilities <ul style="list-style-type: none"> ❑ Definition of Energy Use Index (EUI) ❑ Define baselines—from 1990, watts/sf, etc. ❑ Goal EUI defined—20% of 1990 use by 2007/ 30% by 2012 (15 kWh/sf/yr); this maybe the current use ❑ Goal maybe 13.5 kWh/sf/yr ❑ (New) Goal is to achieve 40% off of code (9 kWh/sf/yr) ❑ Verifiable 2 years after occupancy ❑ End uses: office equipment; HVAC fans; cooling; water heating; and lighting. • Water use <ul style="list-style-type: none"> ❑ Reduce water use ❑ Maximize water being used—recycle/ground water, water collection, ground water recharge, control erosion • Indoor Air Quality <ul style="list-style-type: none"> ❑ Ventilation rate (20 cfm/person per ASHRAE) ❑ Maximize natural ventilation opportunities—air velocity to achieve ❑ Control material off gassing ❑ Prevent mold ❑ Position of supply air ❑ Maximize use of environmental supportive materials • Renewables <ul style="list-style-type: none"> ❑ 20% of total energy (EUI) to be met with renewables including: wind, solar DHW, solar PV, CHP, and bio sources.
Resources	<p>Funding & Technical Support</p> <ul style="list-style-type: none"> • DOE/Rebuild America—contract Charles Eley • Local Utilities—electric, gas, water • CHPS—California document • APPA—national organization • Outside consultants—mechanical, electrical • Vendors & Trade Allies • Gas Technology Institute • ASHRAE—technical committee • EPRI (Electrical Power Research Institute) • Foundations • AEEE • US Green Building Council <p>Execute by hiring A&E with expertise to write guidelines</p>
Partners	See above
Next Steps	<ol style="list-style-type: none"> 1. ID Goals 2. Write Scope of Work 3. Hire consultant 4. Provide draft of standards 5. Reviewed 6. Pen ultimate draft & review 7. Develop RFP from final draft 8. Implemented 9. Built 10. Tested/reviewed/revised 11. Guidelines finalized & used for future RFPs

Project: CHP Study PMRF	
Champion	Navy Region Hawaii
Scope of Work	<ul style="list-style-type: none"> • Assessment of methane powerplant e PRMF • Biomass • * Methane Reclamation • Fossil
Resources	Navy: Region, PWC, PACDIV, Community: County (environmental solid waste energy) Plantation, KIUC (electric utility), State Technology: FEMP, EPA (assessment program) Engineers, ESCOs, Vendors, Environmental Managers
Partners	See resources above
Next 5 Steps	<ol style="list-style-type: none"> 1. Site History/ Planning Docs 2. Existing Studies 3. Query Interest 4. What is value of resource/ landfill gas 5. Concept Paper

Project: Hawaii Energy Star Purchasing Project	
Champion	Cyane Dandridge
Scope of Work	<ul style="list-style-type: none"> • Identify 3-5 non-profit owners and develop a plan to assist them • Investigate request for bids • Staff education for multifamily—HUD, HCDCH, Private management companies • Look into tax credits—add in Energy Star equipment to get points/credit
Resources	<ul style="list-style-type: none"> • DOE Energy Star • HUD operating expenses • Investigate possibility of resources from HCDCH, HECO
Partners	DOE SEI HUD HCDCH Non-profit developers: Ecumenical Association of Housing (EAH) & Hale Pauahi IBM Consulting Corporation
Next 5 Steps	<ol style="list-style-type: none"> 1. Investigate past project reports/ evaluations of effectiveness 2. Investigate IBM assessments (look at what needs/improvements to decrease energy costs and increase environment/comfort)

Jennifer Tosaki prepared these notes.