



VILLAGE OF DOBBS FERRY BOARD OF TRUSTEES AGENDA

MEETING DATE: OCTOBER 27, 2020
AGENDA ITEM SECTION: PUBLIC HEARING
AGENDA ITEM NO. : 1
AGENDA ITEM: PUBLIC HEARING TO DISCUSS A PROPOSED LOCAL LAW TO ADOPT THE NYSTRETCH ENERGY CODE FOR NEW CONSTRUCTION AND SUBSTANTIAL RENOVATIONS AND MAKE FINANCING OF ENERGY-RELATED IMPROVEMENTS AVAILABLE THROUGH THE "EIC OPEN C-PACE" FINANCING PROGRAM
ITEM BACKUP DOCUMENTATION: <ul style="list-style-type: none">1. LEGAL NOTICE2. INTRODUCTORY LOCAL LAW 6-20203. PRESENTATION BY THE SUSTAINABILITY TASK FORCE ON CLIMATE CHANGE AND CLEAN ENERGY4. NYSTRETCH ENERGY CODE: INFORMATION FOR COMMUNITY ADOPTION5. NYSTRETCH ENERGY CODE-20206. NYSTRETCH ENERGY CODE-2020: FREQUENTLY ASKED QUESTIONS



VILLAGE OF DOBBS FERRY

112 Main Street
Dobbs Ferry, New York 10522
TEL: (914) 231-8500 • FAX: (914) 693-3470

PLEASE TAKE NOTICE that a public hearing will be conducted by the Village Board of the Village of Dobbs Ferry, 112 Main Street, Dobbs Ferry, New York 10522 on October 27, 2020 at 6:30 p.m., or as soon thereafter as the matter may be heard, to receive public comments on Introductory Local Law 6-2020 which proposes to adopt the stricter NYStretch as the base energy code in the Village and will require all construction to meet higher energy efficiencies and result in energy cost savings for residents and businesses.

The hearing will be conducted via virtual technology or in person at Village Hall, 112 Main Street, Dobbs Ferry, New York with the format to be dictated by the requirements then in effect by virtue of COVID-19 related Executive Orders. For virtual participation, all interested parties may be heard using Zoom, a web-based videoconferencing service: Webinar ID 205 957 953, Password: 309361. Copy/paste the following link: <https://zoom.us/j/205957953?pwd=aU5YNHJVVYkxub3lWN0RzQUZ0VzROUT09> -or- by Telephone: 1 929 205 6099 during the hearing.

The Village Board of Trustees will also accept written comments forwarded in advance to ldreaper@dobbsferry.com. The local law may be reviewed and further details on public participation can be found online at the Village of Dobbs Ferry website, www.dobbsferry.com

BY ORDER OF THE BOARD OF TRUSTEES

Dated: October 19, 2020

Elizabeth Dreaper
Village Clerk

INTRODUCTORY LOCAL LAW NO. 6-2020

“Amendment to the Village of Dobbs Ferry Code to Adopt a Stricter Standard for Energy Efficiency Improvements and Provide Access to a Financing Program ”

A LOCAL LAW amending Chapter 127 “Building Construction” of the Code of the Village of Dobbs Ferry.

BE IT ENACTED by the Board of Trustees of the Village of Dobbs Ferry, as follows:

Section 1. Legislative Intent. The Village has a policy to achieve energy efficiency and renewable energy goals, reduce greenhouse gas emissions, mitigate the effect of global climate change and advance a clean energy economy. As a means to advance these goals and to protect and promote public health, safety, and welfare of its residents, the Village Board of Trustees proposes to mandate energy efficient building standards and provide opportunities for the financing of energy efficient improvements. Under NY Energy Law § 11-109, the Village Board is authorized to adopt a local energy code more stringent than the 2020 Energy Conservation Construction Code of New York State to apply to new or substantially renovated buildings in the Village. The Village Board has chosen a model code published as the NYStretch Energy Code 2020 developed by the New York State Energy Research and Development Authority (NYSERDA) as the more stringent energy efficient building code. In support of this adoption of more stringent energy-related standards, the Board of Trustees also proposes to provide a program for property-assessed financing for qualified sustainable energy improvements.

