HCR Benchmarking Program

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Steven Winter Associates
Since 1972, Steven Winter Associates, Inc. has been providing research, consulting, and advisory services to improve the built environment for private and public sector clients.

Our services include:

- Energy Conservation and Management
- Sustainability Consulting
- Green Building Certification
- Accessibility Consulting

We have over 125 staff across four office locations: New York, NY | Washington, DC | Norwalk, CT | Boston, MA

For more information, visit www.swinter.com
Benchmarking Goals

The benchmarking program enables properties to:

- Understand and **quantify** their energy usage
- Confirm **high energy usage properties**
- Connect to resources and funding to for system upgrades

Measure  Analyze  Act
Measure: Whole building data

- Track whole building energy use (common areas + units)

- Work with your benchmarking provider to confirm whole building data is reported

- Contact your local utility to receive whole building data if not currently tracked

- Report whole building data via ENERGY STAR Portfolio Manager
Starting with the data

• Monthly utility bills ➔ calculate greenhouse gas emissions

• Identify high energy usage and high greenhouse gas emitting properties ➔ higher costs

• Savings potential!
Greenhouse Gas Emissions
NY State Vision and Goals

- Part of New York State’s policy vision is to enable and preserve homes that are affordable, comfortable, and healthy
  - **Affordable**
    - Efficient equipment to save New Yorkers energy and money
  - **Comfortable**
    - Improved building systems and operations with better controls
  - **Healthy**
    - Improved indoor air quality; reduce or eliminate burning of fossil fuel on site

New York's Nation-Leading Climate Targets

- 85% Reduction in GHG Emissions by 2050
- 100% Carbon-free Electricity by 2040
- 70% Renewable Energy by 2030
- 9,000 MW of Offshore Wind by 2035
- 3,000 MW of Energy Storage by 2030
- 6,000 MW of Solar by 2025
- 22 Million Tons of Carbon Reduction through Energy Efficiency and Electrification

**NEW YORK'S CLIMATE LEADERSHIP and COMMUNITY PROTECTION ACT**

Steven Winter Associates, Inc.
Why greenhouse gases? Climate alarm.
Emissions are not equal

Oil

Gas

Electricity
Why are we doing this?
Why?

- **Affordable**
  - Efficient equipment to save New Yorkers energy and money

- **Comfortable**
  - Improved building systems and operations with better controls

- **Healthy**
  - Improved indoor air quality; reduce or eliminate burning of fossil fuel on site
2022 Program Findings
Why we measure: monitor progress

- Most improved properties
  - H066 Sunnyside Manor
  - H129 The Antioch Citadel of Hope
  - 19980460-00955 Springbrook Apartments
Why we measure: give feedback

• To guide properties effectively we need to understand what types of fuel are used on site and how much
For all properties that submitted data on time.
How am I doing?

Property comparison using your Energy Star Score

2021 Score
91
2020 Score
89
2019 Score
93

ENERGY STAR Scores range from 1-100. Higher scores indicates better performance. Buildings with ENERGY STAR Scores of 75 or above are considered top performers.

Your 2021 rating of a 91 means that your property is eligible for ENERGY STAR certification. Visit the ENERGY STAR website for more information on how to apply for certification.

ENERGY STAR Score

There are many energy metrics. The simplest place to start is the ENERGY STAR Score. ENERGY STAR Scores range from 1-100. Higher scores indicates better performance. Buildings with ENERGY STAR Scores of 75 or above are considered top performers.

The ENERGY STAR Score considers multiple factors such as climate, occupant density, and how the building is operated. It’s a way to compare the energy performance a building to others of a similar type.

Only buildings that submit whole building data -- including resident usage -- are eligible to receive an ENERGY STAR Score.
Annual Greenhouse Gas Emissions intensities were included in the report.

Year over year GHG intensities are compared to the national median established by ENERGY STAR.

If building was flagged for low usage, the median GHG emissions for the building were included.
Energy Performance Report

What should I do next?

Benchmarking should be used as a tool to help you understand how your building performs compared to an average building and your own building over time. It can also help you plan for future capital improvements to your building, which will likely require additional investigation into specific circumstances -- like age of equipment and eligibility for incentive programs -- to understand where to focus resources and planning efforts.

Confirm data quality

It is essential to ensure data submitted during annual benchmarking reporting is correct in order to accurately assess building performance and energy use.

The data you submitted for 2021 DID NOT PASS the data quality checks. Please work with your benchmarking provider to obtain accurate whole building data including residential units for filing year 2023.

Capital Planning

The most cost-effective approach to deep energy reductions is to coordinate upgrades with the end-of-life replacements of major building systems and natural capital investment triggers in a building’s life cycle, like refinancing.

