About Guam Energy Office

Since its establishment in 1974 through local legislation to address programs under the U.S. Federal Energy Administration which transformed to U.S. Department of Energy in 1977, the Guam Energy Office (GEO) operated through a couple of local Executive Orders placing it in various government entities over the years. Mandated by an Executive Order in 1983, the Guam Energy Office continues as a single state agency within the Executive Branch to apply for and receive federal energy grants.

The mission of the Guam Energy Office is to administer programs for the benefit of the general public by promoting energy efficiency and renewable energy to reduce reliance on foreign petroleum, reduce energy consumption and cost for consumers, and to reduce greenhouse gas emissions affecting global climate change.

GEO built its own office with Petroleum Violation Escrow funds to demonstrate the use of energy technologies and architectural green design. Large windows are located on north walls, insulation are on southwest wall and roof, daylight windows bring indirect sunlight to brighten the workplace, and grey water from the kitchen sink irrigates exterior grounds. Toilets using 1.5 gallons per flush, faucet aerators reducing water flow, photovoltaic panels operating ceiling fans, and a solar water heater providing hot water — all these along with energy efficient air cooling units and a lighting system with occupancy sensors contribute to reducing energy costs in a 3,500 sq. ft. office building.

FY 2011 Highlights

♦ American Recovery and Reinvestment Act (ARRA) dollars awarded to the Guam Energy Office allowed Government of Guam to lead by example when reducing government expenditures. Public buildings are to be retrofitted or upgraded with energy efficient technologies to reduce cost on energy bills.

♦ Memorandum of Agreement is underway between GEO and Guam Power Authority (GPA) to install over 1500 LED streetlights along the Tumon District, Marine Corps Drive, and other areas in villages throughout the island. This streetlight project exemplifies collaboration among agencies, GEO, GPA, GVB and DPW, working together to ensure safety in the streets is provided, reduction of energy costs for streetlights is achieved, reliance on equipment is maintained, and efficiencies of public assets are improved.
The **Energy Efficiency Appliance Rebate Program** stimulated Guam’s economy with green purchasing and financially assisted Guam residents to replace older, wasteful appliances in their homes with new energy efficient models. GEO issued appliance rebate vouchers to be used toward the purchase of a qualified Energy Star® appliance. Rebate amounts vary from $125 to $500 depending on the appliance category. Program was launched on December 6, 2010 until the authorized federal dollars ran out. Over 800 households participated with some households receiving up to 5 rebate vouchers for each appliance category.

The **Weatherization Assistance Program** (WAP) financially assisted income eligible applicants by improving energy efficiency of their homes while also ensuring their health and safety. Geared to assist the elderly, persons with disabilities, individuals, and children, WAP weatherized over 600 homes. Partnered with Guam Housing & Urban Renewal Authority, this program replaced refrigerator and window air conditioners with energy efficient models, installed compact fluorescent light bulbs, installed low-flow showerheads and faucet aerators, provided weather-stripping and sealing of air leaks, provided smoke detectors and carbon monoxide detectors, and educated clients on preventing energy waste.

Besides sponsoring educational activities like Earth Day school contests, energy awareness school contests, energy expo, specific trainings, and more to get the word out on reducing energy costs in schools, homes, and the workplace, Retrofitting Public Buildings under the **State Energy Program** is currently ongoing. Over 60 public buildings are getting an energy makeover. GEO partnered with Guam Power Authority to upgrade 44 public buildings such as fire stations, libraries, and the Department of Mental Health & Substance Abuse facility and its satellite houses. In addition, GEO entered into several agreements with the University of Guam, Guam Waterworks Authority, Superior Court, Guam Memorial Hospital Authority, Guam Visitors Bureau, Veteran’s Affairs, and Guam Community College to install technologies such as T8, CFL and LED lights, high SEER A/C units, water devices, solar parking lights, solar ray panels on rooftops and much more to reduce energy usage and government expenditure on energy costs.