Section 2. Chapter 127 of the Code of Dobbs Ferry is hereby renamed with new matter underlined as “Building Construction and Sustainable Energy Improvements Loan Program”

Section 3. Section 127-1 of the Code of the Village of Dobbs Ferry “State Building Construction Code” is hereby amended as follows, with new matter underlined and deleted matter struck and in [brackets]:

- A. Except as may be set forth in this Code, [F]the New York State Uniform Fire Prevention [State] Building [Construction] Code provided for by Article 18 of the Executive Law of the State of New York and the New York State Energy

Conservation Construction Code promulgated pursuant to Article 11 of the Energy Law ("State Building Construction Code") that regulat[ing]e the construction of buildings [and the installation therein of equipment that is essential to building operation and maintenance, such as plumbing, heating, electrical, ventilation and fire protection equipment,] shall [continue to] be applicable to all construction in the Village.

- B. Wherever it is provided in the State Building Construction Code that specified construction or equipment shall be installed in accordance with the regulations of the authority having jurisdiction, the appropriate provisions of this chapter, if any, shall apply.
- C. The Plumbing Standards of the State Building Construction Code not presently applicable to additions or alterations to existing plumbing systems within the Village are hereby made applicable to such additions or alterations.
- D. The Electrical Standards of the State Building Construction Code not presently applicable to existing electrical wiring for electric light, heat or power and for signal systems operating on 50 volts or more within the Village are hereby made applicable to such electrical wiring.
- E. Effective for all building permit applications submitted on or after XXXX, 2020, the NYStretch Energy Code 2020, published by the New York State Energy Research and Development Authority (hereafter referred to as "NYStretch"), shall be applicable to all new construction and substantial renovations in the Village of Dobbs Ferry.

Section 4. Chapter 127 of the Dobbs Ferry Code is hereby amended with the addition of Article VII as follows:

Article VII Sustainable Energy Improvements Loan Program

§127-19 Legislative Findings; intent and purpose; authority.

- A. The State of New York and the Village of Dobbs Ferry are committed to a policy of achieving increased energy efficiency and renewable energy goals, reduction of greenhouse gas emissions, mitigation of the effect of global climate change, and advancing a clean energy economy. The Village of Dobbs Ferry finds it can advance both the policy and an important public purpose by providing access to sustainable energy improvement financing to qualified property owners for the installation of renewable energy

systems and energy efficiency measures. This Article establishes a program ("Program" defined below) that will allow the Energy Improvement Corporation ("EIC" defined below), a local development corporation, acting on behalf of the Village of Dobbs Ferry pursuant to a municipal agreement (the "Municipal Agreement") to be entered into between the Village and EIC under the authority of Article 5-G of the NY General Municipal Law (the "Enabling Act" defined below), to make funds available to qualified property owners in the Village that will be repaid by such property owners through charges on the real properties benefited by such funds. This Article provides a method of implementing the public policies expressed by, and exercising the authority provided by, Article 5-L of the General Municipal Law (as defined below, the "Enabling Act").

- B. The Village of Dobbs Ferry is authorized to enter into, deliver and perform the Municipal Agreement and otherwise implement this financing program pursuant to the Constitution and laws of the State of new York, including Article IX of the Constitution, Section 10 of the Municipal Home Rule Law, the Enabling Act and this local law.

§127-20 Definitions.

- A. Capitalized terms used but not defined herein have the meanings assigned in the Enabling Act.
- B. For purposes of this law, and unless otherwise expressly stated or unless the context requires, the following terms shall have the meanings indicated:

ANNUAL INSTALLMENT AMOUNT – shall have the meaning assigned in this Article.

ANNUAL INSTALLMENT LIEN – shall have the meaning assigned in this Article.

AUTHORITY — The New York State Energy Research and Development Authority known as NYSERDA, as defined by Subdivision 2 of § 1851 of the Public Authorities Law, or its successor.

BENEFIT ASSESSMENT LIEN – shall have the meaning assigned in this Article.

BENEFITED PROPERTY – Qualified Property for which the Qualified Property Owner has entered into a Finance Agreement for a Qualified Project.

BENEFITED PROPERTY OWNER – the owner of record of a Benefited Property.

