

# DSM Program Update

## Arizona Public Service Co. (APS)

December 8, 2011

Jim Wontor  
Manager, DSM Programs



# DSM Program Update

1. Current Status of EE Programs
2. Featuring 2 EE Programs
  - Residential  
→ Home Performance with ENERGY STAR
  - Business  
→ Small Business Express Solutions
3. Program Savings and Budget
  - 2011
  - 2012 proposed

# Current DSM Program Status

- Goal for 2011
    - \$60 million EE program spending
    - 352,000 MWh of EE savings
    - Total DSM savings equivalent to 1.25% of Retail Sales
  - Expected Year-End Results
    - Program spending of approximately \$55-\$58 million
    - EE savings of ~390,000 MWh (or 430,000 MWh including DR savings)
- Exceed savings goal by ~10%; while being ~5% under budget

## Featured Programs

- 1. Home Performance with ENERGY STAR**
2. Small Business Express Solutions

# Home Performance with ENERGY STAR

## Why This Program?

*ISSUE: Needed way to get deeper and more comprehensive energy savings per home*

- Have programs for many individual end uses and equipment/appliances
- Won't be able to meet future EE goals with only individual equipment-focused programs
- Customers want overall assessment and prioritization of actions with most impact on electric bill

# Home Performance with ENERGY STAR Background

- Launched in March 2010
- Contractor Based Model
  - General Contractors
  - BPI Certification per Auditor
- Implementation Partners:
  - FSL Home Energy Solution
  - Conservation Services Group
- Implemented in partnership with other electric utilities in AZ; working with gas companies to integrate with them



# **Home Performance with ENERGY STAR Program Concept**

- Customers Start with a “Checkup”
  - Customer Pays \$99
  - Contractor receives an additional \$200 incentive from APS
- Home Energy Checkup Includes
  - Blower Door Test
  - Duct Test
  - Infrared Diagnostics (when temp allows)
  - Health and Safety Testing
  - HVAC and Envelope Evaluation
  - Home is Energy Modeled and Report is provided to customers showing estimated costs and savings for each recommended action

# **Home Performance with ENERGY STAR Incentives and Financing**

*If customer implements recommendations, then eligible for following incentives:*

- Duct Sealing up to \$250 per system
- Air Sealing up to \$250 per home
- Attic Insulation up to \$250 per home
- Shade Screen up to \$250 per home
- HVAC - \$175 to \$525, depending on SEER
- Financing (launched March, 2011):
  - \$1,000 - \$15,000
  - Unsecured up to 60 months
  - Low fixed rate (currently 5.99%)

Performance based rebates proposed for 2012;  
currently under commission review



# Home Performance with ENERGY STAR Results

- Number of audits completed:
  - 2010: 2,363
  - 2011: 4,473 YTD
- 38% conversion rate to follow-up work after checkup
- Average project is a basic weatherization: duct sealing, air sealing and insulation
- 47 loans
  - \$292,772 total loan value (YTD)
- Represents 5% of the total residential annual energy savings in 2011 ... and growing
- Program recognized in 2011 with ENERGY STAR partner of the year – HPwES Emerging Markets.

# Home Performance with ENERGY STAR

## What Makes It Different?

- Whole house energy retrofitting
- Strong contractor model
  - Network of over 75 participating contractors
  - Contractors provide full service auditing and installation
- Good complement to ENERGY STAR new homes program and low income weatherization program
- Market consistency through utility collaboration
- Unique market factors
  - Decline in new home construction helped build work force for existing home retrofits
  - ARRA spending facilitated contractor development

