

# BGE Smart Energy Savers Program®

## Energy Efficiency and Demand Response Programs

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# Snapshot of BGE

- Maryland's **largest** gas and electric utility
- Nation's **first** gas utility, and among first electric utilities
- Serving Central Marylanders for almost **200 years**
- **1.2 million** electric customers
- More than **650,000** gas customers
- **32 million** MWh 2011 energy sales and **7,236** MW peak demand
- Subsidiary of **Exelon Corporation**
  - Headquartered in Chicago, IL
  - \$32.7 billion in revenues
  - Regulated utilities include BGE, ComEd and Peco



## Drivers for Utility Energy Efficiency programs

- A cost effective alternative to building power plants – energy efficiency is called the first fuel by some in the industry
- To increase customer satisfaction
  - A way for customers to manage energy bills since no control over costs
- Environmental
- Corporate focus
- Regulatory and/or legislative
- BGE had three primary drivers:
  - Rate shock in 2006 due to electric deregulation caused big dip in customer satisfaction
  - Wanted to provide customers with tools to manage energy use
  - Environmental focus

# BGE Smart Energy Savers Program<sup>®</sup> Filed in 2007

Energy Efficiency



Demand Response



Smart Grid



## EmPOWER Maryland Energy Efficiency Act of 2008

- Governor / the Maryland Energy Administration (MEA) proposed law which was passed by the State legislature in 2008
- Requires a 15% per capita reduction in electric consumption and peak demand by 2015
- Utilities required to implement programs to achieve most of the savings
- Programs must be cost effective and applicable to all customer groups
- Each electric company to file with the Maryland Public Service Commission (PSC) an electricity savings and demand reduction plan every three years
- PSC oversees utility programs and performance



# BGE Programs in Support of EmPOWER Maryland

## Residential

- Quick Home Energy Check-up
- Home Performance w/ ENERGY STAR®
- HVAC Rebate Program
- PeakRewards<sup>SM</sup>
- Lighting & Appliances
- Refrigerator/Freezer Recycling
- ENERGY STAR® New Construction

## Commercial & Industrial

- Small Business Energy Solutions
- Energy Solutions for Business
- Retrocommissioning (RCx)
- Combined Heat and Power



# BGE PeakRewards<sup>SM</sup> Program

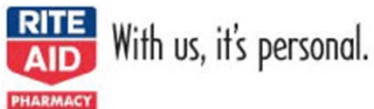
- Program used to reduce peak demand
- Customers allow “smart cycling” of their air conditioning in exchange for annual bill credits
- Choice of “smart” thermostat or outdoor switch
- Choice of 3 levels of cycling – 50%, 75%, or 100% -- and up to 2 overrides per summer
  - Summer bill credits totaling \$50-\$100
  - First-year bonus of \$50-\$100
- Ability to remotely adjust thermostat settings / programming
- 350,000 residential customers enrolled (about 40% of eligible market)
- About 500 MW of demand reduction
- Produces the equivalent capacity of building a medium power plant at a fraction of the cost

**PeakRewards<sup>SM</sup>**  
a BGE Smart Energy Savers Program<sup>SM</sup>



## Lighting Discount Program

- Instant savings on a wide variety of CFLs
- BGE offers a broad range of discounts on qualifying ENERGY STAR CFLs, LEDs and light fixtures
  - CFLs: Per bulb negotiated discounts
  - LEDs: \$10 per bulb
  - Light Fixtures: \$10
- Available at almost 300 participating retail locations





# Appliance Rebate & Recycling Programs

- Appliance rebates from retailers

- \$100 on Refrigerators/ \$150 on super efficient models
- \$75 on Freezers
- \$50/\$100 on Clothes Washers
- \$25 on Room Air Conditioners
- \$25 on Dehumidifiers
- \$350 on Electric Heat Pump Water Heaters



- Refrigerator/Freezer Recycling Program

- BGE will pick up operational old refrigerator or freezer and give customer \$50
- \$25 additional if a room A/C is added to the pick-up



# Quick Home Energy Check-up (QHEC)

- One-hour walk-through
- Written report
- Homeowners and renters
- Measures shown here are installed
- Savings: \$60/year
- 60,000 program to date!