EIC — the Energy Improvement Corporation, a local development corporation, duly organized under § 1411 of the Not-For-Profit Corporation Law of the State, authorized hereby on behalf of the Municipality to implement the Program by providing funds to Qualified Property Owners and providing for repayment of such funds from money collected by or on behalf of the Municipality as a charge to be levied on the real property.

ELIGIBLE COSTS – costs incurred by the Benefited Property Owner in connection with a Qualified Project and the related Finance Agreement, including application fees, EIC's Program administration fee, closing costs and fees, title and appraisal fees, professionals' fees, permits, fees for design and drawings and any other related fees, expenses and costs, in each case as approved by EIC and the Financing Party under the Finance Agreement

ENABLING ACT – Article 5-L of the General Municipal Law of the State, or a successor law, as in effect from time to time.

FINANCE AGREEMENT – the finance agreement described in this Article.

FINANCING CHARGES – all charges, fees and expenses related to the loan under the Finance Agreement including accrued interest, capitalized interest, prepayment premiums, and penalties as a result of a default or late payment and costs and reasonable attorneys' fees incurred by the Financing Party as a result of a foreclosure or other legal proceeding brought against the Benefited Property to enforce any delinquent Annual Installment Liens.

FINANCING PARTIES – Third party capital providers approved by EIC to provide financing to Qualified Property Owners or other financial support to the Program which have entered into separate agreements with EIC to administer the Program in the Municipality.

MUNICIPALITY – the Village of Dobbs Ferry, a municipality of the State constituting a tax district as defined in Section 1102 of the RPTL of the State.

MUNICIPAL LIEN – a lien on Qualified Property which secures the obligation to pay real property taxes, municipal charges, or governmentally imposed assessments in respect of services or benefits to a Qualified Property.

NON-MUNICIPAL LIEN – a lien on Qualified Property which secures any obligation other than the obligation to pay real property taxes, municipal charges, or governmentally-imposed assessments in respect of services or benefits to a Qualified Property Owner or Qualified Property.

PROGRAM – the Energize NY Open C-PACE Financing Program authorized hereby.

QUALIFIED PROJECT – the acquisition, construction, reconstruction or equipping of Energy Efficiency Improvements or Renewable Energy Systems or other projects authorized under the Enabling Act on a Qualified Property, together with a related Energy Audit, Renewable Energy System Feasibility Study and/or other requirements under or pursuant to the Enabling Act, with funds provided in whole or in part by Financing Parties under the Program to achieve the purposes of the Enabling Act.

QUALIFIED PROPERTY – Any real property other than a residential building containing less than three dwelling units, which is within the boundaries of the Municipality that has been determined to be eligible to participate in the Program under the procedures for eligibility set forth under this local law and the Enabling Act and has become the site of a Qualified Project.

QUALIFIED PROPERTY OWNER – the owner of record of Qualified Property which has been determined by EIC to meet the requirements for participation in the Program as an owner, and any transferee owner of such Qualified Property.

RPTL – the Real Property Tax Law of the State, as amended from time to time.

SECURED AMOUNT – as of any date, the aggregate amount of principal loaned to the Qualified Property Owner for a Qualified Project, together with Eligible Costs and Financing Charges, as provided herein or in the Finance Agreement, as reduced pursuant to this Article.

STATE – the State of New York.

§127-21 Establishment of Program.

- A. An Energize NY Open C-PACE Financing Program is hereby established by the Municipality, whereby EIC acting on its behalf pursuant to the Municipal Agreement, may arrange for the provision of funds by Financing Parties to Qualified Property Owners in accordance with the Enabling Act and the procedures set forth under this local law, to finance the acquisition, construction, reconstruction, and installation of Qualified Projects and Eligible Costs and Financing Charges approved by EIC and by the Financing Party under the Finance Agreement. EIC, on behalf of the Municipality, and with the consent of the Benefited Property Owner, will record a Benefit Assessment Lien on the Benefited Property in the Secured Amount (the "Benefit Assessment Lien") on the land records for the Municipality. Such recording shall be exempt from any charge, mortgage recording tax or other fee in the same manner as if recorded by the Municipality.
- B. Before a Qualified Property Owner and a Financing Party enter into a Finance Agreement which results in a loan to finance a Qualified Project, repayment of which is secured by a Benefit Assessment Lien, a written consent from each existing mortgage holder of the Qualified Property shall be obtained, permitting the Benefit Assessment Lien and each Annual Installment Lien to take priority over all existing mortgages.

