

# Navigating Policy and Programs for Energy Efficiency

Tina Halfpenny

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**nationalgrid**

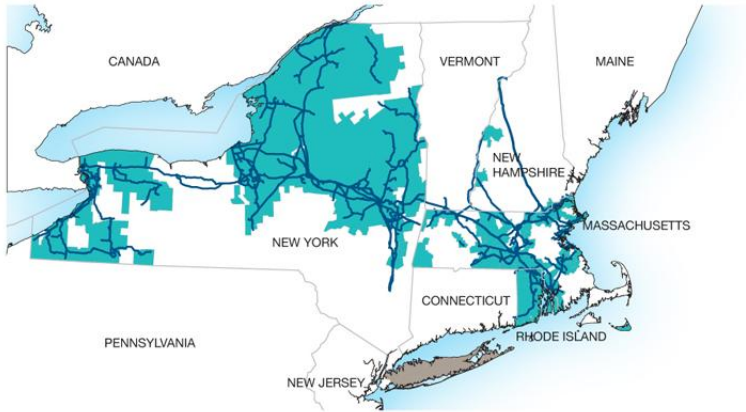
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# Who is National Grid?

- ◆ National Grid is an international electricity and gas company primarily based the northeastern US and UK. We play a vital role in delivering gas and electricity to millions of people in a safe, efficient and reliable manner.
- ◆ One of the largest investor-owned utilities in the world. It is the largest utility in the UK and the second largest utility in the US.\*
  - ◆ Almost 18 million customers
  - ◆ 50% UK, 50% US
  - ◆ 50% Electricity, 50% Gas
  - ◆ 50% Transmission, 50% Distribution
  - ◆ 27,000 -plus employees

*\*Based on customer numbers; includes the servicing of LIPA's 1.1 million customers*

# National Grid: an international electricity and gas company



- ◆ Provides natural gas to 3.5 million customers
- ◆ Distributes electricity to 3.3 million customers
- ◆ Services 1.1 million customers of Long Island Power Authority (LIPA)

# National Grid: an international electricity and gas company

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- ◆ Distributes electricity to 3.3 million customers
- ◆ \$100M Gas efficiency programs
- ◆ \$225M Electric efficiency programs

# MA: Green Communities Act

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Green Communities Act signed into law on July 2, 2008 to promote enhanced gas and electric energy efficiency throughout the Commonwealth

- ◆ Program Administrators to develop state-wide Three-Year Plan providing for acquisition of all available cost effective energy efficiency

Broad Stakeholder support

- ◆ Energy Efficiency Advisory Council (EEAC) assigned through GCA
  - Chaired by Department of Energy Resources (DOER)
  - EEAC comprised of 11 voting members
  - Includes representatives from Residential customers, LI weatherization and Fuel Assistance Network, Environmental community, Lg C&I users, Manufacturing, EE expert, Organized labor, D E P, Attorney General's office, OHED, DOER

# Three-Year Plan: MA - Energy Efficiency

- ◆ Goal to establish programs and targets that will achieve a significant increase in energy savings over the next 3 years
- ◆ Highlights include ramping up to 2.4% of sales in energy efficiency savings for electric programs and 1.15% of sales in energy efficiency savings for gas programs by 2012
- ◆ Three-Year Plan:
  - Aggressive – unprecedented – integrated
  - A construct for gas/electric program integration and seamless delivery across Program Administrators
  - A commitment to go both “deeper” (more comprehensive) in buildings and “broader” (more customers participating)



# Achievement of this aggressive plan involves:

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- ◆ Unprecedented collaboration of PAs
- ◆ Full integration of gas and electric
- ◆ New marketing approaches to reach underserved markets
- ◆ Testing of new approaches
  - ◆ Community mobilization initiatives
  - ◆ Deep energy retrofits
  - ◆ Main streets programs

# Funding Sources

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## 2010 Plans \$293M

- ◆ System Benefit Charge
  - ◆ Previously \$125M
- ◆ Annual funding plans
  - ◆ Previously \$25M
- ◆ Regional Greenhouse Gas Initiative
- ◆ Forward Capacity Market
- ◆ Other Funds

