



Delivering Benchmarking Services through  
Whole Building Performance Programs----  
National Grid's Whole Building Assessment  
Initiative

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**Anita Hagspiel, WBA Program Manager**

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**nationalgrid**

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# Program Environment and History

## Program Environment

- In MA, RI and NH energy efficiency goals have increased significantly - increasing energy savings targets by 100% over the next 3 years.
- These aggressive goals can't be achieved by just doing more of the same---must be more comprehensive and get deeper savings.
- National Grid also began launching its programs in NY this year.

## National Grid's WBA Initiative

- One of the first utilities to partner with ENERGY STAR® to develop a program that incorporated the ENERGY STAR strategy and benchmarking tools
- The Initiative has become an integral strategy to helping customers achieve greater savings—a portal to other programs

# Whole Building Assessment Initiative (WBA)

## Whole Building Assessment

- Commercial and municipal customers
- Improve energy performance of customer's building
- Maintain efficiency over time
- Integrated solutions
- Leverage all available efficiency opportunities



# Whole Building Assessment Initiative (WBA)

## The Initiative helps customers to:

- Assess a building's energy performance (all fuels)
- Identify cost-effective energy upgrades & utility incentives
- Tie into the EPA's Energy Star Program
- Develop an action plan
- Undertake training & educational campaigns



# WBA Overview

## Eligibility Criteria

- National Grid commercial or municipal customer
- One building per customer
- The building:
  - Has electric energy use of 200 kW or greater
  - Is at least 75% occupied
- Knowledgeable, motivated, and available building staff
- Owner commits to the project via signed Memorandum of Understanding (MOU)
  - Provides an overview of the process
  - Agrees to continue to benchmark the energy use of the building over a year
  - Agrees to implement low-cost/no-cost measures

# WBA Overview - Process

## Step 1—Benchmark the Building using Energy Star's Portfolio Manager

- Buildings that rate very high or low (<25 or >75) are checked (data input, discuss key data with customer and ensure that all energy sources and meters have been included)

## Step 2—Conduct Building Energy Assessment (Lighting and Mechanical)

- Arrange a walkthrough of the building by a lighting expert and mechanical engineer. Low and no cost and capital projects included in the report findings.

# WBA Overview - Process

## Step 3—Action Plan

- The National Grid team and its consultants meet with the customer to discuss the findings and recommendations and to strategize a plan for helping the customer move forward with projects.
- The WBA highlights the building's ENERGY STAR score and estimates the score change if all recommended changes were to be implemented.

## Step 4—Implementation

- The National Grid Key Account Executive or Energy Efficiency Consultant works with the customer to provide technical and financial assistance for projects.
- O & M, facility staff training and occupant education

# WBA Overview--Cost

## Split report cost 50/50

- For municipal customers the report fee will be waived if the customer moves forward with an energy-efficiency project within a year.



# WBA Overview - Training & Occupant Education

## Benchmarking & Low-cost/No-cost Workshops

- 3 (spring/fall and a municipal focus)
- coordinated with NSTAR and Cape Light Compact

## Building Operator Certification

- Will provide greater incentives for WBA customers
- 2 course specifically for municipals being developed



## “Power to Save” Campaign



- Currently piloting this turnkey education campaign for elementary grades



## “How Sweet It Is” Campaign

- High school (13 years and older) /commercial occupants education campaign
  - Compact lighting offer
  - Energy Star “Change the World” pledge drive
  - Fund raising opportunity

# Program Plans 2009 - 2012

## 1. Expand the Reach of WBA

- 64 and increase to about 110/yr in 3 years

## 2. Achieve Greater Savings

- More savings per building—go deeper

## 3. Fine-Tune the Initiative

- Other Building Types
- Adjust program based on evaluation

## 4. Increase Training and Educational Efforts

## 5. Plan for Expansion in 2009 - 2012



# Benchmarking

## Benefits:

- A key criteria for assessing whether a building should be looked at more closely (spend resources to assess)
- Provides a gauge of energy performance that customers can understand.
- Ties to a national platform that gets customers attention—provides Energy Star brand recognition & credibility
- The score provides an incentive to make progress and re-benchmarking—customers want to improve the score and obtain the Energy Star plaque
- Highlights when energy use is way out of line for further investigation

# Benchmarking

## Initiative Support:

- Benchmark one building and provides account access for the customer to maintain the data in Portfolio Manager
- Provide individual training to get a customer up-to-speed
- Offer Benchmarking Workshops –1 workshop last year and 3 this year
- Will provide the “Energy Star Benchmarking Starter Kit” to customers at the Action Plan meeting.
- In addition to a building screening tool, benchmarking may be considered a customer service, marketing strategy or customer education tactic

# Benchmarking

## Important Considerations:

- Small errors can make a big difference in the score
- Being familiar with the system helps for accuracy--being able to tell if a score looks right or not and what to check (a score of 2 or 100 should be checked).
- Some customers will maintain the data in PM and re-benchmarking and *many* will not!
- Some customers see benchmarking as the *end* rather than a means to an end – particularly if they are being required to benchmark by a corporate office.
- It may be more of a challenge to convince a customer to take on energy projects if the building scores well (75+) and qualifies for the Energy Star plaque.
- National Grid can only take credit for kWh saved—”getting on the scale” (benchmarking) does not equal “losing weight “(kWh savings)

# WBA Initiative Results Since 2006

## Results Since 2006

- Conducted 131 commercial WBA energy studies
- 42 of those customers have applied for incentives
- \$1,705,137.00 have been committed with annual estimated savings of 4.5 million kWh
- Co-hosted 20 educational Campaigns
- Held 2 Benchmarking Workshops with 78 attendees

# Evaluation

## Findings

- A key focus of the evaluation to assess the effectiveness of the programs in stimulating the installation of energy efficiency measures as well as to estimate the “net value” provided by the program
  - About the Evaluation
  - Evaluation Process
  - Results

For More Information on WBA

**[Anita.Hagspiel@us.ngrid.com](mailto:Anita.Hagspiel@us.ngrid.com)**

**Ph: (781) 907-1581**

**Go to our website at:**

**[www.nationalgridus.com](http://www.nationalgridus.com) or**

**[www.thinksmarthinkgreen.com](http://www.thinksmarthinkgreen.com)**