Creating and Managing Energy Programs (A3)

A County Perspective

Justin Dula, AICP
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Municipalities Planning Code

"To promote energy conservation and the effective utilization of renewable energy sources, the comprehensive plan may include an energy conservation plan element..."
Themes

Create partnerships to get broad interest.

Build on Strengths

use existing efforts and build on existing strengths.

Promote Planning

The link between planning and energy efforts aren't always apparent and planning should be stressed.
Influences

Politics
- Elected official leadership
- Visible projects for constituents
- Partner requests

Demand
- Municipal needs
- Partner needs
- Marketing and toolbox approach

Financial
- Financial constraints
- Federal funding requirements
- Private sector expertise
County Context

STRENGTHS
- Opportunity for guidance and "leading by example"
- Greater resources and broader view than municipalities
- Interaction with both municipalities and the private sector
- Local knowledge of communities
Less restricted by specific political concerns and day to day operations

CHALLENGES
- Lack of authority to mandate changes on the local level
- Fewer resources and less specialized expertise compared to regional entities and the private sector
- Greater responsibility to constituents and elected officials
- Less policy directed than State and Region
County Efforts
Being completed by various departments

- Solar Panel Demonstration Project
- Hybrid Vehicles

Guaranteed Energy Savings Act (GESA) contract with Energy Savings Company (ESCo) for some County Facilities.
Municipal Efforts

Various levels of progress & Emphasis

Broad Spectrum of interest and progress on Energy

Programs for residents
Public Interest

Increasing Public Awareness & Concern

Concerns about greenhouse gasses

Financial Concerns with Energy Prices

weatherization and Energy Conservation programs for residents
Unified Effort
Planning can help unify efforts

County Efforts
Being completed by various departments
- Solar Panel Demonstration Project
- Hybrid Vehicle
- Guaranteed Energy Savings Act (GEA) contract with Energy Savings Company (ESC) for some county facilities

Municipal Efforts
Various levels of progress & Emphasis
- Broad Spectrum of interest and progress in Energy
- Programs for residents

Public Interest
Increasing Public Awareness & Concern
- Financial concerns with Energy Prices
- Weatherization and Energy Conservation programs for residents
- Concerns about greenhouse gasses
Coordinating Efforts

Energy and Environmental Advisory Board (EEAB) formed of appointed experts.

- Focused on easily implementable low cost to no cost items
- Looking at existing efforts
- Focused on County Facilities & assisting the County Community
- Matrix of projects, cost, and time for implementation
- Some projects were implemented
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<tr>
<th>Committee</th>
<th>Initiative</th>
<th>Focus Area</th>
<th>Priority</th>
<th>Cost</th>
<th>Impact</th>
<th>Timeframe</th>
<th>Grant?</th>
<th>Partners</th>
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<td>Land Use Projects</td>
<td>Incorporate Sustainable development principles into the County’s SALDO</td>
<td>County Government</td>
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<td>Incorporate Sustainable development principles into the County Comprehensive Plan</td>
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<td>Include Transit Oriented Development principles in the County’s SALDO</td>
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<td>Incorporate Sustainable development principles into the County’s Revitalization Program</td>
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<td>Energy Efficient Development Incentives</td>
<td>Include &quot;green&quot; elements in existing County redevelopment grant programs</td>
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<td>Provide discounted County assistance for zoning ordinances that include TOD or sustainable development principles</td>
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<td>Green Building</td>
<td>Develop model County green building standards</td>
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<td>Support and promote the principles of the County’s Bike Plan</td>
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<td>Initiate tree planting program on County properties</td>
<td>County Government</td>
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Unified Effort
Planning can help unify efforts

County Efforts
- Solar Panel Demonstration Project
- Guaranteed Energy Savings Act (GEA) contract with Energy Savings Company (ESC) for some County Facilities

Municipal Efforts
- Various levels of progress & Emphasis

Public Interest
- Increasing Public Awareness & Concern
- Financial Concerns with Energy Prices
- Weatherization and Energy Conservation programs for residents

Concerns about greenhouse gas emissions
Funding

Having coordinated effort makes it easier to seek funding.

