

Reducing Waste Through Sustainable Communities

Lake County Green Symposium
2010 Annual Conference

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Agenda

- Community Sustainability Plan Development
- Case Studies
 - Community Energy Challenge
 - Palm Bay
 - Energy Efficiency Conservation Block Grant & State Energy Programs

Keys to Successful Community Sustainability Programs

- Economics
 - Energy Savings Drivers
- Leveraging Existing Delivery Channels
- Policies and Regulation
 - Codes, Standards, & Permitting

and Involvement

Community Stakeholders

Palm Bay Case Study



City Goals & Objectives

- Become a sustainability leader
 - Triple Bottom/Top Line
- Reduce operating costs by minimizing environmental footprint
- Reduction in GHG Emissions while not affecting services
- Job Creation and Economic Stimulus:
 - Attracting renewable industries
 - Supporting growing business
 - Encouraging energy efficient use policies and patterns

Collaboration

Identify Stakeholders and Their Concerns

Employees

- Safe and healthy work conditions, quality of life, professional growth, training, career development

Residents

- Quality of Life, education, job opportunities, basic amenities, environmental quality, human rights, public services

City of Palm Bay

- Revenue & tax distribution, profitability, employment and contribution to GDP, safe work and environmental compliance

Adjacent Municipalities

- Collaborative initiatives and opportunities, communication, synergies

Energy Providers

- Demand Load, distribution, energy security, resource availability

Visitors/Tourists

- Amenities, safety, access to services, quality of experience

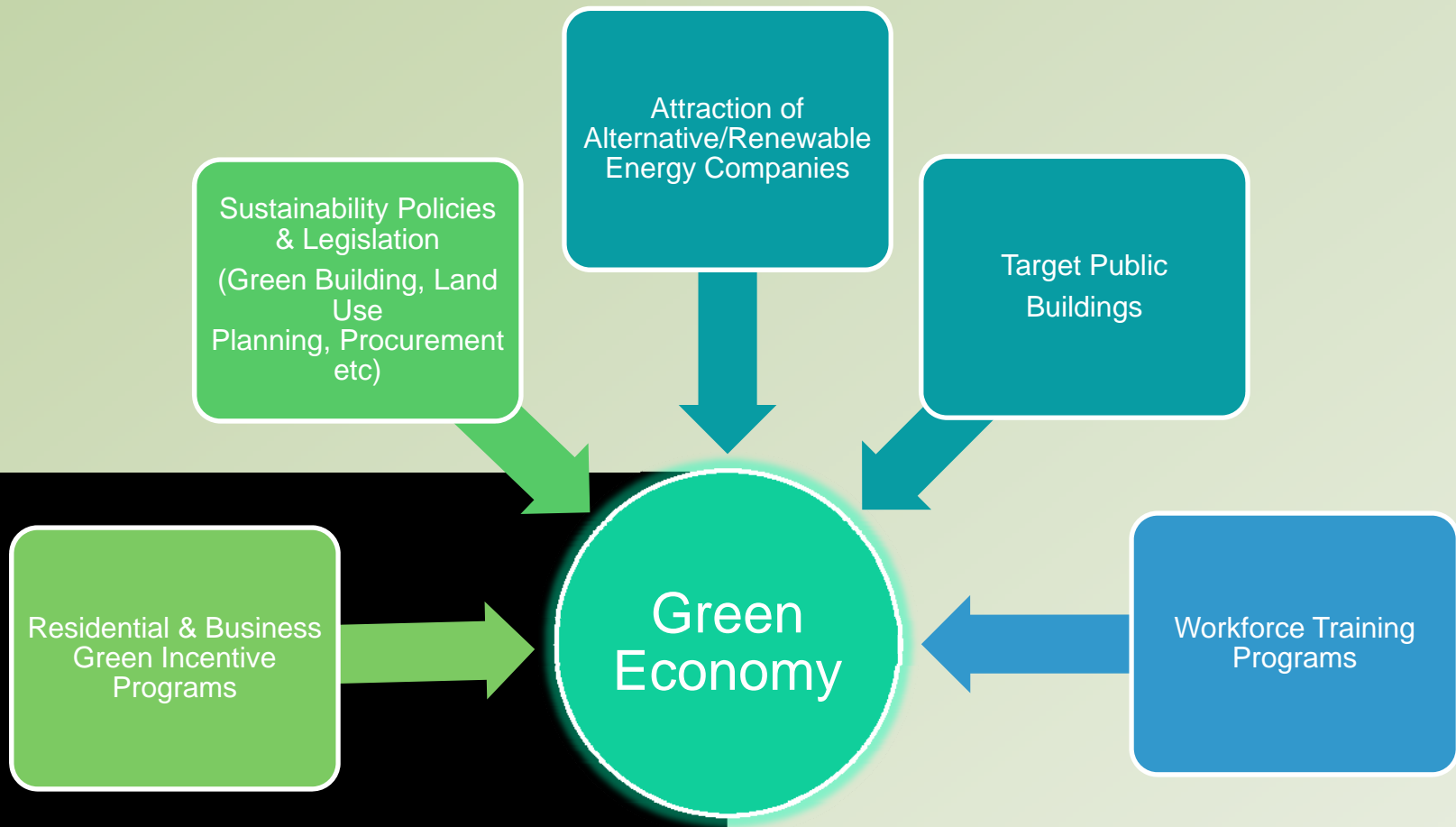
Business

- Infrastructure, access to services, security and safety, economic development

Schools & Universities

- Infrastructure, security and safety services, access to public services, internship & job opportunities