# Three-Year Plan: RGGI

- ◆ RGGI - Regional Greenhouse Gas Initiative. A cooperative effort by ten Northeast and Mid-Atlantic states to limit greenhouse gas emissions
- ◆ Approx. 80% of MA's 2010 RGGI proceeds dedicated to energy efficiency programs under the Three-Year Plan
- ◆ Allocations to the electric efficiency Program Administrators (PA) based on each PA's kWh sales
- ◆ 2009 auctions = \$50+ million
- ◆ National Grid's allocation
  - In MA \$22M
  - In RI \$5,200,000 (projected for 2010)
    - 60% earmarked for energy efficiency programs
  - In NH
    - The state has a RFP process, i.e. utilities have to bid for RGGI funds
  - In NY
    - RGGI auction process directed to NYSERDA for energy efficiency

# MA positioned to lead the nation in EE

**\$6.5 Billion** = Expected savings for electric and gas customers over the next three years through reduced energy bills

## Electric

- ◆ Enough to power more than 350,000 households
- ◆ 2.4M residential, low-income and commercial participants over 3 years
- ◆ \$ 1.3b investment over 3 years
- ◆ 30,000 GWh savings over the lifetime of the measures
- ◆ Efficiency represents 2.4% of sales in 2012

## Gas

- ◆ Enough to heat 57,000 homes or approx. 4% of gas heated homes for a year
- ◆ 920,000 residential, low-income and commercial participants over 3 years
- ◆ \$483M investment over 3 years
- ◆ 897M therm savings over the lifetime of the measures
- ◆ Efficiency represents 1.15% of sales in 2012

# Three-Year Plan: Challenges

- ◆ Reach **more** electric and gas customers
  - ◆ **Engage** more electric and gas customers
  - ◆ Additional administrative processes: volume of work, reporting, stakeholder buy-in
  - ◆ Maintain **controls** over QA and budget management
  - ◆ Achieve more extensive **savings**
    - It goes beyond lighting and appliances
  - ◆ Create willingness to **invest**
  - ◆ Outside **funding** sources
  - ◆ Short-term **bill impacts**
- ☑ ***In the midst of an already strained economy***

# Lessons Learned

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- ◆ Administratively complex
- ◆ Tailor efforts to customer needs, regional differences
- ◆ Build on customer and trade ally relationships.
- ◆ Focus messaging/outreach efforts on how program efforts serve targeted customer needs.
- ◆ Make program participation easy while gathering cost, market and savings information
- ◆ *Don't underestimate the importance and value of program evaluation efforts.*