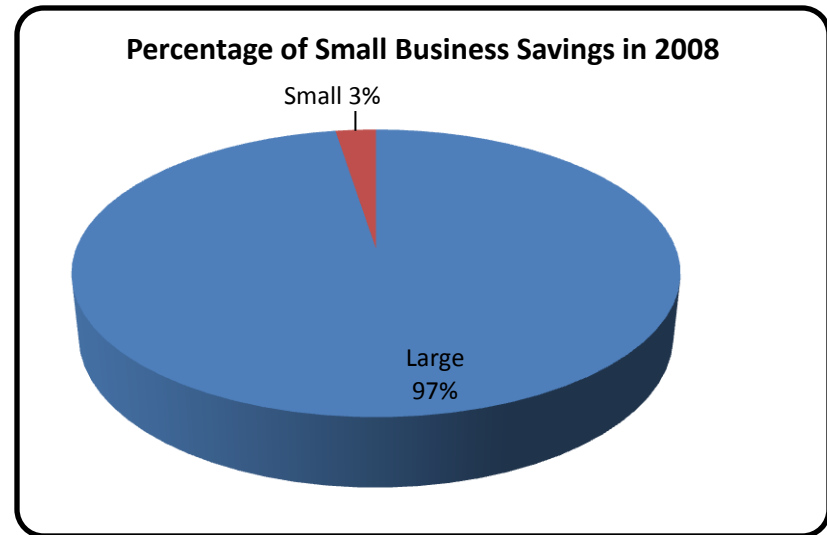
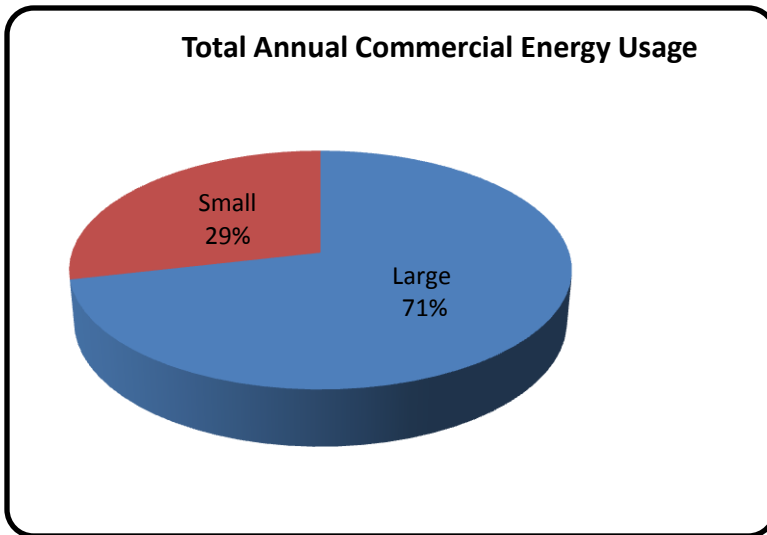
## Featured Programs

1. Home Performance with ENERGY STAR
2. **Small Business Express Solutions**

# Small Business Express Solutions

## Why This Program?

*ISSUE: Needed to get small businesses more involved in energy efficiency*



- Barriers to overcome
  - Not focused on energy savings; too many other priorities
  - Limited time to evaluate and “make the right choice” for EE
  - Very limited budget to fund EE investment

# Small Business Express Solutions

## Background

- Approved and introduced in 2009
- Program concept
  - Utilize existing contractors who specialize in serving small business customers
  - Provide consistent framework for assessment, savings estimation, and customer approval
  - Minimize up front cost to customers
  - Make it easy for customers and contractors
- Program implementation
  - 34 contractors currently working in program
  - Most jobs are lighting retrofits or refrigeration

# **Small Business Express Solutions Program Concept**

- How it works ...
  - Contractor conducts free energy assessment for customer
  - Contractor presents energy saving opportunities to customer for consideration
  - Customer decides to move forward and gives approval; project approved by APS
  - Contractor installs measures
  - Once project is complete
    - APS approves and sends payment to contractor
    - Customer pays contractor the balance of job
    - Customer realizes future bill savings