CFLs



Smart Strip



Faucet Aerator



Hot Water Heater  
Tank Wrap



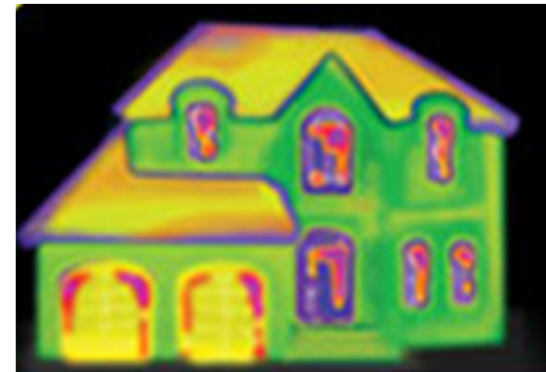
Pipe Insulation



Low Flow Shower  
Head

## Home Performance w/ ENERGY STAR®

- **\$100** comprehensive audit helps customers prioritize energy efficiency investments with advanced, diagnostic tests:
  - Blower door test
    - Air leakage
  - Thermographic camera
    - Effectiveness of insulation
  - Combustion and safety testing
    - Carbon monoxide and gas leaks
- Rebates up to \$2,000 for home improvements
  - **\$3,150** including HVAC
- Energy savings up to 20%
- Fewer drafts and more comfortable rooms



# HVAC Rebate Program

- \$175-\$400 rebates on new high efficiency heating & cooling equipment
- Over 300 participating contractors qualified to offer the rebates
- Over 25,000 rebates to date
- \$200 duct sealing rebate
- \$200 rebate for HVAC Quality Installation
- \$75 rebate for Diagnostic Tune-up

VI. Minimum Efficiency Levels and Associated Incentive Payment	
Minimum Efficiency For Measure	Associated Incentive Payment
<b>AHRI Rated Central A/C Units</b>	
Central A/C Tier 1: $\geq 14.5$ SEER and $\geq 12$ EER	\$175
Central A/C Tier 2: $\geq 15$ SEER and $\geq 12.5$ EER	\$350
<b>AHRI Rated Air Source Heat Pump</b>	
Tier 1: $\geq 14$ SEER and $\geq 11.5$ EER and $\geq 8.5$ HSPF	\$200
Tier 2: $\geq 15$ SEER and $\geq 12.5$ EER and $\geq 8.5$ HSPF	\$400
<b>AHRI Rated Gas Furnace</b>	
Tier 1: $\geq 92\%$ AFUE	\$300
Tier 2: $\geq 92\%$ AFUE w/ECM or ICM	\$400

## Small Business Energy Solutions (SBES)

- Existing Small Business Energy Solutions Program is one of BGE's most successful commercial programs focused on the needs and requirements of small businesses
  - Full turnkey service to greatly reduce time and effort needed to participate in the program
  - Includes energy analysis and easy-to-follow recommendations for improving energy efficiency
  - Incentives cover up to 80% of total cost of most energy efficiency lighting, electric water heating and refrigeration controls upgrades (materials, labor, and recycling)
  - “Direct Install” incentives paid to one of three installation contractors selected by BGE via Request For Proposal
- For average project, customers contribute less than \$1,000 with paybacks of less than one year (no financing needed)



## Energy Solutions for Business (ESfB)

- Provides incentives and technical assistance to industrial, commercial, institutional and non-profit customers
  - Prescriptive Component (Predetermined incentives)
    - Lighting & Controls
    - Unitary HVAC and Chillers
    - Variable Frequency Drives in HVAC applications
    - Commercial Refrigeration and Kitchen Equipment
    - Indoor and Outdoor LED Lighting
  - Custom Component
    - EE measures that go beyond Prescriptive offering: air compressors, building management systems, multi-stage chillers, etc.
    - Technical assistance to customers (up to \$15,000)
  - Combined Heat and Power
- Customers can use own contractors or staff to perform work

