

A hand is shown adjusting a white thermostat on a wall. The thermostat has a circular dial with numbers from 1 to 9. The background is a light-colored wall.

Kent County Home Energy Efficiency Program

Client: Area Community Services Employment and Training Council (ACSET) and the Kent County Essential Needs Task Force Energy Efficiency Subcommittee

Michigan State University
Urban Planning Practicum
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Presentation Outline

- Client Introduction
- Background Information
- Energy Efficiency Concepts Defined
- Survey Analysis/Resource Catalog
- Case Studies
- Senior Citizen Winter Preparation Program Findings
- Home Energy Efficiency Tool Kit
- Conclusion

Client Introduction

ACSET: Area Community Service

Employment and Training Council

- Member of the Community Action Partnership for 35 years
 - National non-profit Agency serving 17 million low-income US residents annually
- Kent County Home Energy Efficiency Service Provider since 1974
- Mission:

“Assuring access to affordable utility resources for Kent County’s most vulnerable residents while promoting a culture of energy efficiency for all” - 2009 Strategic Plan
- Services Offered
 - US Department of Energy Weatherization Assistance Program
 - Energy Efficiency Workshops
 - Partnerships with local resource providers

Project Goals

- Kent County Home Energy Efficiency Resource Catalog
 - Compiled from Home Energy Efficiency Survey
- Research countywide home energy efficiency program models in other communities
- Senior Citizen Winter Preparation Program
 - Implementation Ideas
 - Weatherization/Whole House Energy Efficiency Tool Kit

Background Information

Kent County, Michigan



Home Energy Efficiency Concepts Defined

- What is Home Energy Efficiency?
- Energy Audit
- Weatherization
- Whole-House Energy Efficiency Planning



Total Green Energy Solutions



Springfield Partners Inc.

Survey Analysis/Resource Catalog

Background of Survey

- Conducted in November 2009
- Approximately 100 businesses/organizations received survey
- Conducted to detail involvement of home energy efficiency practices of each organization
- Responses collected at SurveyMonkey.com
- Questions consisted of:
 - What services do you offer?
 - What are the eligibility requirements?
 - How is your program funded?
 - What gaps exist in home energy efficiency?

What services do you offer?

Agency/Organization	Services						
Survey Correspondence Question	Q. 7: Describe your home energy programs/activities.					Question 9	Question 19
	Rebates	CFL	Energy Audit	Housing Rehab	Financial Assistance	Charge?	Interested in Senior Prep.
Government							
City of Grand Rapids							
Kent County Dept. of Human Services							x
City of Grand Rapids Community Development Department			x	x			x
Kent County Housing and Community Development			x	x	x		x
County of Kent							
City of Wyoming Utilities Department						X, depends	
Grand Rapids Housing Commission				x	x		

What are the eligibility requirements?

Agency/Organization	Eligibility			
Survey Correspondence Question	Q 10: Who is eligible?			
	Income	Age	Location	Customer
Salvation Army Booth Family Services	x			
Michigan Green				x
Neighborhood Ventures			x	
Home Repair Services of Kent County, Inc	x	x	x	
DwellingPlace	x	x		
Rental Property Owners' Association				X-m
Healthy Homes Coalition	x	x		
Steepletown Neighborhood Services		x	x	

How is your program funded?

Agency/Organization	Funding						
Survey Correspondence Question	Q 10: How is your program funded?						
	Federal	State	County	Local	Donations	Grants	Revenue/Fee
Government							
City of Grand Rapids	x	x	x	x			x
Kent County Dept. of Human Services	x	x	x				
City of Grand Rapids Community Development Department	x	x			x		
Kent County Housing and Community Development	x						
County of Kent							
City of Wyoming Utilities Department			x	x			

What gaps exist in home energy efficiency?