# Residential Program Profile

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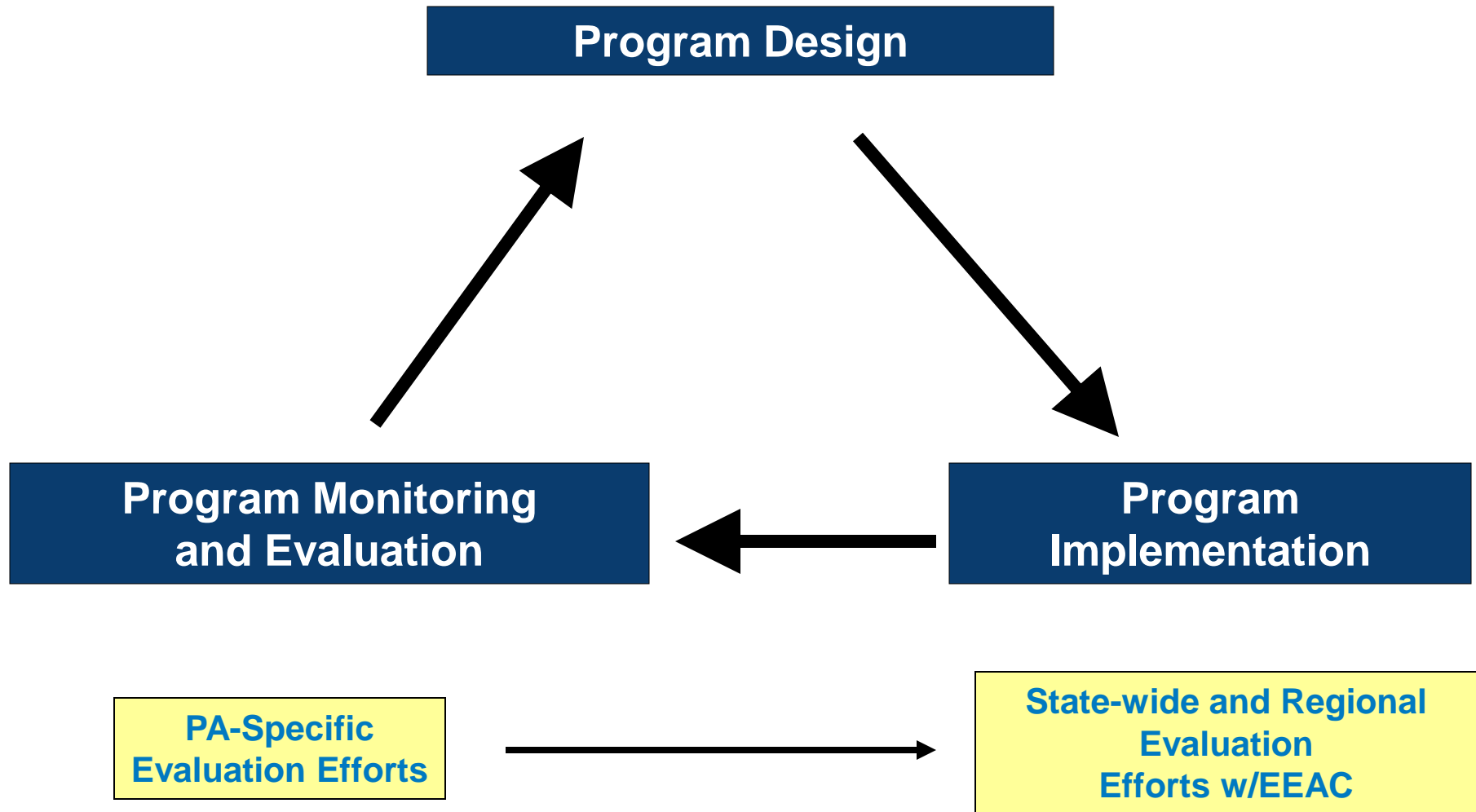
- ◆ Low Income Programs electric and gas
  - ◆ 14,000 participants, \$26M program allocation
- ◆ MassSave: Residential Conservation Services
  - ◆ 21,000 participants
- ◆ Retrofit:
- ◆ Weatherization Program
- ◆ Heating and Cooling Equipment Rebate Program
- ◆ Lighting and Appliances
- ◆ Multifamily
- ◆ Behavioral Marketing Program

# Residential Pilots

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- ◆ Heat Loan
- ◆ Deep Energy Retrofit ~50% energy reduction
- ◆ Energy Star New construction pilot
- ◆ Lighting Design
- ◆ Major Renovation

# Evolution in EM&V



# Three-Year Plan: Lasting Positive Impact

## In addition to energy savings, these Three-Year Programs:

- ◆ Reduce peak electricity demand by more than 400 MW – roughly the size of a conventional power plant
- ◆ Deliver nearly 15 million tons of greenhouse gas (GHG) emission reductions toward the Global Warming Solutions Act goal of reducing GHG emissions by 80% by 2050. Comparable to taking 1.6 million cars off the road
- ◆ Create more than 4,000 jobs across the Commonwealth



**Tina Halfpenny**  
Director, Residential Program Operations  
National Grid  
40 Sylvan Road, Waltham, MA  
(781) 907-1585  
[Christina.halfpenny@us.ngrid.com](mailto:Christina.halfpenny@us.ngrid.com)