With the **Energy Efficiency and Conservation Block Grant** dollars, GEO is drafting another agreement with GPA to install equipment identified in the energy audits on additional public facilities such as Government House, Adelup, KGTF Channel 12, and Finegayan Elementary School. Also, this program allows GEO the opportunity to financially assist non-profit organizations wanting to reduce energy costs in their facilities. Several contract agreements between GEO and nonprofit groups are underway.
Grants awarded by U.S. Department of Energy

State Energy Program - ARRA
- Grant Amount: $19,098,000
- Timeframe: 04/28/2009 – 04/30/2012

Weatherization Assistance Program - ARRA
- Grant Amount: $1,431,132
- Timeframe: 04/01/2009 – 03/31/2012

State Energy Efficient Appliance Rebate Program - ARRA
- Grant Amount: $166,000
- Timeframe: 04/28/2009 – 04/30/2012

Energy Efficiency Conservation Block Grant - ARRA
- Grant Amount: $9,593,500
- Timeframe: 03/19/2010 – 03/18/2013

Note: Each ARRA grant has increment dates to award percentage of set dollars throughout the duration of the grant cycle.

Formula Grants (including carry-overs):

- State Energy Program
  - FY 2011: $118,000

- Weatherization Assistance Program

Priority was placed on spending ARRA grants for projects due to restricted timeline for meeting obligation or encumbrance and to complete projects within the grant period. As to formula grant dollars awarded annually, the period of performance lies on a 5 year-period allowing GEO to request carry-over of funds to a new Fiscal Year. Encumbered dollars are for agreements and contracts with sub-recipients to be completed within the grant period of performance.

The FY11 Government of Guam Financial Statement Audit was conducted on Line Agencies and was released by the Office of the Public Auditor. Visit www.guamopa.org for more information.
Moving Forward

Complete ARRA Projects

♦ In order to secure ARRA dollars per conditions of the grants, Guam Energy Office will meet obligation due dates for ARRA grants by getting all agreements, contracts, and purchase orders established.

♦ Work closely with sub-recipients to ensure all ARRA energy projects are completed.

♦ Work with the Guam Energy Task Force members to establish a Strategic Energy Plan for Guam that is realistic and attainable to meet addressing our limited resources and unique geographic challenges.

♦ Work closely with Guam Community College to pursue its goal to make its new building a LEED Gold Certified building by the U.S. Green Building Council. GCC will need about 39-plus points of the Leadership in Energy & Environmental Design by implementing practical and measurable green building design, construction, operations, and maintenance solutions.

Challenges & Opportunities Ahead

♦ Since timelines on a couple of projects are being pushed back due to delay on shipping equipment, bureaucracy on permit review, or procurement hiccups, GEO may be requesting an extension on both ARRA State Energy Program and Weatherization Assistance Program grants with uncertainty of receiving a favorable response from the U.S Department of Energy.

♦ With the proposed extension on two ARRA grants and continuation of receiving annual formula funds, GEO anticipates maintaining staff numbers until midpoint of FY 2013.

♦ GEO is being moved to better serve the community as part of the reorganizational initiatives as Governor Eddie Calvo continues to improve government services and streamline government expenditures reducing the huge deficit inherited when taking Office in January 2011.

♦ Governor Calvo’s Mag-ProAwards, a public service recognition program, provides GEO the opportunity to highlight programs and government employees going above and beyond.

♦ GEO plans to present the Guam Tropical Energy Code in draft to the Guam Building Code Council to start the process route for enactment. An energy code within the standard building system will ensure buildings are designed to utilize less energy to occupy, produce less cost to operate, and release less carbon in the environment. Also, enforcing an energy code will create a market transformation when energy technologies are deployed and spark a behavioral change among the community when constructing a new building or house incorporating energy measures to prevent energy waste.

Energy Audits’ Recommendation Measures

About 44 public buildings in twelve line agencies are receiving new lighting, occupancy sensors, roof coating, HVACs, VAVs & thermal diffusers, Energy Star ® refrigerators/freezers, flow-restrictors, 1.5 gallons toilet urinals/closets, and window film.