- Know and prioritize potential projects
- Know who to involve in decision making
• Energy Efficiency & Conservation Block Grants (EECBG) Granted by the DOE - 2009 Recovery Act
• Delaware County Allocation = $3.66 million
• Unique opportunity, but also wanted to avoid continuing costs
• GESA program already completed, so looking to fill in the gaps left
• Mix of implementation with some planning projects
Project Initiation

Partners to Implement Your Projects

Keep partners engaged by understanding their motivations. Stay flexible.
Partners to Implement Your Projects

Keep partners engaged by understanding their motivations. Stay flexible.
Solar Panel installation on County Buildings

Public Works, Buildings and Maintenance

Created a press friendly event
Prison Energy Audit and Improvements

Public Works, Prison Board

- Needed new electrical system
- Instant hot water
Transportation Incentives

Personnel, Transportation Management Association
Municipal Grant Program

Grant program to encourage energy efficiency at Municipalities.
Conservation Plan and Action Strategy

Two parts which provide framework for existing and future projects
- Energy Plan for the greater County community including municipalities
- Action Strategy for County owned facilities

Early implementation items also included
Incorporating information gathered during the grant program
Project Initiation

Partners to Implement Your Projects

Keep partners engaged by understanding their motivations. Stay flexible.
Grant Program

County Council wanted flexibility in the program to all eligible projects.
- Prescriptive & Custom measures
- Feeding into overall Energy Plan and Action Strategy
Financing as Motivation

Delaware County, PA
Municipal Energy Efficiency Grant Program

LETTER OF INTEREST / REQUEST FOR CONSULTATION

Allowed the collection of information.

Build in the funding source requirements.
Municipalities have time constraints, even for grant programs.

Still needed a low technical barrier.
Grant Program Projects

31%  Interior lighting/delamping
19%  Replacement HVAC units ★
14%  Thermal controls (central or programmable)/rezoning
 8%   Occupancy/day lighting sensors for lighting
 6%   Exterior lighting
 6%   Street lighting
 6%   Building envelope (windows, weatherstripping)
 5%   Unit heater replacements (public works, firehouses)
 2.5%  LED traffic lights
 2.5%  Wastewater treatment pump upgrades

★Unit heater replacements counted separately
Grant Program

County Council wanted flexibility in the program to all eligible projects.

- Prescriptive & Custom measures
- Feeding into overall Energy Plan and Action Strategy
Energy Plan

Based on municipal desires, the project changed into a toolkit.

Worked with internal departments on operational and capital needs.

Included implementation measures.
Internal Efforts

- Operational and Capital Needs Assessments
- Laundry Press
- Energy Tracking and Reporting
- Transportation Incentives
- Internal Education
Public Efforts

- Marketing approach
- Menu of options for municipalities to choose from
- Examples from the Grant Program
- Local examples
- Private sector expertise
Energy Plan

Based on municipal desires, the project changed into a toolkit.

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Themes

Create partnerships to get broad interest.

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The link between planning and energy efforts aren’t always apparent and planning should be stressed.
Partners

• Internally
  • Get an elected official champion behind the planning process
  • Internal focus on key departments (Public Works, Buildings and Maintenance) leaves out planning
  • Departments brought in later had useful input that should have been incorporated at the outset
• Municipalities
  • Programs on the County level have to meet their needs
  • Finding the right people at municipalities takes time
• Expertise
  • Make the case for outside expertise early on
  • Private sector or specialized staff will be needed
• Regionally
  • Avoid duplication of efforts that are similar through larger areas
  • Showcase model local communities to make regional efforts more locally accepted
Strengths

- Keep it positive for the county community
  - County level is all carrots, no sticks so encouragement is our only tool
- Showcase model local communities and let them be the example
- Work to leverage regional resources
- Be a clearinghouse for local knowledge and experience
- Lead by example
  - Highlight your projects to municipalities and the greater community
  - Try to be honest and include learning experiences as well
Planning

- Gather and integrate background data
- Build on successes
- Market results and efforts
- Prioritize future improvements

Electricity Consumption: Court House/Government Services

Source: Practical Energy Solutions
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