

ENERGY AUDITS FOR RURAL FARMS AND BUSINESSES

USDA Rural Energy for America Program Grant

Presented to the 2012 Pacific Peer Exchange
By

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Background

- Grants Team-established early 2011 with members from all Strategic Industries Division (SID) branches to search aggressively for grant opportunities
- Team members reviewed 23 solicitations from various federal agencies in depth and applied for 7 grants
- Six grants were awarded: four from US Department of Energy; one from the National Science Foundation and one from the US Department of Agriculture
- DBEDT received a \$100,000 award from USDA for the Hawaii Energy Audit Program for Eligible Rural Small Businesses and Farmers in Oahu, Maui, Lanai, Molokai, and Hawaii islands. Two year grant beginning February 10, 2012

The Need and The Goal

Who can use energy audits?

- Maui County-estimated 350 farmers and businesses
- Hawaii County-estimated 7,600 farmers and small businesses

What is project goal?

- Provide 7-10 participants with energy audits
- Advance food and energy security
- Promote public/private sector partnerships

Public Private Sector Partnership

- DBEDT will manage the grant and support project with \$25,000 in-kind services
- Clients will pay 25% of audit cost up front
- Hawaii Energy will support the project with at least \$25,000 in rebates
- Hawaii and Maui Counties will support project by advertising the program, identify eligible entities for audits, and marketing

Partner Experience

DBEDT—technical assistance (TA) for review of IGA's for performance contracts for 5 state hospitals, University of Hawaii at Hilo (22 buildings); The Judiciary (5 courthouses); also review of ASHRAE level 1 audits for two corrections facilities and UH-Hilo under a retro-commissioning (RCx) project

Hawaii Energy--two years energy study program with 10 participants; \$81,331 rebates given

Project Plan

- DBEDT, in cooperation with Hawaii Energy, Maui County and Hawaii County, will develop marketing plan for eligible rural entities. Only non-rural area for Hawaii is downtown Oahu
- Auditor will develop application form for audit consistent with grant and Hawaii Energy (Energy Study) requirements
- DBEDT and partners will work with Auditor to identify qualified applicants for Investment Grade Audits and Hawaii Energy Rebates

Investment Grade Audit (IGA)

- DBEDT will contract with licensed Professional Engineers or Certified Energy Managers to prepare Investment Grade Audits (IGA)
- IGA
 - Technical and Economic Analysis of potential energy savings projects in a facility
 - Financial Analysis that provides owner or lender with sufficient information to judge feasibility of the project and document loan request

Audit Contents

- Situation Report
 - ✓ Narrative description of facility, energy systems, usage, prices
 - ✓ Description of Energy Conservation Measures
- Technical Analysis
 - ✓ Costs, cost savings, ranking by cost-effectiveness
- Description of Potential Improvements
- Financial Analysis (including Cash Flow)
- Justification for project implementation

Audit Funding Structure

- Hawaii Energy rebates of 50% of study cost up to \$15,000 per audit
- Client pays 25% of cost of audit up front
- Grant funds 75% of audit cost
- Example of a \$15,000 audit

Example Audit Cost	Grant 75%	Recipient 25%	Hawaii Energy Rebate (up to 50% of audit cost maximum \$15,000)
\$15,000	\$11,250	\$3,750	\$7,500 maximum

Financing for Energy Efficiency Improvements

- USDA grants and combination grant and guaranteed loans
- GreenSun Hawaii, DBEDT's Loan Loss Reserve Program delivers a variety of loan options to owners of single family residential, multi-family, non-profit and commercial properties
- Hawaii Energy and KIUC rebates and incentives

For More Information

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