



LAKE COUNTY FLORIDA



Energy Efficiency & Conservation Block Grant (EECBG)

Final Report

December 18, 2012

Purpose



- To provide the BCC and citizens with a final report on the Energy Efficiency and Conservation Block Grant

Presentation Outline



- EECBG Program Overview
- Program Results
- Final Grant Reporting
- Recommendations

EECBG Program Overview



- Department of Energy grant (\$2.8 million) intended to reduce fossil fuel emissions and energy use, while improving energy efficiency in the building and transportation sectors
- Implementation of the following EECBG activities required a coordinated inter-departmental and inter-agency effort

LCBCC

Growth Management (Administration/Building)

Communications

Community Services

County Attorney

County Manager

(Administration, Budget and Procurement)

Facilities Development and Management

Public Safety (Administration)

Public Works (Engineering /Solid Waste)

Lake County Clerk Finance

Lake County Extension

Lake Sumter State College

Lake Technical Center

EECBG Program Overview



EECBG Activities

- Energy Efficiency & Conservation Strategy (EECS)
- Financial Incentive Programs
(Energy Efficiency/Rebate Program/Energy Efficiency Fund)
- Benchmarking, Education & Outreach (BEO)
- Quality Inspection, Measurement & Building Codes
- Traffic Signal Synchronization & System Improvement
- Expansion of Recycling Program
- Greenhouse Gas Reduction Program
- Renewable Energy Technologies
- Public Safety Towers (2) LED Lighting Retrofits

Energy Efficiency Projects



- Retrofitted T-12 lamps to T-8 in 25 county facilities (218,855 SF)



- Annual savings \$22,270 (est.)

Adkins House
Ag Center Greenhouses
Agricultural Center
American Legion
Animal Control
Astor Recreational Center
BCC Warehouse #1
County Administration Bldg
Fairgrounds – (4 buildings)
Forest Hills Comm. Center
Fuel Station Main Shed
Health Dept. Admin
McTureous House
Mosquito Ctrl Paint/Service
Paisley Community Center
Pear Park Office Bldg #1
Property Records Storage
Sheriff's Aircraft Hangar
Sheriff's Vehicle Maintenance
Sheriff's Work Farm
Tourist Welcome Center
Umatilla Community Center

Energy Efficiency Projects



- Replaced traditional CFL down-lights in 5 county facilities with 20% energy efficient LEDs (339 new/150 eliminated)
- Annual savings \$9,900 (est.)
- Also installed daylight sensor controls, and occupancy sensors in offices, storage areas and restrooms (savings above does not factor these additional cost saving improvements; six months monitoring required to determine actual results)



Energy Efficiency Projects



- Energy Star Roof Coating (“Cool Roof”) – CAB
- Annual savings \$3,360 (est.)



- 1975 Central Energy Plant Boiler Replacement
Annual savings \$3,000 (est.)



- \$975,755 rebates issued to 3,043 applicants
- \$4,646,920 public investment in energy efficiency
- \$97,484 annual cost savings to applicants
- 936 mega watt hours electricity saved
- 580 metric tons of greenhouse gas/criteria pollutants

- Economic Impact Analysis (IMPLAN)
- 51.8 jobs created/retained
- Total economic impact \$4,674,834
(includes direct, indirect and induced effects)

Education Sub-Grants - LSCC



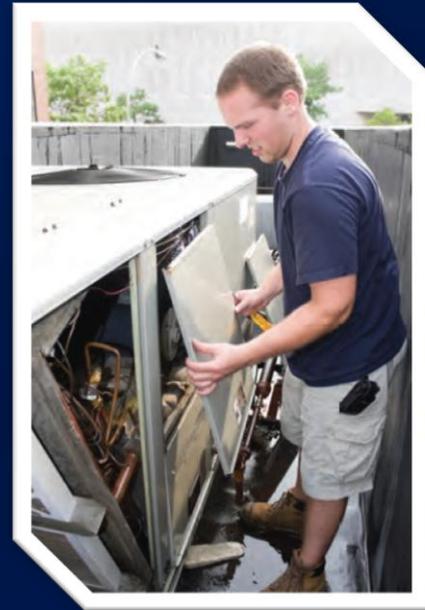
Course	Total Trained	Total Certified
Florida Green Building Coalition Training	14	n/a
Part 1 – Building Science for Green Professionals	11	11
Part 2 – FGBC Certification	10	10
Lead Certified Renovator Training (EPA)	10	10
Weatherization Assistance Program (WAP) Training	10	10
Building Operations Management Program (IFMA/SFP)	14	9
Community-Based Outreach Program	150	n/a
Project Totals	209	40

Education Sub-Grants – Lake Tech



LAKE COUNTY
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- Introduction to Photovoltaic Installation
- Introduction to Solar Thermal
- Energy Efficient HVAC
- Solar Film Installer
- Ten classes served 54 students
- A/C equipment updated to modernize course offering; classes will be continued beyond grant



Traffic Signal Synchronization



- Retiming of 49 traffic signals along 9 major corridors
- Annual savings: 650,625 gallons



- Annual savings time and value to citizens \$4.7 million

Solar Pilot Project



- 13 kW dual-technology system
- Annual electric savings \$1,400 (est.)
- On target to realize net-zero building

BILLING CYCLE	KWH USED	KWH GENERATED
JUNE 22 TO JULY 23 (SYSTEM START JULY 18)	811	173
JULY 24 TO AUG. 22	445	1054
AUG. 23 TO SEPT. 21	359	598
SEPT. 22 TO OCT. 22	149	149

Solar Pilot Project



<http://www.lakecountyextensionsolar.com/>

Public Safety Towers



- Retrofitted two (2) towers with LED fixtures
 - Minneola 250-ft
 - Buckhill 410-ft
- Annual savings \$1,000 (est).



Final Reporting



- Expenditures through 12/18/12: \$2,807,500
- Grant is 100% complete
- Economic Impact Analysis (IMPLAN)
(includes Go Green Get Green rebate program impacts)
 - 79.1 jobs created/retained
 - Total economic impact \$7,384,134
(includes direct, indirect and induced effects)

Recommendations



- Continue tracking energy use/energy cost savings with EPA Portfolio Manager
- Consider adopting policies to encourage usage of energy cost savings for further energy efficiency upgrades and programs



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Thank you.

www.lakecountyfl.gov keyword EECBG

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