§127-22 Procedure for eligibility.

- A. Any property owner in the Village of Dobbs Ferry may submit application to EIC on such forms as have been prepared by EIC and made available to property owners on the website of EIC and at the Municipality's office.
- B. Every application submitted by a property owner shall be reviewed by EIC acting on behalf of the Municipality, which shall make a positive or negative determination on such application based upon the criteria in the Enabling Act and this Article. EIC may also request further information from the property owner where necessary to aid in its determination.
- C. If a positive determination on an application is made by EIC acting on behalf of the Municipality, the property owner shall be deemed a Qualified

Property Owner and shall be eligible to participate in the Program in accordance with this Article.

§127-23 Application Criteria.

Upon the submission of an application, EIC, acting on behalf of the Municipality, shall make a positive or negative determination on such application based upon the following criteria for the making of a financing:

- A. The property owner may not be in bankruptcy and the property may not constitute property subject to any pending bankruptcy proceeding;
- B. The amount financed under the Program shall be repaid over a term not to exceed the weighted average of the useful life of Renewable Energy Systems and Energy Efficiency Improvements to be installed on the property as determined by EIC;
- C. Sufficient funds are available from Financing Parties to provide financing to the property owner;
- D. The property owner is current in payments on any existing mortgage on the Qualified Property;
- E. The property owner is current in payments on any real property taxes on the Qualified Property; and
- F. Such additional criteria, not inconsistent with the criteria set forth above, as the State, the Municipality, or EIC acting on its behalf, or other Financing Parties may set from time to time.

§127-24 Terms and conditions of repayment.

The Finance Agreement shall set forth the terms and conditions of repayment in accordance with the following:

- A. The principal amount of the funds loaned to the Benefited Property Owner for the Qualified Project, together with Eligible Costs and Financing Charges approved by EIC and by the Financing Party, shall be specially assessed against the Benefited Property and will be evidenced by a Benefit Assessment Lien recorded against the Benefited Property on the land

records on which liens are recorded for properties within the Municipality. The special benefit assessment shall constitute a “charge” within the meaning of the Enabling Act and shall be collected in annual installments in the amounts certified by the Financing Party in a schedule provided at closing and made part of the Benefit Assessment Lien. Said amount shall be annually levied, billed and collected by EIC, on behalf of the Municipality, and shall be paid to the Financing Party as provided in the Finance Agreement.

- B. The term of such repayment shall be determined at the time the Finance Agreement is executed by the Benefited Property Owner and the Financing Party, not to exceed the weighted average of the useful life of the systems and improvements as determined by EIC, acting on behalf of the Municipality.
- C. The rate of interest for the Secured Amount shall be fixed by the Financing Party in conjunction with EIC, acting on behalf of the Municipality, as provided in the Finance Agreement.

§127-25 Levy of annual installment amount and creation of annual installment lien.

- A. Upon the making of the loan pursuant to the Finance Agreement, the Secured Amount shall become a special Benefit Assessment Lien on the Benefited Property in favor of the Municipality. The amount of the Benefit Assessment Lien shall be the Secured Amount. Evidence of the Benefit Assessment Lien shall be recorded by EIC, on behalf of the Municipality, in the land records for properties in the Municipality. Such recording shall be exempt from any charge, mortgage recording tax or other fee in the same manner as if recorded by the Municipality. The Benefit Assessment Lien shall not be foreclosed upon by or otherwise enforced by the Municipality.
- B. The Finance Agreement shall provide for the repayment of the Secured Amount in installments made at least annually, as provided in a schedule attached to the Benefit Assessment Lien (the “Annual Installment Amount”). The Annual Installment Amount shall be levied by EIC, on behalf

of the Municipality, on the Benefited Property in the same manner as levies for municipal charges, shall become a lien on the Benefited Property as of the first day of January of the fiscal year for which levied (the "Annual Installment Lien") and shall remain a lien until paid. The creation or any recording of the Annual Installment Lien shall be exempt from any charge, mortgage recording tax or other fee in the same manner as if recorded by the Municipality. Payment to the Financing Party shall be considered payment for this purpose. Such payment shall partly or wholly discharge the Annual Installment Lien. Delinquent Annual Installment Amounts may accrue Financing Charges as may be provided in the Finance Agreement. Any additional Financing Charges imposed by the Financing Party pursuant to the Finance Agreement shall increase the Annual Installment Amount and the Annual Installment Lien for the year in which such overdue payments were first due.

