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

Lindsay Robbins NYSERDA April 29, 2014



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 Players

NYS Public Service Commission

Governor's Office

NYS Legislature

Municipal Utilities

Investor-Owned Utilities Department of Environmental Protection

New York City Government NYS Municipalities

CBOs & NGOs



New York State Strengths

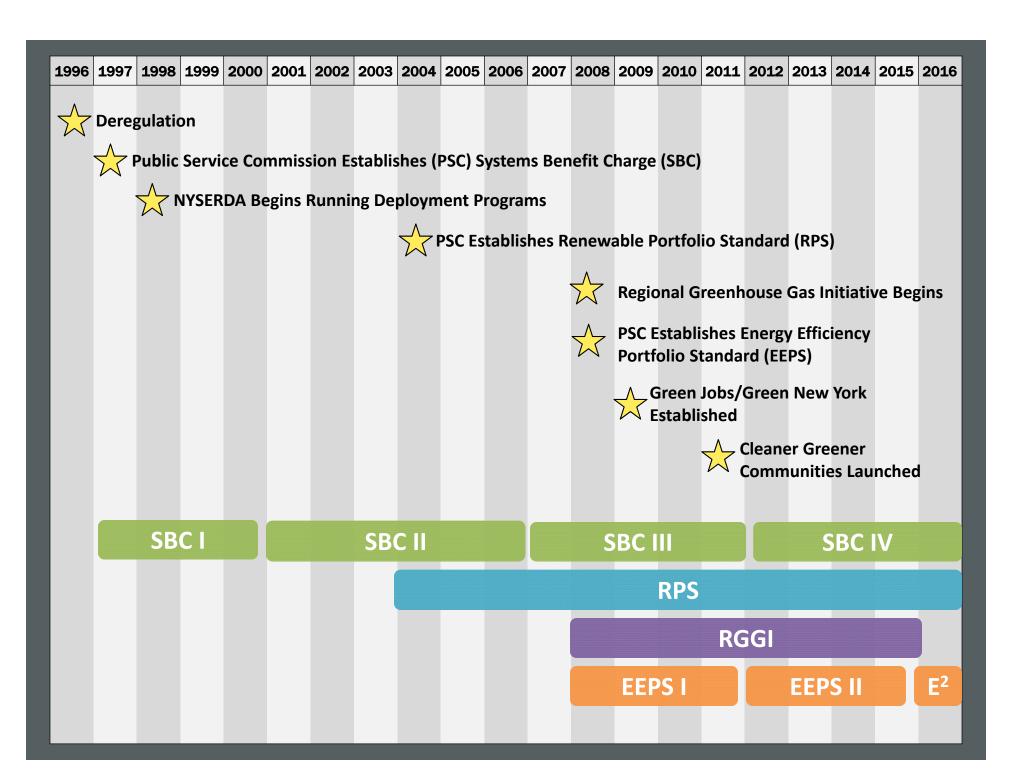
- Funding & Experience
- Leadership & Innovation
- Political Support & Partnerships (top-down)
- Community-Based Strategies (bottom-up)
- Market Transformation



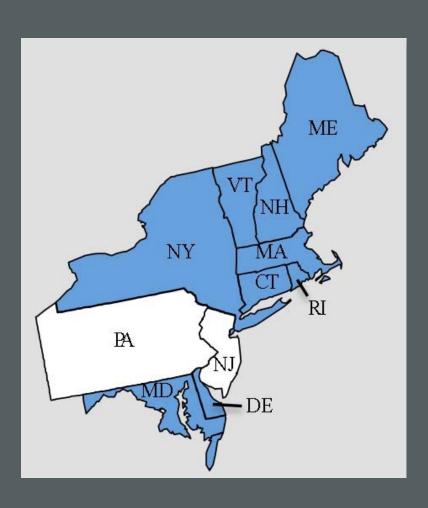
Funding & Experience

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





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 STARMultifamily High RiseProgram
 - Building Performance Institute



Leadership & Innovation

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.

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

Green Workforce Development Training

These energy-saving upgrades will require a skilled workforce and create 19,000 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.

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.

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 15¢ per square foot; required retrofits will average less than

Green Building Financing

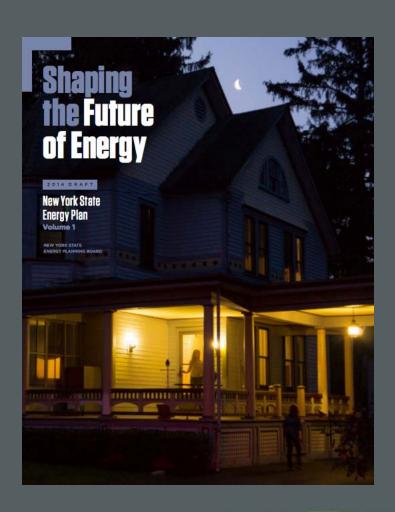
By definition, smart retrofits pay for themselves, reduce utility bills and improve buildings' financial health; every building can profit from this kind of improvement. However, some owners may not be able to obtain financing to make these upgrades. To begin to assist these owners, New York City will 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
 - WorkforceDevelopment

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



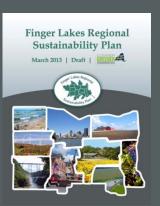


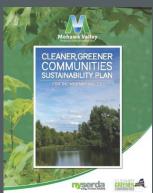
- Green Jobs/Green New York Innovative Legislation
- Focus on engagement at the community level through Community Benefit Organizations (CBOs)
- Locally tailored outreach strategies

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



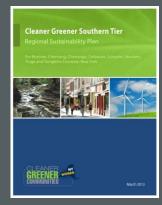






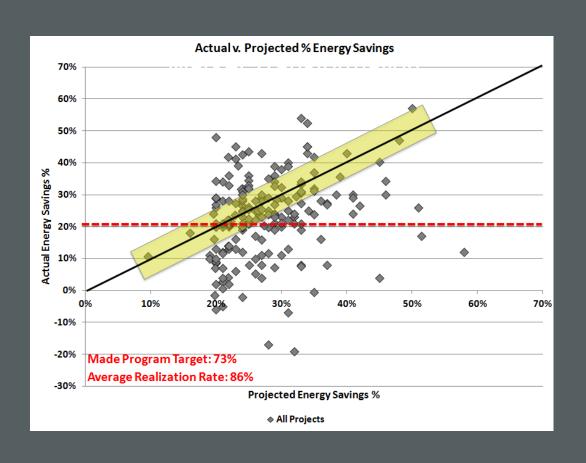






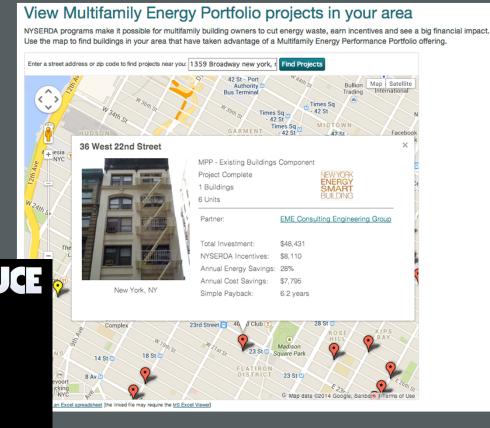
Creating an educated workforce and market mechanism for delivering clean energy services





Utilizing information from programs to inform the marketplace

 Finding creative strategies to stimulate action in the marketplace





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

Technology
Development
& Demonstration

Scientific Research & Market Analysis

Business & Market Development

Energy Innovation Chain

Market Adoption & Expansion

Standard Practice



Questions?

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