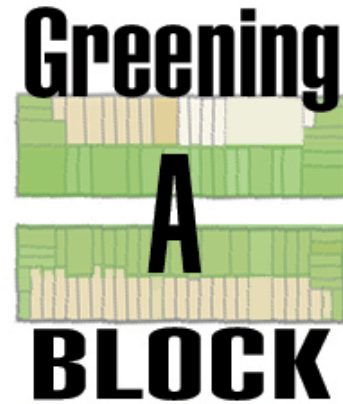


**Solar One**  
**Green Renter Series**  
**January 17<sup>th</sup>, 2006**



A Project to Promote  
Community Health and  
Environmental and  
Economic Sustainability

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# Greening A Block

*Greening a Block is a revolutionary showcase of concentrated urban energy efficiency. It will demonstrate the achievable gains in air quality, energy savings, job opportunities, and dollars from community-scale energy efficiency investments.*

- 1 City Block near Con Ed 14<sup>th</sup> St. Plant
  - 40-50 Buildings
  - 400-500 Apartments
  - 10-15 storefronts
  - Community Board #3 (CB3)

# The Project Area



# Why Focus on One Block?

- Broad sample of buildings and residents.
- Economies of scale.
- “Friendly competition.”
- No cherry-picking.
- Aggregate air quality and job creation benefits.
- Not a skyscraper or a pilot building.
- Empower a community that faces a power plant.
- Embed knowledge and understanding of sustainable “green” practices within a community.

# A Showcase Project

- Greening A Block will develop a life size, fully functioning, model showcase of energy efficiency in an urban environment.
- This first block will serve as a template for similar efforts throughout CB3, other New York City neighborhoods, and other urban centers worldwide.

# The Con Ed Settlement

- Manhattan Community Board 3 has control over the funds that can ensure high participation rates in Greening a Block.
  - **\$4.25 Million** – Total amount that Con Ed set aside for the community as part of a settlement regarding the expansion of the 14<sup>th</sup> Street East River Generating Station.
  - **\$2.3 Million** – Amount Greening a Block proposes to utilize from this fund. (Total budget: \$3.84 M)

# Goal: 30% Energy Savings

- 190,000 gallons worth of fuel oil, natural gas and electricity per year  
(= 380 cars off the road)
- \$478,000 / year in fuel savings
- Electricity Savings per apt: \$217/yr.

*(Based on fuel oil @ \$2.50/gallon, electricity @ \$0.20/kWh)*

# Capacity for Energy Efficiency

- Heating and Hot Water System Efficiency
- Air Sealing and Insulating
- Common Area Electricity Efficiency
- Individual Unit Electricity Efficiency



