

Energy Efficiency Financing: New York City

Political Climate Change 2010

Pratt Center for Community Development

June 28, 2010

On Earth Day in 2007, Mayor Bloomberg released a comprehensive sustainability plan to create a greener, more sustainable city.



PlaNYC is a roadmap to achieve 10 goals:

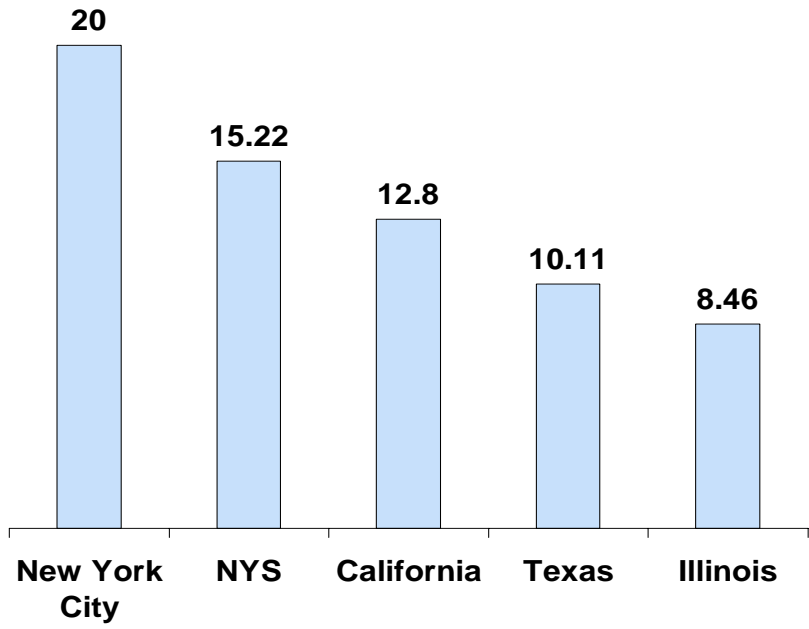
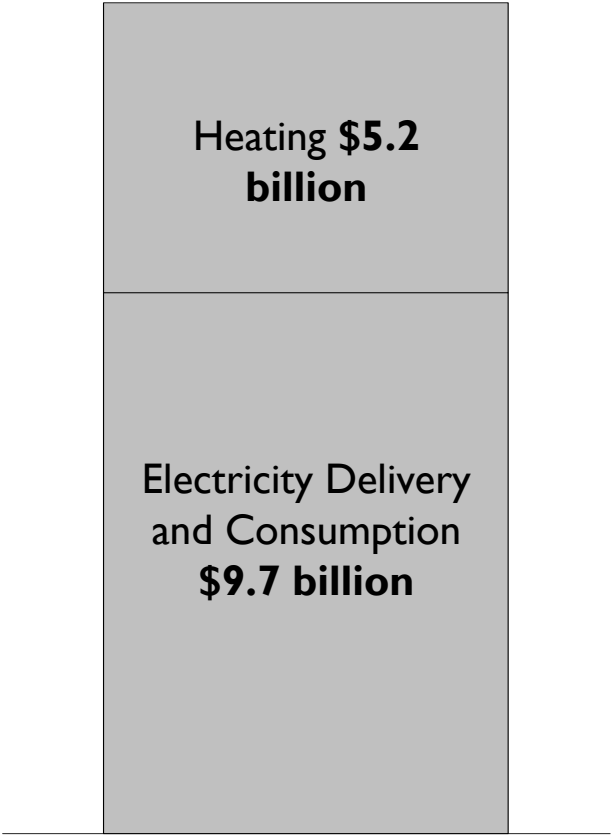
- 1 Create enough housing for our growing population
- 2 Ensure all New Yorkers have parks within a 10-minute walk
- 3 Clean up all contaminated land in New York City
- 4 Develop water network back-up systems
- 5 Open 90% of our waterways and protect natural areas
- 6 Improve travel times by adding transit capacity for millions
- 7 Achieve “State Of Good Repair” on our transportation system
- 8 Upgrade our energy infrastructure to provide clean energy
- 9 Achieve the cleanest air of any big city in America
- 10 Reduce global warming emissions by 30%

New Yorkers spend ~\$15 billion/yr on energy; our energy costs are the highest in the nation.