Address Data Quality

If energy metrics are very low or very high, we recommend reaching out to service provider or utility to confirm data is accurate.
Navigating Incentive Programs

• NYSERDA will provide a list of available rebate and incentive programs.
• Some **low-cost or free programs** are available specifically for affordable properties.
• State and utility programs are updated constantly – it’s important to check their websites regularly for new information.
Decarbonization Programs for Affordable Housing
Agenda

> Climate Act & 2 Million Climate Friendly Homes

> Capital Planning & Technical Assistance
  • Flextech
  • Low Carbon Capital Planning Support
  • IPNA

> Implementation
  • Affordable Multifamily Efficiency Program (AMEEP) -- offered by NYS utilities
  • NYS Clean Heat -- offered by NYS utilities
  • Low Carbon Pathways
  • Solar Opportunities

> Capital Planning & Implementation
  • RetrofitNY
  • HCR Clean Energy Initiative
Climate Leadership and Community Protection Act (Climate Act) - Overview

Most aggressive greenhouse gas reduction goals of any major economy: **40%** by 2030, **85%** by 2050

- **70%** renewable energy by 2030,
- **100%** zero-emission electricity by 2040

- Codifies clean energy targets
- Commitments to environmental justice, disadvantaged communities, and just transition

New York State’s Clean Energy Goals

- **Clean Energy Economy**: nearly 159,000 clean energy jobs
- **Renewable Energy**: 6,000 MW of distributed solar
- **Renewable Energy/Clean Energy Standard**: 70% electricity from renewable energy
- **Renewable Energy**: 9,000 MW of offshore wind
- **Clean Electricity**: 100% zero-emission electricity
- **GHG Reduction**: 85% reduction in greenhouse gas emissions from 1990 levels

- **Resilient and Distributed Grid**: 1,500 MW of energy storage
- **Energy Efficiency**: 185 TWh end-use savings in buildings and industrial facilities
- **GHG Reduction**: 40% reduction in greenhouse gas emissions from 1990 levels
- **Energy Efficiency**: 3,000 MW of energy storage
- **30,000** employed in storage sector
Governor Hochul announced at State of the State a goal to achieve 2 million climate friendly homes by 2030
• Goal commits New York State to 1 million efficient and electrified homes and 1 million electrification-ready homes with efficient envelope
• Goal includes new construction, existing buildings, market rate & affordable housing, single family and multifamily housing
NYSERDA Program Eligibility Requirements

• Existing buildings
• Pay into electric System Benefits Charge or Clean Energy Fund
• Buildings must have 5 or more dwelling units
• At least 50% of the gross heated square footage is residential space
Capital Planning & Technical Assistance: FlexTech

> **50% cost share** for technical assistance

> Use a FlexTech Consultant OR Independent Service Provider

> Funding available through 2025 on first-come, first-served basis

> Open to existing affordable multifamily housing

> Technical Assistance can be combined with AMEERP

> **Learn More:**
  - Visit [FlexTech funding opportunity page](#)
  - Questions and submit completed application to [FlexTech@nyserda.ny.gov](mailto:FlexTech@nyserda.ny.gov)

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<th>Primary Services</th>
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<tr>
<td>Level 1+ Energy Study</td>
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<tr>
<td>Targeted / Comprehensive Energy Study</td>
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<tr>
<td>Targeted / Comprehensive RCx Study</td>
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<tr>
<td>Climate Action Plan / Sustainability Plan</td>
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<tr>
<td>Climate Heating &amp; Cooling Study</td>
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<tr>
<td>Energy Master Planning</td>
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<tr>
<td>Energy Advisor Services</td>
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<td>Energy Storage</td>
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<th>Supporting Services</th>
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<tr>
<td>Investigation of renewable energy technologies</td>
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<td>Greenhouse gas emissions inventory</td>
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<td>Installation of permanent meters or sub-meters</td>
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Capital Planning & Technical Assistance: Low Carbon Capital Planning Support

> **75% cost share** for energy studies focused on electrification or electrification-readiness building improvements

> Identify potential benefits linked to recommended improvements
  • Ways to reduce utility & operating costs
  • Compliance with low carbon building regulations & avoid fines (e.g., LL97)

> Services: Portfolio-level Studies & Building-specific Studies

> Must work with FlexTech Consultant or Multifamily Building Solutions Provider

> Open to both affordable & market-rate buildings

> **Learn More:**
  • Visit [Low Carbon Capital Planning Support](#)
  • Questions and submit completed application to [FlexTech@nyserda.ny.gov](mailto:FlexTech@nyserda.ny.gov)
The Integrated Physical Needs Assessment (IPNA) merges traditional PNAs, energy audits, solar screening, and screening of housing-based health issues.

A standardized process for evaluation of energy efficiency, water conservation, and health-related improvements as part of capital planning process.

Utilize pre-qualified Providers that work across HCR, HPD and HDC to complete assessment.

IPNA is required for participation in multifamily affordable housing financing programs.

- Helps agencies understand which items need repair immediately or are nearing their end-of-life to ensure that they are included in project scopes.
- Promotes an integrated approach that takes advantage of synergies between physical, environmental and health benefits.
- IPNA streamlines access to more preservation funding and assistance from energy program implementers (e.g., NYSERDA, utilities).