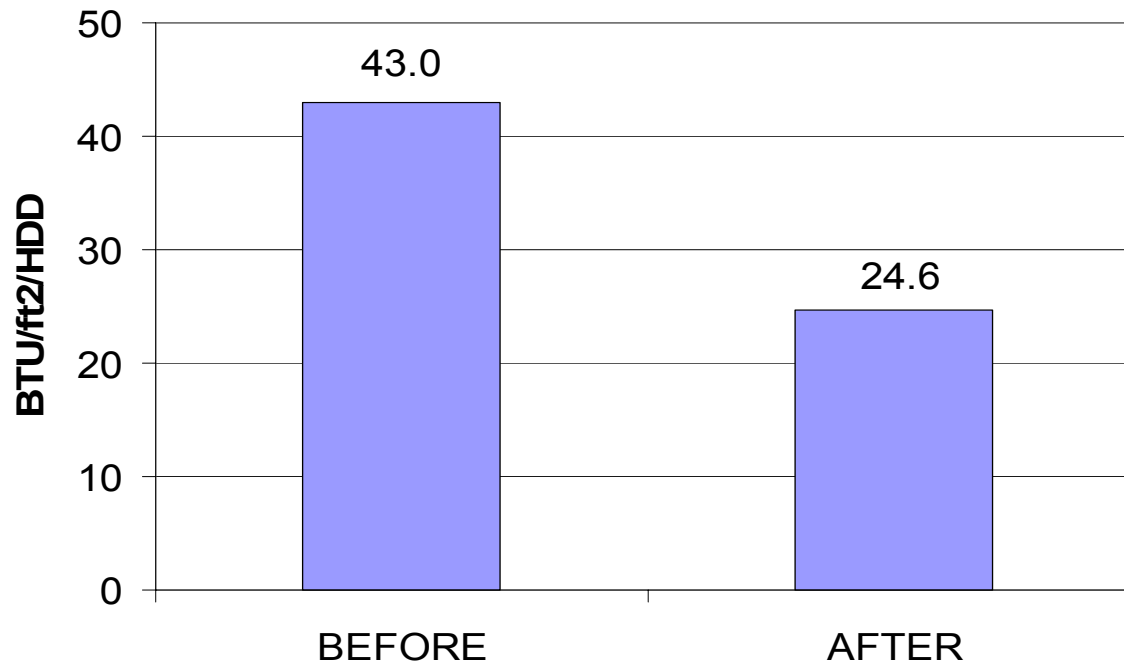
# Benefits

- Energy Cost Savings.
- Comfort Improvement.
- Air Quality Improvement.
- Water Savings.
- Job Creation.
- Community Empowerment.

# Cross-Cutting Methodology

- Working with community groups and trusted leaders.
- Understanding stakeholders and their needs/concerns (owners, occupants, etc.)
- Strong educational component.
- Flexible and informed staff.
- Using state and federal subsidy programs.
- Leveraging money from the Con Ed settlement fund.

# Energy Efficiency: Heating Systems



9 Lower East Side Buildings with Steam Heating System Improvements performed by Henry Gifford

# A Variety of More Efficient Lighting



**14W Floodlight (R-30),  
50 Watt Equivalent**



**25W Lightwiz Basic Spiral,  
75 Watt Equivalent**

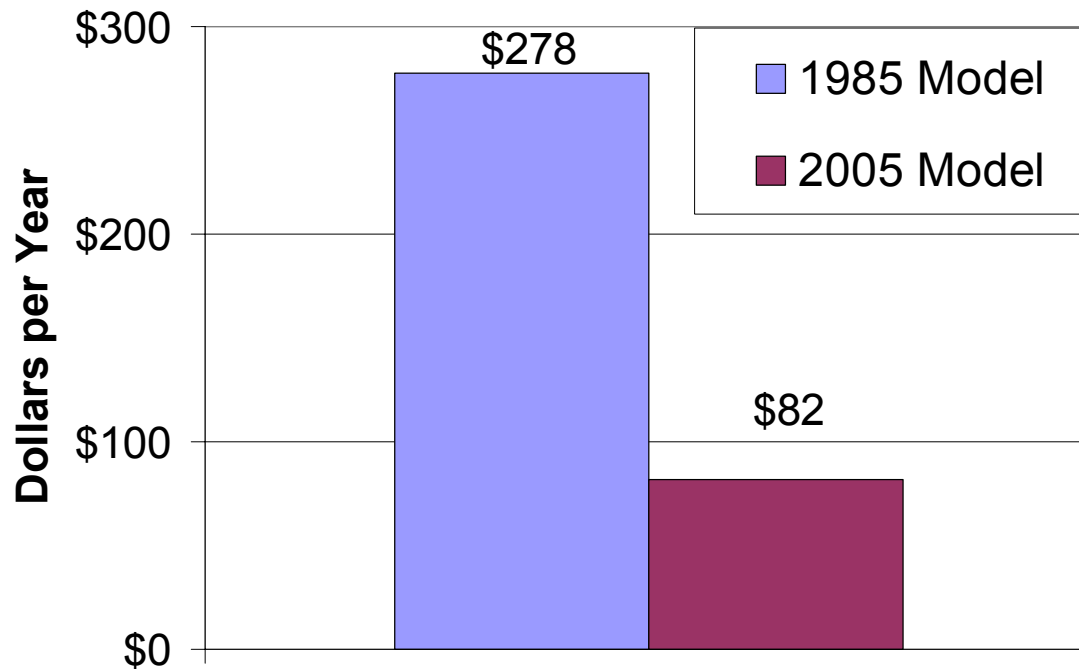


**14W Candela Bulb ,  
45 Watt Equivalent**

# Energy Efficiency: Refrigerators

## GE Refrigerators w/ top Freezer, ~ 18 ft<sup>3</sup>

(Assumes electricity rate of \$0.20/kWh)