# **Small Business Express Solutions Results**

- Number of projects completed:
  - 2010: 1,124
  - 2011: 1,684 YTD
- Conversion rate from sale to project of 78%
- Average portion of cost paid by customer is 27%
- Most common projects are: lighting and refrigeration
- Financing available to small business customers for their share of up front costs
- Represents ~20% of the total non-residential annual energy savings in 2011 ... and growing
- Program increasingly popular with customers and contractors

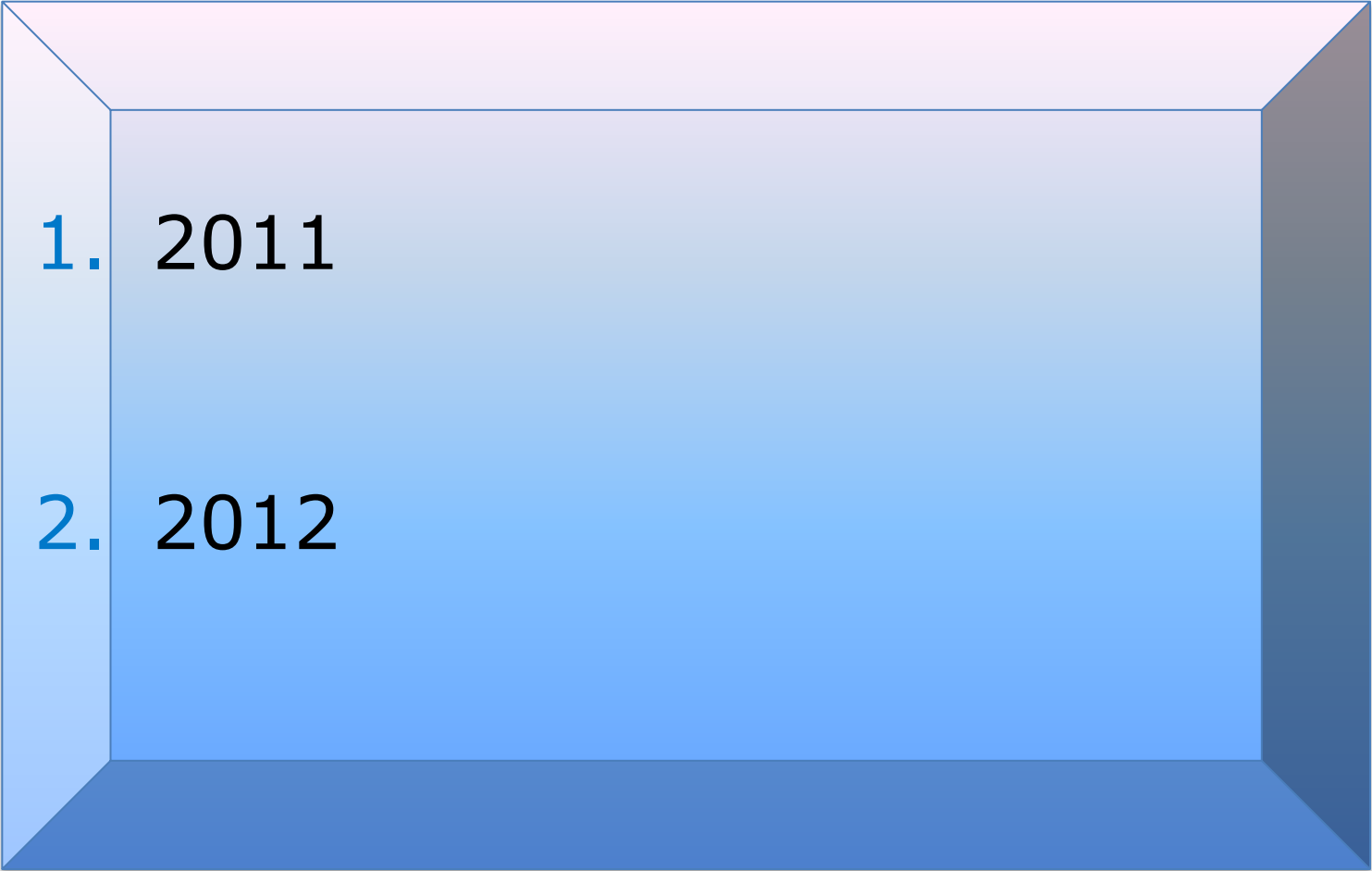
# Small Business Express Solutions

## What Makes It Different?

- Higher % of incremental cost paid by APS compared to other programs
- Contractor network specializing in this customer segment and these types of projects
- Participation is hassle free to customers and doesn't require significant investment
- Very quick payback to customers



# Program Savings and Budget



# 2011 EE Program Savings and Budget

RESIDENTIAL	Annual MWh Savings	% of Total EE Savings	Budget
Consumer Products	99,000	28%	\$7,547,000
Existing Homes	21,000	6%	\$14,812,000
New Construction	8,000	2%	\$2,800,000
Appliance Recycling	11,000	3%	\$1,661,000
Low Income	2,000	1%	\$2,779,000
Conservation Behavior	25,000	7%	\$1,017,000
Multi-Family	4,000	1%	\$1,277,000
Shade Trees	<u>1,000</u>	<u>&lt;1%</u>	<u>\$444,000</u>
<b>RESIDENTIAL TOTAL</b>	<b>171,000</b>	<b>49%</b>	<b>\$32,337,000</b>
NON-RESIDENTIAL	Annual MWh Savings	% of Total EE Savings	Budget
Large Existing	101,000	29%	\$13,792,000
New Construction	27,000	8%	\$3,410,000