Learn More: NYSERDA’s IPNA Landing Page: nyserda.ny.gov/IPNA
Implementation: Affordable Multifamily Efficiency Program (AMEEP)

- Statewide affordable multifamily efficiency program, administered by NYS utilities, that provides incentives for prescriptive or custom measures, direct install, and/or comprehensive projects.

- Incentive Structure
  - Prescriptive/Non-comprehensive: Projects will receive incentives on a measure-specific basis. Incentives are determined by a fixed rate per measure or $/energy savings.
  - Comprehensive: Must meet 100 point minimum.
    - Multiple measures can be combined to meet this requirement.
    - Incentives are $/dwelling unit basis.
    - Incentives differ between upstate and downstate.

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<tr>
<th>Tier</th>
<th>Minimum Points</th>
<th>Downstate Incentive ($/ Dwelling Unit)</th>
<th>Upstate Incentive ($/ Dwelling Unit)</th>
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<tr>
<td>1</td>
<td>100</td>
<td>$1,500</td>
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<tr>
<td>2</td>
<td>150</td>
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- Eligibility:
  - Existing affordable multifamily building. Must be utility customer with gas and/or electric from Central Hudson, Con Edison, National Fuel Gas, National Grid, NYSEG RG&E, or Orange and Rockland.

- Learn More: Complete Lead Intake Form to connect with Implementation Contractor. Visit AMEEP website for more details.
The 2020 NENY Order set Program budgets and targets. The Joint Management Committee (“JMC”), consisting of the NYS Electric Utilities and NYSERDA, oversee the Clean Heat Program:

- The NYS Electric Utilities implement the incentives program.
- NYSERDA implements the market enablement programs.

Funding is available for both affordable and market-rate housing and various electric heat pump technologies (ASHP, GSHP, HPWH, etc.).

The JMC publishes program guidance and hosts recurring industry webinars for market awareness.

Learn More: Visit the website.
**Implementation:**
Low Carbon Pathways

> Install one or up to four packages of recommended measures corresponding to major building systems
  > Envelope
  > Ventilation
  > Heating/cooling electrification
  > DHW full or partial electrification

> Packages designed to be modular – can implement one at a time

> Must work with FlexTech Consultant or Multifamily Building Solutions Provider

> Incentives
  > Depend on package and order packages installed but range from $700 - $5,000 per dwelling unit

> Participant Eligibility: Targeting for replication
  > Portfolio owners/managers with 10+ buildings OR
  > Owners who are active members in real estate associations (e.g. REBNY, CNYC, UHAB, RSA, etc.)

> **Learn More:** Visit [website](#) or reach out to MFLowCarbonPathways@nyserda.ny.gov
Implementation:
NY-Sun Solar Incentive Program

Incentives in the Con Edison Region
> Nonresidential (includes multifamily):
  • Small (<200kW): $1.20/W
  • Medium (200kW-1MW): $1.00/W
  • Large (>1MW): $0.50/W

Incentives in the Upstate Region
> Nonresidential (includes multifamily): $0.35/W up to 750kW

Considerations:
> Installation of new grid-connected solar PV systems
> Incentives levels decline as more projects enter program
> Accepted through December 31, 2030
Implementation:
Solar Multifamily Affordable Housing Incentive

Eligibility
> Regulated affordable housing (including in the Long Island Region)
> Only projects physically located on regulated affordable housing are eligible
  • Projects with offsite subscribers must meet additional criteria

Funding Details
> Upstate and Long Island: $1.00/W when combined with Nonresidential incentive
> Con Edison:
  • Onsite: $1.60/W when combined with Nonresidential incentive
  • Community Solar: $2.00/W when combined with Nonresidential Incentive
  • Community solar projects that have secured the Community Credit will receive $1.00/W
> Capped at first 200kW of project
> All capacity above 200kW will receive the applicable Nonresidential incentive

How to Apply
> NY-Sun Contractor submits as part of NY-Sun Incentive Program
Affordable Solar and Storage Pre-Development and Technical Assistance

> PON 3414: Affordable Solar and Storage Predevelopment and Technical Assistance (Predevelopment Program)

> Provides grants up to $200,000 for the early-stage development of solar and/or storage installations on affordable housing or community solar installations that will offer benefits to LMI households

> Applications accepted: June 30, 2020 – December 31, 2030
We need you!
Role of building owner/manager

- Verify compliance
  - Get ready for next year: May 1, 2023
- Review benchmarking memo
  - Are any of your properties noted as high energy users?
  - Connect with NYSERDA
- Capital planning
  - Are any properties planning for refinancing or capital work?
  - Review new HCR sustainability guidelines for existing buildings
  - Ensure energy/GHG reduction measures are part of the plan
  - Connect with NYSERDA
What steps can you take to help lower your building’s GHG emissions?