Agency/Organization	Gaps				
Survey Correspondence Question	Q 15: Existing Home Energy Gaps in Kent?				
	Education/Knowledge	Funding	Lack of Material/Resources	Human Capital	No Response
Non-Profit					
Alliance for Environmental Sustainability	x	x			
Area Agency on Aging of Western Michigan	x				
ASCET					
New Development Organization	x				
Sierra Club	x				
Oakdale Neighbors					x
West Michigan Environmental Action Council				x	
Salvation Army Booth Family Services	x	x		x	

Gap Analysis

An analysis was conducted of the survey results to identify where gaps in home energy efficiency exist

□ Gaps Identified:

■ Education:

- 15 respondents indicated education as a gap

■ Funding:

- 8 respondents indicated a lack of funding was a gap

■ Human Capital:

- 10 respondents detailed a lack of human capital as a gap

Resource Catalog

- The Resource Catalog is compiled of agencies who indicated they wished to be included



Dwelling Place
101 Sheldon Blvd. SE, Suite 101
Grand Rapids, MI 49503
Contact: Scott Page
(616) 454-0928
spage@dwellingplacegr.org
Website: www.dwellingplacegr.org

Dwelling Place:

- We performed a study on green energy including: LEED Gold and Platinum certified buildings
- HUD, Michigan financing, non profit organizations, philanthropists, and the City of Grand Rapids provide funding
- Persons in assisted living and affordable housing are eligible
- We completed renovations on buildings with installation of “Green Roofs”, high energy efficient windows, insulation, remodeling, and heat gain/loss protection

- Contact Information
- Services offered
- Funding sources
- Eligibility requirements
- Other important aspects of program

Case Studies

Successful Home Energy Efficiency Programs in Other Counties

□ Counties studied:

- Macomb County, Michigan
- Milwaukee County, Wisconsin
- Ramsey County, Minnesota

□ Why we chose these counties

- Purpose was to identify effective strategies that may be of use to Kent County in their efforts to promote home energy efficiency
- EPA and DOE's Region #5
- Climate
- Topography
- Population



Detroit Notary



ForeclosureDeals.com



Destination360.com

Case Study Common Features

- Analysis of county case studies revealed that each of these counties are engaged in:
 - Education Outreach
 - Connecting residents with resources
 - Organizations/businesses engaged in home energy efficiency services
 - Organizations providing low-income energy assistance and loans for energy efficient improvements
 - Organizations providing education
 - Utility company's benefits to consumers
 - Energy audits, energy saving tips, rebates
- Home Performance with Energy Star program is used to efficiently facilitate home improvements

Home Performance with Energy Star (HPwES)

- Adopted by utility companies, state energy agencies, municipalities, and non-profit organizations
- Provides a program structure to assist HPwES Program Sponsors with developing a comprehensive home energy efficiency program
- HPwES provides a template for:
 - Home Performance Protocols
 - Contractor Recruitment Plan
 - Contractor Training
 - Contractor Participation Requirements
 - Marketing/Media Plan
 - Incentive/Financing Plan
 - Quality Assurance Plan

Summary

Countywide Structure

- Establish countywide goals for what constitutes home energy efficiency
- Connect with other organizations involved with home energy efficiency
- Create educational outreach tools
- Adopt a comprehensive home energy efficiency program similar to HPwES to oversee home improvement efforts

Senior Citizen Winter Preparation Program Findings

Senior Citizen Winter Preparation Program

- Goals:
 - Raise community awareness of surrounding poverty and the importance of energy efficiency
 - Provide weatherization and whole-house energy efficiency planning measures

- Researched five agencies that either:
 - Featured a weatherization program
 - Targeted senior citizens
 - Organized/facilitated a weatherization volunteer day



Senior Citizen Winter Preparation Program

Agency		Community Energy Project	Riverside Public Utilities	CCOA	Westchester County, NY DSPS	HEET: Home Energy Efficiency Team
Organization Type	Non-Profit	X		X		X
	Utility Company		X			
	Local Government				X	
Program Exclusive to Seniors					X	
Eligibility	Senior Citizens	Low-Income	X	X	X	X
		All				X
	Disabled Persons	Low-Income	X	X	X	
		All				X
	General Public	Low-Income			X	
		All				X

