Front-Runners in Energy Renovation Policies: What Can We Learn From Them?
New York State

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NYSERDA
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NYSERDA

- New York State Energy Research & Development Authority
- Public Benefit Corporation
  - Established in 1975
- Responsibilities
  - State energy planning
  - Research & development
  - Clean energy deployment programs
NYSERDA’s Mission

NYSERDA strives to facilitate change through the widespread development and use of innovative technologies to improve the State’s energy, economic, and environmental wellbeing.
New York State Strengths

- Funding & Experience
- Leadership & Innovation
- Political Support & Partnerships (top-down)
- Community-Based Strategies (bottom-up)
- Market Transformation
Funding & Experience

- 16-year history of running deployment programs
- Statewide collaboration
- Harnessing multiple funding sources (rate-payer funding, RGGI, federal funding)
Funding & Experience

- Deregulation
- Public Service Commission Establishes (PSC) Systems Benefit Charge (SBC)
- NYSERDA Begins Running Deployment Programs
- PSC Establishes Renewable Portfolio Standard (RPS)
- Regional Greenhouse Gas Initiative Begins
- PSC Establishes Energy Efficiency Portfolio Standard (EEPS)
- Green Jobs/Green New York Established
- Cleaner Greener Communities Launched

SBC I
SBC II
SBC III
SBC IV

RPS
RGGI
EEPS I
EEPS II
E2
RGGI

- Regional Greenhouse Gas Initiative
- First Mandatory Cap and Trade Program in North America
- 9 Northeast States (CT, DE, MD, ME, NY, MA, NH, VT, RI)
Leadership & Innovation

- Designing innovative deployment programs and training standards that lay the foundation for national standards
  - Home Performance w/ ENERGY STAR
  - ENERGY STAR Multifamily High Rise Program
  - Building Performance Institute
Leadership & Innovation

1. New York City Energy Code
   Today, our energy standards are controlled by a New York State code that includes a critical loophole - one that no other state has - that allows inefficient equipment to be replaced with similarly inefficient equipment. This legislation will create a local New York City Energy Code and eliminate this unique loophole. This means when a renovation takes place in one of NYC's one million buildings, new equipment will have to meet current standards, resulting in energy reductions and cost savings.

2. Lighting Upgrades
   A fifth of all NYC's energy is used in lighting - and lighting upgrades routinely pay for themselves in a year or two. This legislation will require all large buildings to upgrade all of their lighting over the next 12 years. The bill proposes that upgrades be completed with other renovations, and thus will not inconvenience building users. The requirement will not apply to residential living spaces.

3. Benchmarking
   You can't manage what you don't measure. This legislation will require large buildings to conduct an annual analysis of energy consumption using a free, online tool provided by the U.S. Environmental Protection Agency. Building owners need only know basic information about their building and have their energy bills on hand. Benchmarking provides a simple and effective tool for owners and potential purchasers alike to compare buildings' energy consumption with similar buildings, to start to understand how efficiently

4. Audits and Retrofits
   Smart energy-saving retrofits pay for themselves, but knowing which ones work in an individual building requires an analysis called an energy audit. This legislation will require large buildings to conduct an energy audit once every ten years, and to undertake those improvements that pay for themselves. The law will apply to the central systems the building shares, to minimize impacts on individual tenants and ensure that the owner who makes the investment will realize the savings. On average, energy audits cost $5 per square foot; required retrofits will average less than

5. Green Workforce Development Training
   These energy-saving upgrades will require a skilled workforce and create 15,000 construction-related jobs. To ensure that New Yorkers have these skills, the City is partnering with real estate and labor to identify the qualifications and training workers will need to perform these new green jobs. Because building retrofits will be a key economic driver in the new green economy, the New York State Energy Research and Development Authority (NYSERDA) and the U.S. Green Building Council will work with us to design and fund the training that is required.

6. Green Building Financing
   By definition, smart retrofits pay for themselves, reduce utility bills and improve buildings' financial health; every building can profit from this kind of improvement. However, some owners may not be able to obtain financing to make these upgrades. To begin to assist these owners, New York City will apply for federal stimulus funds to establish a pilot revolving loan fund. Loans will be offered to owners who demonstrate financial need or have already completed an energy audit. Energy savings data will be collected to encourage private sector lending in the long-term.

New York City’s Greener Greater Buildings Plan

- Benchmarking
- Audits & Retrofits
- Code Updates
- Workforce Development

THE NEW YORK CITY
GREENER, GREATER
BUILDINGS PLAN
Political Support & Partnerships

• Leadership from Governor Cuomo & previous Governors
• Robust network of state and municipal governments, agencies, and regulators working together
• Participation in RGGI
• State Energy Planning
Community-Based Strategies

- Green Jobs/Green New York Innovative Legislation
- Focus on engagement at the community level through Community Benefit Organizations (CBOs)
- Locally tailored outreach strategies
Community-Based Strategies

- **Cleaner Greener Communities Mission:**
  *Empower regions to lead the development of sustainability plans and implement projects that will significantly improve the economic development and environmental well-being of their communities.*

- **1st state to create comprehensive regional sustainability plans**
Market Transformation

- Creating an educated workforce and market mechanism for delivering clean energy services
Market Transformation

- Utilizing information from programs to inform the marketplace
Market Transformation

- Finding creative strategies to stimulate action in the marketplace
Market Transformation

- Connecting clean energy with economic development
- Increasing the availability of capital for clean energy projects
Market Transformation

Scientific Research & Market Analysis

Technology Development & Demonstration

Business & Market Development

Market Adoption & Expansion

Standard Practice

Energy Innovation Chain
Questions?

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