We shape our buildings; thereafter, our buildings shape us.

Winston Churchill
TWO SISTERS: HISTORIC PRESERVATION & SUSTAINABILITY
“Cultural resource preservation intrinsically is a form of sustainable conservation. The built environment represents the embodied energy of past civilizations”

Nation Park Service, “Guiding Principles of Sustainable Design“
NEW YORK CITY LANDMARKS PRESERVATION COMMISSION
PRESERVATION AND SUSTAINABILITY

GREEN ROWHOUSE MANUAL

Greening NYC’s Historic Buildings
Green Rowhouse Manual
85% IN NEW YORK CITY, 85% OF THE BUILDINGS THAT WILL EXIST IN 2030 ARE ALREADY HERE TODAY.

PlaNYC
Almost 80% of New York City's carbon footprint comes from energy used in buildings.*

*Approximate energy use in New York City, 2007. Energy use and carbon emissions are closely related but not the same.
Small historic buildings account for over 50% of buildings in New York City’s pre-1940 historic building stock.
Brooklyn and Queens are home to more than 75% of New York City’s pre-1940 historic building stock.
HISTORIC ROWHOUSES

- Built for the climate
- Durable interiors
- Unique character
RETROFIT BENEFITS

- Improve occupant comfort and health
- Quieter building systems
- Prolong life of building materials
- Retain character
- Reduce water, energy and carbon impacts
- Reduce utility bills
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KNOW YOUR BUILDING THROUGH AN ENERGY AUDIT

ENERGY STAR HOME PERFORMANCE:
http://www.energystar.gov/index.cfm?c=home_improvement.hpwes_for_homeowners

NYSERDA (NY STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY) PROGRAMS:
http://www.nyserda.ny.gov/Contractors/Find-a-Contractor.aspx
OPPORTUNITES

MAXIMIZE BENEFITS OF EXISTING PASSIVE FEATURES
OPPORTUNITIES

BASIC WEATHERIZATION OF BUILDING OPENINGS
CHALLENGES

INSULATION OF HISTORIC MASONRY WALLS
According to the U.S. Department of Energy, doors and windows combined account for 21% of a typical building’s air infiltration.
Annual Percent Energy Savings for Various Window Upgrade Options

CHALLENGES

WINDOWS AND DOORS

National Trust Preservation Green Lab 2012 Report “Saving Windows, Saving Money”
CHALLENGES

WINDOWS AND DOORS

Interior View  Exterior View  Open Tilt/Turn Sash

Photo © 475 High Performance Building Supply
CHALLENGES

MAINTAINANCE AND REPAIR VS REPLACE
In New York City, 27% of our electricity is used to light buildings, accounting for 12% of our overall carbon emissions

*PlaNYC Update April 2011*
In the average home, 75% of the electrical used to power home electronics and appliances is consumed while the products are turned off.
TWO SISTERS: HISTORIC PRESERVATION & SUSTAINABILITY

Working together in New York City