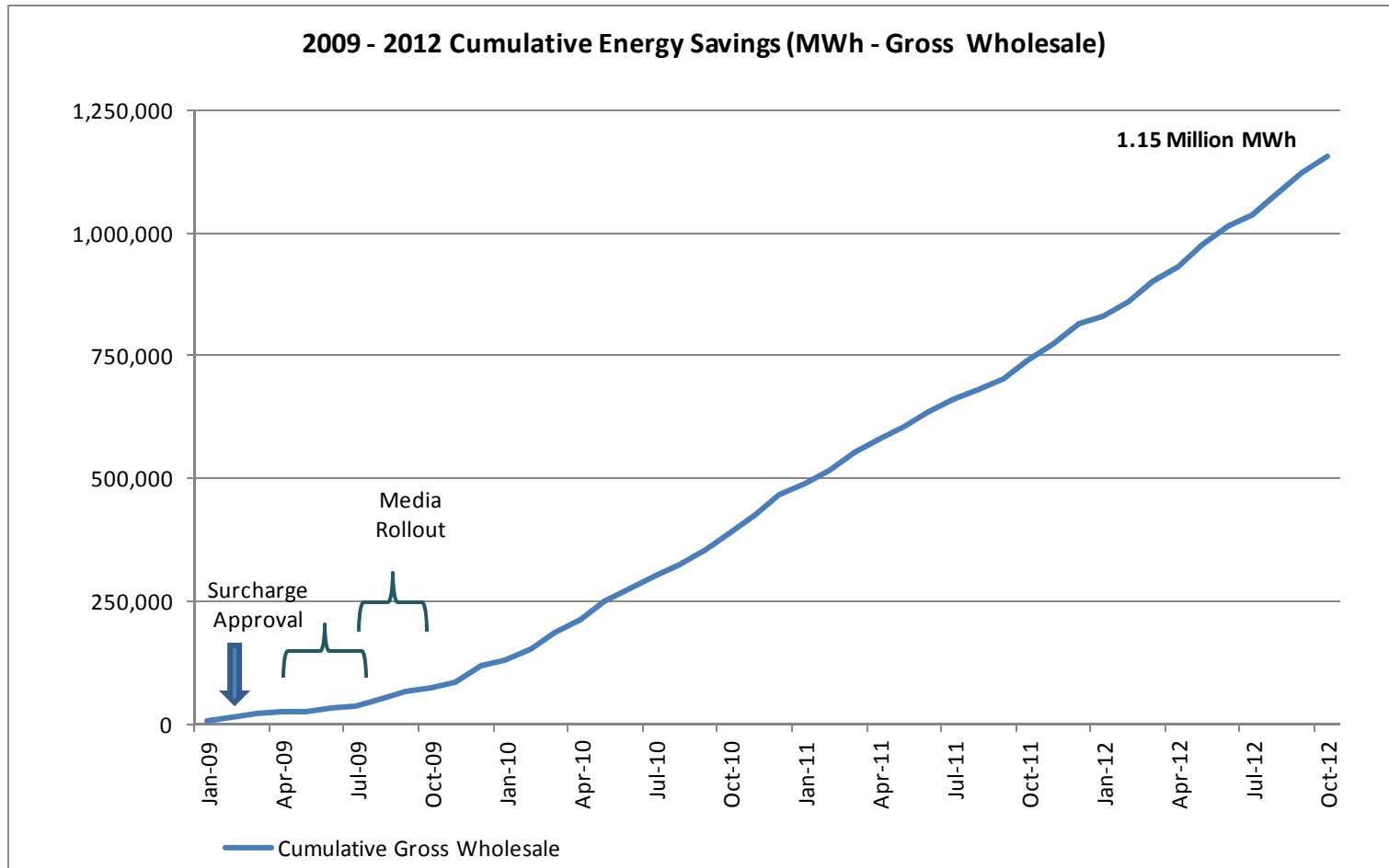
# BGE Energy Efficiency & Conservation Programs

## Significant results achieved through September 31, 2012

- Over 12 million compact fluorescent light bulbs sold
- Over 160,000 ENERGY STAR appliance rebates
- More than 47,000 efficient HVAC system replacements
- 80,000 Quick Home Energy Check-ups
- 21,000 recycled inefficient, working appliances
- 4,400 ENERGY STAR new homes completed
- 11,000 audits for Small Business Energy Solutions
- Almost 4,500 commercial projects