Common Features of Senior Weatherization Programs

- Of the five programs researched:
- Funding
 - Primarily supported by the Federal Government
 - Comprehensive programs leveraged additional dollars
- Program Structure
 - Weatherization Professionals
 - Volunteers
 - Energy Audit/Visit with Household
- Accessing Clients
- Most Common Procedures
 - Storm Window/Door Installation
 - Weatherstripping
 - CFL Replacement
 - Window/Door Caulking
 - Insulation Installation
 - Furnace Repair



Community Energy Project

Home Energy Efficiency Tool Kit

Weatherization Procedure and Whole-House Energy Efficiency Tool Kit

- Procedures are divided into three categories according to difficulty
- Beginner Procedures
 - No-cost
 - Mostly changes in behavior
- Intermediate Procedures
 - Low-cost
 - Moderate savings in energy costs
 - Do-it-Yourself Repairs
- Professional Procedures
 - Relatively expensive
 - Significant savings in energy costs
 - Repairs completed by professionals

Beginner Procedures

- Turn the heat down during the winter
- Wash laundry in cold water
- Turn off lights
- Clean coils in the back of the refrigerator
- Turn off the dishwasher's heated dry setting
- Close doors and vents to underutilized rooms
- Turn down hot water heaters
- Unplug 24/7 gadgets
- Clear obstacles blocking heating vents
- Clean the lint trap in the dryer before every load

Intermediate Procedures



Ceiling fans



Caulking



Filter Replacement



Chimney Flue Pillows



Door Sweeps

Lighting Replacement



Window Sealing



Low-Flow Shower Heads



Programmable Thermostats

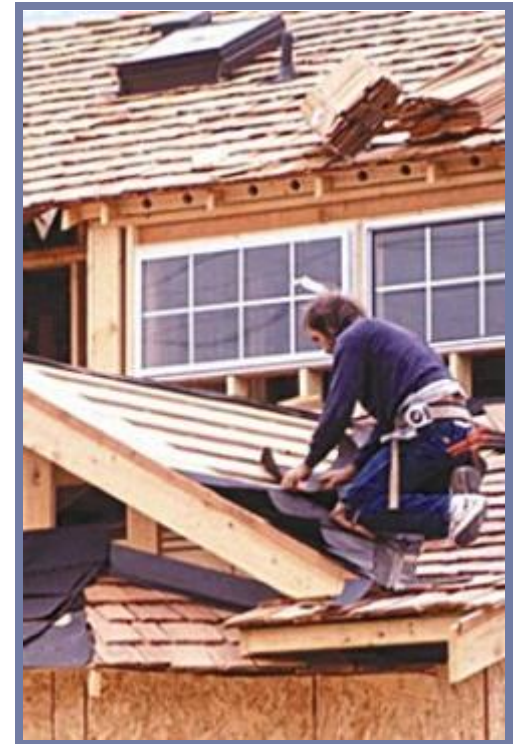


Hot Water Tank Insulation



Professional Procedures

- Heating system repair or replacement
- Roof replacement
- Window repair or replacement
- Outside door repair or replacement
- Insulation of attics and walls
- Duct maintenance



Conclusion

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- Countywide Program Structure
 - ▣ Target Renters
 - ▣ Formulate Goals and Objectives
 - ▣ Collaboration
 - ▣ Implementation

Conclusion

- ❑ Senior Citizen Winter Preparation Program
 - ❑ Involve Local Aging Agencies
 - ❑ Client Outreach
 - ❑ Recruit an existing organization to:
 - Organize countywide volunteer day(s)
 - Offer home energy efficiency community leader trainings for non-profits, faith-based groups, etc interested in conducting a volunteer day at a more local level



Thank you for your time!

Questions?