

# Organizing your Community for an Alternative Energy Future

Energy Efficiency

Renewable Energy Sources

Dr. David I. Johnson, Professor  
Department of Fish and Wildlife  
Michigan State University  
E. Lansing, MI. 48824  
[johnso76@msu.edu](mailto:johnso76@msu.edu)  
517-353-1997

# Why do energy efficiency?

- Lower energy bills
- Stimulate local economic growth
- Reduce pollution and green house gas emissions
- Reduce the need for more power plants, transmission lines etc.
- Produce local jobs
- Build a vibrant, sustainable community future

## What other reasons would you suggest?

- Increase comfort?
- Improved home/building values?
- Community spirit/cooperation?
- Changed attitudes?



# Where can efficiency be improved?

- Homes
- Neighborhoods
- Workplaces
- Shopping Centers
- Schools
- Transportation Systems



# What other energy consumers can you suggest?

Day Care

Manufacturers

Campgrounds

Churches

Water and  
Sewer Treatment

Agriculture

Outdoor  
Lighting

Food Production

# What are the barriers?

- National hurdles
  - Lack of market incentives
  - Resistant institutions
  - Policies
  - Community Hurdles
    - lack of knowledge
    - upfront financing
    - time
    - importance



## Value of a community level programs

- Combines resources and efforts
- Easier to overcome barriers
- Creates a life of it's own
- Builds a momentum of long-term energy improvements
- Reevaluates community goals
- Makes community a better place to live

# Organizing principles for your community

- 1) Assess your community
- 2) Create an action committee
- 3) Develop a plan of action
- 4) Mobilize your constituencies to action
- 5) Do community implementation
- 6) Continuously evaluate your progress

# Assess your community

- How much interest is there in our community?
- One-on-one connections are necessary
- What resources are available?
- What other institutions share goals?
- Refer to [energyfinder.org](http://energyfinder.org) to help identify potential
- Consider behavior as well as infrastructure
- Be sure that all the potential players have opportunity

# Create an action team

- 10-20 members
- Look for worker bees
- A broad-base of community representation
- Government representation, financial institutions and business absolutely necessary
- Must share interest and goals
- Make meetings concise and enjoyable
- Never lose site of your goals

## Develop an action plan

- Gather information on energy bill, economics and environmental impact
- Publicize your energy plans to the whole community
- Emphasize where more efficient/renewable alternatives are available
- Provide strategies for the implementation of alternatives

## Mobilize your constituencies to action

- Build support within the community with interesting and diverse communication efforts
- What additional resources can you attract to your efforts?
- What people with what roles are needed?
- Invite widespread community participation

# Community implementation

- What policy changes will contribute?
- Residential, commercial and municipal components may need separate approaches
- What energy flows need to have priority?
- Problems and costs with these energy uses
- Educational strategy and resources
- Identify efficiency and renewable options

## Continuously evaluate your progress

- A verifiable record of energy savings
- Broad support from your community and clientele
- Identified enough resources to accomplish your goals
- Enough technical expertise to accomplish goals
- Are we learning, innovative and open to new opportunities

# Community Energy Partnership: A successful scenario

- Partner Cities

- Irving Corona
- Santa Monica
- San Bernardino
- Mereno Valley Cathedral City
- Palm Desert Hermosa Beach
- Brea Santa Clarita



## Other partners

- Southern California Gas
- Southern California Edison
- Facilitating Partner
- The Energy Coalition
  - Communities take an active role in energy futures
  - New utility/community relationship
  - Consumer responsibility for energy use

# Program Implementation

- Cities and utilities work together to deliver customized efficiency programs
- Underserved customers targeted for highly valued services
- Students are core of demonstration and community activities
- Building trust and relationships opens doors for energy assistance

# Customer interface

- Residential or small commercial customers
- Partnership outreaches
  - Community rallies in school parking lots
  - Pizza meetings in apartment rec rooms
  - Peak Student Energy Actions
    - 36,000 cfls for student homes-free
    - 12,000 cfls sold as school fund raisers
    - K-12 energy curriculum



# Home services



- Installations

- 13 – 30 watt cfls
- R30-40 PAR cfls
- Cfls in kitchen, bathroom, porch and yard lights
- Led night lights
- Cfls in torchiere lamps
- Ceiling fans
- Low flow shower heads



## Home services (cont.)

- Installations (cont.)
  - efficient faucet aerators
  - water heater wraps
  - weather stripping

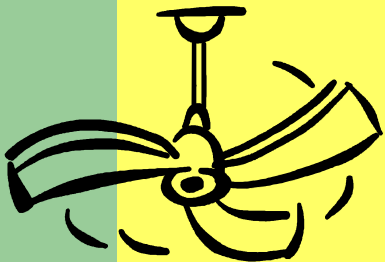


# Installer activities

- Detailed, triplicate checklist to track installations
- Notes on usage patterns
- Check major appliances
  - e.g. refrigerator and water heater
- Provide household record of tune ups
- Top three recommendations for more savings
- Foster participation
  - fans, smoke detectors, etc.

# Small business efficiency tune ups

- Mostly same as residential
- Install
  - LED Exit signs
  - Single – 4 lamp fls with T8s and electronic ballasts
  - 4 to 8 foot fixtures with T8s and electronic ballasts
  - Ceiling fans



# Subcontractor activities

- Trained and licensed installation companies
  - Efficiency installations
  - Education materials and activities
  - Identify utility program opportunities
- Quality Assurance
  - Ride-alongs
  - Unannounced site visits
  - Post – installation on-site verification visits



# Community efficiencies

- Bulk purchases
- Local storage and access
- Smaller company efficiency/quality
- Easy monitoring
- Efficient workforce
- Focused educational activities

# Useful websites

- <http://www.rmi.org/>
- <http://www.energyfinder.org/>
- [http://www.californiaenergyefficiency.com/calenergy\\_old/scg/3525.doc](http://www.californiaenergyefficiency.com/calenergy_old/scg/3525.doc)
- [http://www.marininstitute.org/print/action\\_packs/community\\_org.htm](http://www.marininstitute.org/print/action_packs/community_org.htm)
- <http://www.mass.gov/Eoca/docs/doer/energybasics.pdf>