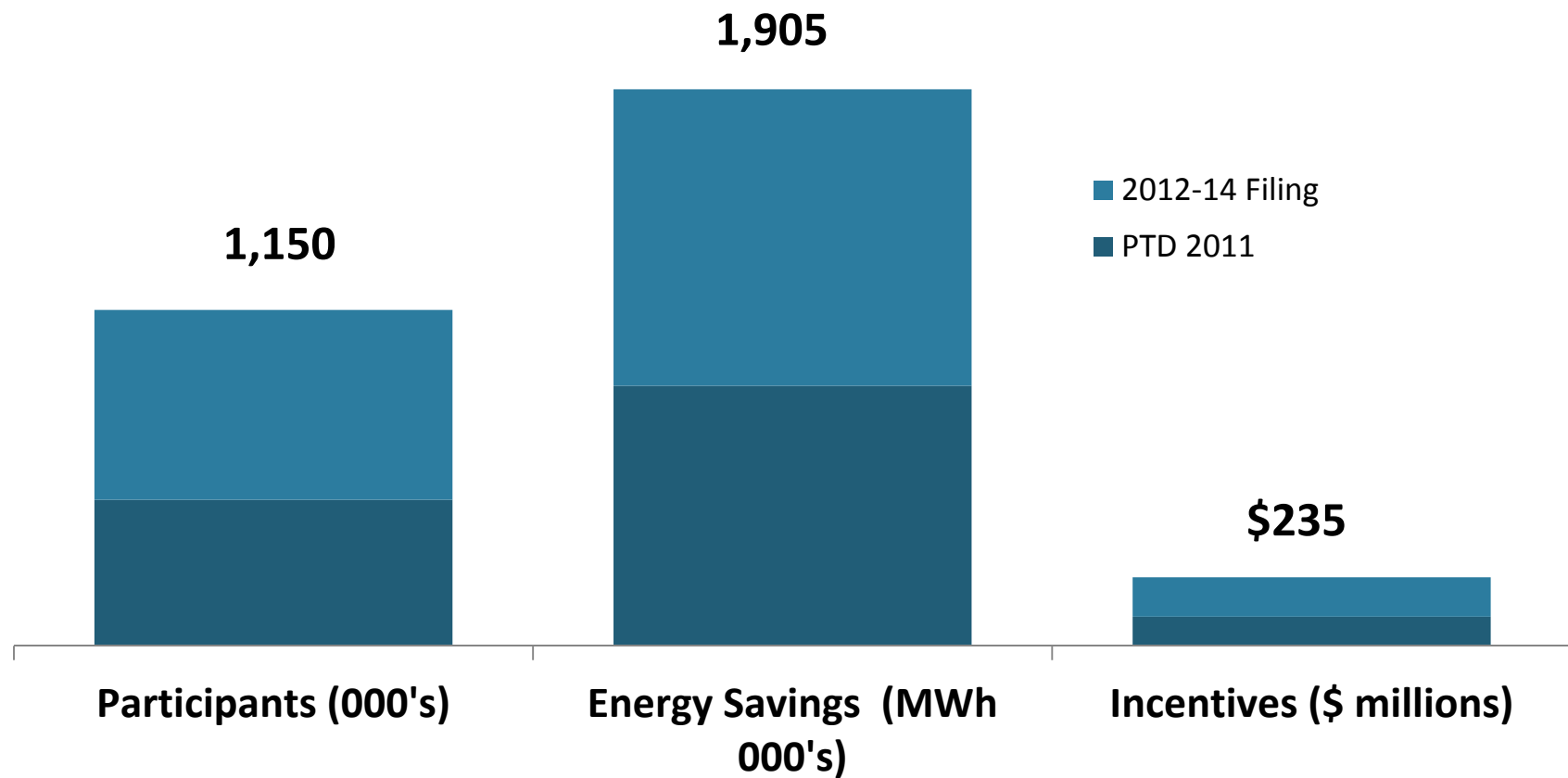
# Energy Savings to Date

- Program impacts grew rapidly after implementation





# BGE's Energy Efficiency Program Impacts Through 2014

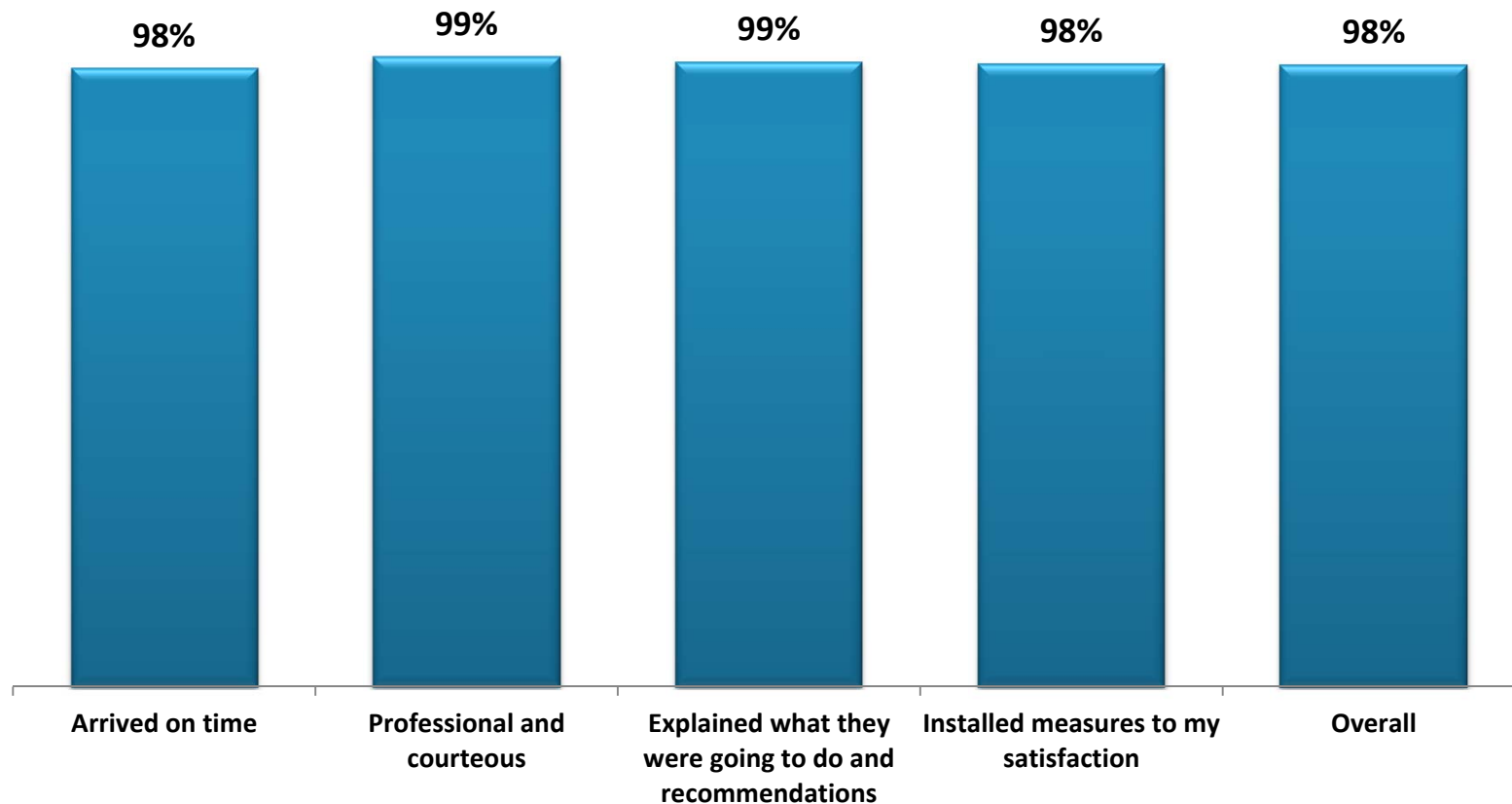


## The Financial Implications

- Need appropriate financial treatment for the utilities who offer programs that reduce sales – regulatory environment is critical
- BGE operates in a relatively good environment
  - PSC treats prudently incurred Demand Side Management expenditures like investments in infrastructure (pipes and wires)
    - Cost recovery – 5 years amortization for energy efficiency with BGE’s authorized rate of return
  - Decoupling – “Monthly Rate Adjustment” that changes delivery service price to reflect revenues established in latest rate proceedings
- Some states have penalties for failure to meet goals

## Positive Impact On Customer Satisfaction

- 90% overall satisfaction with residential programs
- 2700 respondents rated the QHEC Program Excellent or Good





## Winner of Numerous Awards

- 2010 winner of Platts Energy Efficiency Program of the Year Award
- 2011 and 2012 ENERGY STAR® Partner of the Year Awards
- Association of Energy Service Providers
- The American Marketing Association Baltimore Chapter
- Peak Load Management Alliance Award



For additional information, visit  
BGESmartEnergy.com

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Heating & Cooling  
Home Performance with ENERGY STAR  
Lighting & Appliances  
Limited Income  
New Homes  
Online Energy Calculator  
PeakRewards  
Quick Home Energy Check-Up  
Service Providers  
Glossary

**Business**  
Small Business Energy Solutions  
Energy Solutions for Business  
Retrocommissioning  
Service Providers  
Calendar  
What's New  
Customer Spotlights

### Save energy. Save money. Be energy smart.

Whether you're a homeowner, business owner, or contractor, the BGE Smart Energy Savers Program® offers you a variety of powerful options to save energy, money and the environment.

#### Residential Rebate and Discount Programs

- Heating & Cooling
- Home Performance with ENERGY STAR®
- Lighting & Appliances
- Limited Income
- ENERGY STAR® for New Homes
- Online Energy Calculator
- PeakRewards™
- Quick Home Energy Check-up
- Refrigerator and Freezer Recycling

#### Business Rebate and Incentive Programs

- Small Business Energy Solutions
- Energy Solutions for Business
- Retrocommissioning

*"I received many useful recommendations and plan to implement as many as I can!"*  
- Paulette B., participant in Quick Home Energy Check-up Program.

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Take the ENERGY STAR Pledge

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