Small Business	28,000	8%	\$4,460,000
Schools	23,000	6%	\$3,458,000
Energy Info Services	<u>2,000</u>	<u>&lt;1%</u>	<u>\$195,000</u>
<b>NON-RESIDENTIAL TOTAL</b>	<b><u>181,000</u></b>	<b><u>51%</u></b>	<b><u>\$25,315,000</u></b>
<b>TOTAL EE PROGRAMS</b>	<b>352,000</b>	<b>100%</b>	<b>\$57,652,000</b>

# 2012 EE Program Savings and Budget

RESIDENTIAL	Annual MWh Savings	% of Total EE Savings	Budget
Consumer Products	135,000	28%	\$7,605,000
Existing Homes	34,000	7%	\$15,629,000
New Construction	11,000	2%	\$3,608,000
Appliance Recycling	15,000	3%	\$1,734,000
Low Income	2,000	<1%	\$2,779,000
Conservation Behavior	31,000	6%	\$1,053,000
Multi-Family	6,000	1%	\$1,858,000
Shade Trees	<u>1,000</u>	<u>&lt;1%</u>	<u>\$447,000</u>
<b>RESIDENTIAL TOTAL</b>	<b>235,000</b>	<b>49%</b>	<b>\$34,713,000</b>
NON-RESIDENTIAL	Annual MWh Savings	% of Total EE Savings	Budget
Large Existing	152,000	32%	\$18,124,000
New Construction	27,000	5%	\$3,498,000
Small Business	32,000	7%	\$4,654,000
Schools	33,000	7%	\$3,614,000
Energy Info Services	<u>1,000</u>	<u>&lt;1%</u>	<u>\$78,000</u>
<b>NON-RESIDENTIAL TOTAL</b>	<b><u>245,000</u></b>	<b><u>51%</u></b>	<b><u>\$29,968,000</u></b>
<b>TOTAL EE PROGRAMS</b>	<b>480,000</b>	<b>100%</b>	<b>\$64,681,000</b>

# Summary

- Expect to meet 2011 goals
- 2 featured programs doing very well and growing
- Key challenges ahead:
  - Approval of 2012 DSM Plan
  - Desire by regulators to achieve higher savings goals for less budget money
  - Ability to get decoupling approved
  - Debate over methods to use to determine cost effectiveness of measures