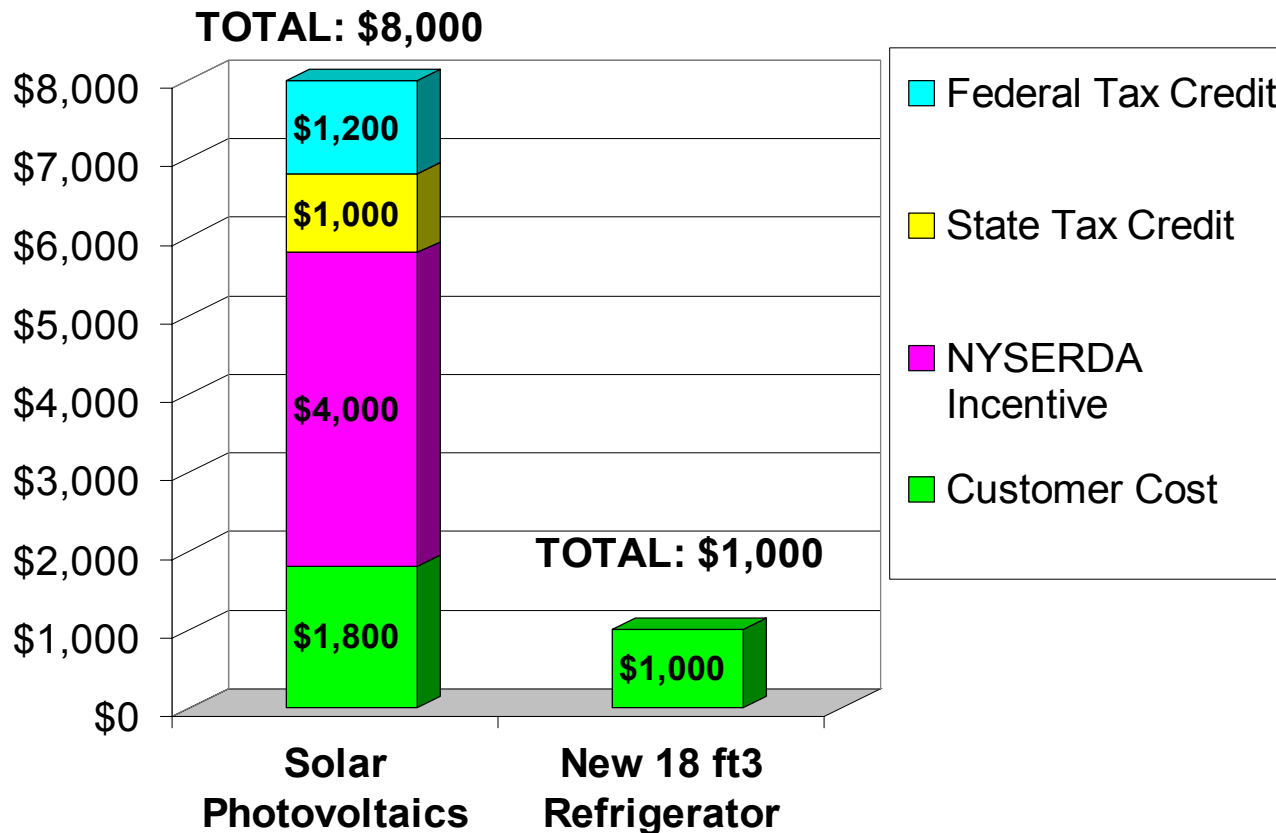
# Renewable Energy Projects

Demonstration projects of:

- Solar Panels for
  - Electricity
  - Water Heating
- Bio-diesel for
  - Heating
- Green (Planted) Roofs
- Street Trees

# Solar PV vs. New Refrigerator

In a home with a 20-year-old refrigerator, consider two options, each can save the purchase of 1200 kWh of electricity per year.



# Achieving Community Buy-in

- Strong financial case.
- Emphasizing community's input to project.
- Address growing concerns about energy – esp. cost & security.
- Highlighting recent press coverage of alternative energy projects.
- Increasing comfort.

## How to make it compelling?

- Education.
- Accountability.
- Public Recognition of Achievements.
- Ease of Participation.



# Who is Involved?

Consultants for the Feasibility Study:

- Bright Power
- Komanoff Energy Associates

Under the sponsorship of:

- Association for Energy Affordability
- Private Funders

With the support of:

- Neighborhood Energy Network (NEN)
- East River Environmental Coalition (EREC)
- Open Road of New York

And with encouragement from:

- US Congress Member Nydia Velazquez
- State Senator Martin Connor
- City Council Member Margarita López
- NYC Economic Development Corporation
- Manhattan Community Board 3

# For More Information

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