EECS & Master Plan Overview: Growing a Green Economy in Palm Bay



Sustainability Master Plan

- **GHG /Energy/Water baseline inventories / Assessments**
 - Municipal operation retrofits
 - Florida Green Building Certification upgrade
- **Development of Sustainability Policies and Legislation**
 - Green Building Codes
 - Residential Rehabilitation Standards
 - Affordable housing standards

Green Purchasing Policies

Energy Improvement Program

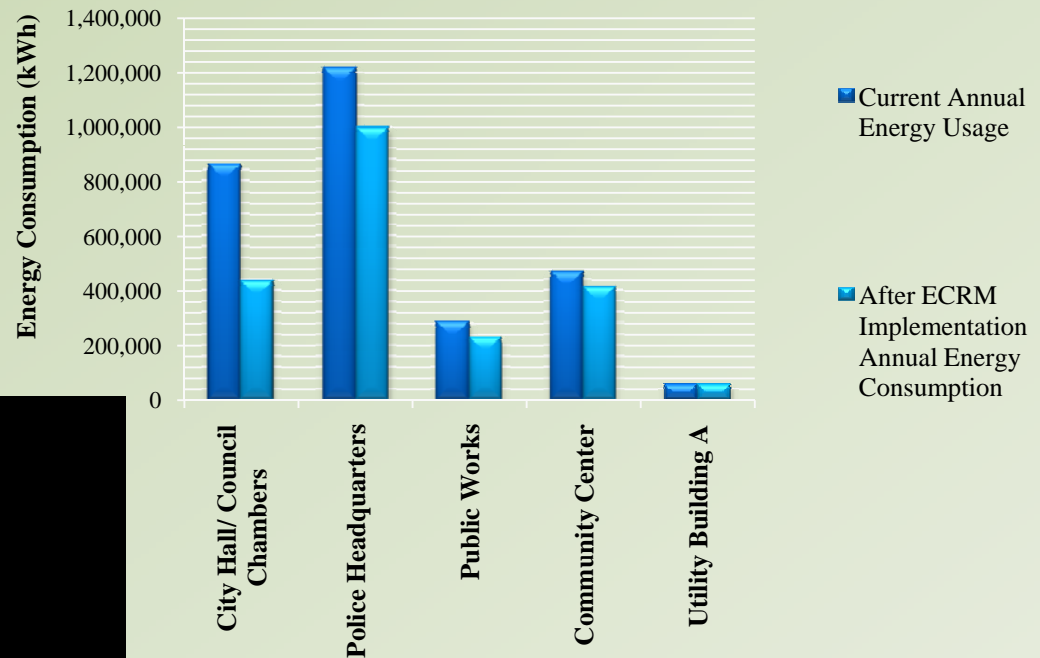
Sustainability High School

Energy Audits of Public Facilities

- 6 energy audits of top consumers
- Used energy audits to determine what projects to fund

- **Identified Savings:**
 - **1,845,982 kWh per year**
 - **\$168,6526 per year**
 - **Implementation cost of \$493,625**
 - **37% IRR**

Current Energy Consumption vs After ECRM Implementation Annual Energy Consumption



Sustainable Community Ordinances

- Residential standards for City funded programs
- LEED standard for municipal buildings
- Voluntary green building program for commercial and residential buildings
 - Incentivized
 - Expedited permit process



Technical assistance



Public Awareness Campaign

- Websites and Social Networks
- Community outreach personnel
 - Community Outreach Coordinator
- Workshops –
 - Rain Barrel workshop
 - Neighborhood Investment Cooperative Effort (N.I.C.E.)
- E-statements for Utility Bills
- Green Team

ing inspections

events –

Firefighters Annual Ladder Climb,

ComEd Community Energy Challenge Case Study

- Partnership program between ComEd and 10 municipalities in the Chicago area
- Competition to design and implement the best municipal energy / sustainability plan
- Targeted
 - Energy, water, and GHG savings



and businesses

of 34,965,593 kWh

ar power plant in one

Successful Programs

- Targeted own facilities for Energy Efficiency
- Leverage Existing Delivery Channels
 - Utilized fire inspectors and code enforcers to educate on energy efficiency
 - Existing Energy Efficiency business & trade allies
- Public outreach
 - Energy Star pledge, school energy / water challenges



standards
training and

t Programs

State Energy Programs

Project: State Energy Program & Energy Efficiency Conservation Block Grant

Client: States of Louisiana and Missouri

- Implemented over \$240 Million in ARRA funded energy efficiency programs
- Program Design and Execution:



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Questions and Answers

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