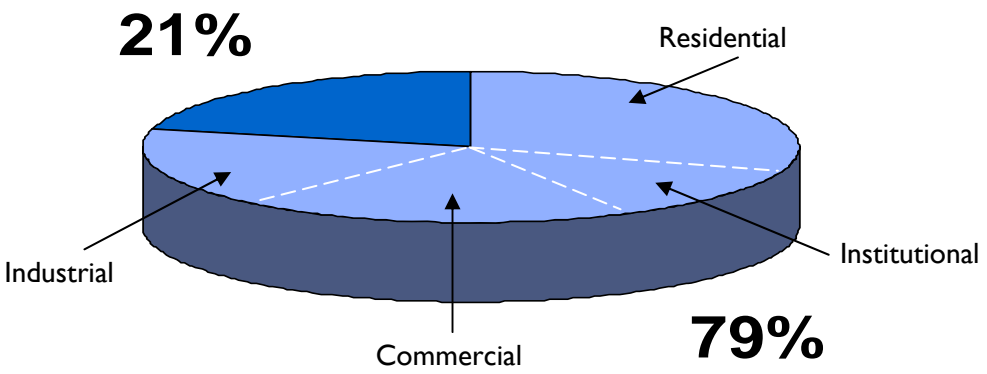


NYC energy expenditures 2007

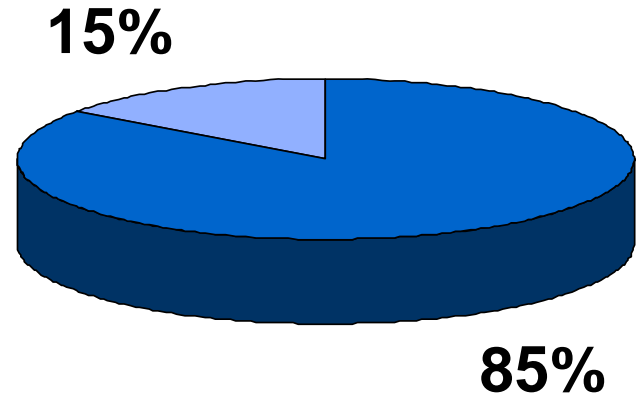
Average retail electricity prices Per kwh, 2007



Existing buildings are the most important area for carbon reductions in NYC.



79% of all NYC emissions are due to energy used in buildings...



... and in 2030, 85% of our buildings will be ones that already exist

No city has acted on existing buildings in a comprehensive way . . .

- Many large cities have set LEED requirements for all large new developments
 - Boston, Washington, Los Angeles, San Francisco
- However, existing buildings are more important
 - Average age of NYC buildings is 60 years
 - In 2030, 85% of NYC's building space will be pre-2005
 - Widely recognized by media and environmentalists
- Only small attempts have been made on existing buildings
 - Washington, DC – requires benchmarking of commercial buildings
 - San Francisco – large gut renovations require LEED Certified

. . . creating a need and an opportunity for New York to lead

- Addressing existing buildings is necessary to achieving our 30% target
- Cities across the country and around the world have already expressed interest in what we are proposing (e.g., London)
- By taking the lead, NYC can ensure a rational approach and set a national standard

The New York Times

Green Buildings Don't Have to Be New

“The vast stock of existing buildings presents a much bigger opportunity to cut down on energy consumption and carbon emissions”

- January 27, 2008

**4 City
Council Bills**

- Four City Council bills that address energy efficiency in existing buildings
 - LL 84: Benchmarking
 - LL 85: NYC Energy Code
 - LL 87: Audits and Retro-commissioning
 - LL 88: Lighting Upgrades

**Workforce
Development**

- City working with WIB, labor, real estate, NYSERDA, and others to:
 - Identify workforce needs and opportunities created by the legislation
 - Identify and coordinate training needs to ensure supply of necessary skills
 - Advise on certification and QA/QC requirements

Financing

- Pilot lending programs using Federal stimulus funds
- “Proof of concept” to private lenders that loans can be based on savings generated from energy efficiency improvements
- First step towards more comprehensive financing solutions

PlaNYC

- Initiative to create NYC EE Authority
 - Coordinated incentive and financing programs
 - Awareness and training campaign
 - Green job training efforts

Current Focus

- **Demand Generation** (education, marketing, and outreach)
- **Innovative Financing**
 - PACE
 - Future financing programs
- **Economic Development**
 - Workforce development / green jobs
 - Quality assurance / quality control (QA / QC)

Models

- NYSERDA Green Jobs – Green New York: <http://www.nyserda.org/GreenNY/>
- Delaware Sustainable Energy Utility: <http://www.energizedelaware.org>
- Cambridge Energy Alliance: <http://cambridgeenergyalliance.org>
- Efficiency Vermont: <http://www.encyvermont.com>
- Green Finance San Francisco: <https://greenfinancesf.org>
- Solar Sonoma County: <https://sonomacountyenergyaction.org>
- Baltimore Neighborhood Energy Challenge: <https://baltimoreenergychallenge.org>

**What is
PACE?**

- Property Assessed Clean Energy (PACE)
- A way to help residential and commercial building owners access the upfront capital needed to make energy efficiency and renewable energy improvements
- Existing programs (partial list):
 - Babylon, NY (2008)
 - Berkeley, CA (2008)
 - Boulder, CO (2009)
 - Sonoma County, CA (2009)
 - San Francisco, CA (2010)

**How does
PACE work?**

- Property owners voluntarily opt-in to program, borrowing money from a municipality to finance energy retrofits
- Municipality raises proceeds through revenue bond issuance
- Property owners repay over 15-20 years through property tax bill
- If property is sold, new owner accepts payment obligations
- PACE assessment occupies same senior status as other government charges (“sits above” private encumbrances)

**Impact /
Benefits**

- Lowers energy bills and improves cash flow
- Reduces greenhouse gas emissions
- Creates local “green” jobs

Financing

- *Municipal Sustainable Energy Loan Program legislation needs to be amended by State legislature; City Council law is also required*
- Work with one or more program lenders to originate PACE loans, with NYC Dept of Finance levying and billing PACE charges
- Create City-sponsored entity to issue bonds backed by PACE charges
- Fund loan loss reserve account (s) to credit enhance bonds

Demand Generation

- Web-based “one stop shop” info center / clearinghouse
- Citywide public education campaign:
 - Community organizations – NGOs, religious organizations, etc.
 - BIDs
 - Contractors / unions
 - Financial institutions
 - Social marketing

Workforce Development

- Contractor certification and training standardization
- Monitoring and verification standardization
- Other QA/QC efforts