- C. The Benefit Assessment Lien shall be reduced annually by the amount of each Annual Installment Lien when each Annual Installment Lien becomes a lien. Each Annual Installment Lien shall be subordinate to all Municipal Liens, whether created by Section 902 of the RPTL or by any other State or local law. No portion of a Secured Amount shall be recovered by the Municipality, EIC, or an assignee upon foreclosure, sale or other disposition of the Benefited Property unless and until all Municipal Liens are fully discharged. Each Annual Installment Lien, however, shall have priority over all Non-Municipal Liens, irrespective of when created, except as otherwise required by law.
- D. Neither the Benefit Assessment Lien nor any Annual Installment Lien shall be extinguished or accelerated in the event of a default or bankruptcy of the Benefited Property Owner. Each Annual Installment Amount shall be considered a charge upon the Benefited Property and shall be collected by EIC, on behalf of the Municipality, at the same time and in the same manner as real property taxes or municipal charges. Each Annual Installment Lien shall remain a lien until paid. Amounts collected in respect of an Annual Installment Lien shall be remitted to EIC, on behalf of the

Municipality, or the Financing Party, as may be provided in the Finance Agreement.

- E. EIC shall act as the Municipality's agent in collection of the Annual Installment Amounts. If any Benefited Property Owner fails to pay an Annual Installment Amount, the Financing Party may redeem the Benefited Property by paying the amount of all unpaid Municipal Liens thereon, and thereafter shall have the right to collect any amounts in respect of an Annual Installment Lien by foreclosure or any other remedy available at law. Any foreclosure shall not affect any subsequent Annual Installment Liens.
- F. EIC, on behalf of the Municipality, may sell or assign for consideration any and all Benefit Assessment Liens and Annual Installment Liens to Financing Parties that provide financing to Qualified Properties pursuant to Finance Agreements. The Financing Parties may sell or assign for consideration any and all Benefit Assessment Liens and Annual Installment Liens received from EIC, on behalf of the Municipality, subject to certain conditions provided in the administration agreement between EIC and the Financing Party. The assignee or assignees of such Benefit Assessment Liens and Annual Installment Liens shall have and possess the same powers and rights at law or in equity as the Municipality would have had if the Benefit Assessment Lien and the Annual Installment Liens had not been assigned with regard to the precedence and priority of such lien, the accrual of interest and the fees and expenses of collection.

§127-26 Verification and report.

EIC, on behalf of the Municipality, shall verify and report on the installation and performance of Renewable Energy Systems and Energy Efficiency Improvements financed by the Program in such form and manner as the Authority may establish.

§127-27 Separability.

If any clause, sentence, paragraph, section, or part of this Article shall be adjudged by any court of competent jurisdiction to be invalid, such judgment shall not affect, impair or invalidate the remainder thereof, but shall be confined in its operation to the clause, sentence, paragraph, section, or part thereof involved in the controversy in which such judgment shall have been rendered.

Section 5. Except as otherwise provided herein, all other provisions of Chapter 127 “Building Construction and Sustainable Energy Improvements Loan Program” shall remain the same.

Section 6. This Local Law shall take effect immediately upon publication, filing and posting as required by law.

CLIMATE CHANGE AND CLEAN ENERGY

Presentation by the Sustainability Task
Force (STF) to
Village of Dobbs Ferry
Board of Trustees Meeting

October 27, 2020

NEW YORK STATE: Climate Leadership and Community Protection Act (CLCPA: Adopted in 2019)

TARGETS:

85% GHG EMISSIONS REDUCTIONS BY 2050

100% CARBON FREE ELECTRICITY BY 2040

70% RENEWABLE ENERGY BY 2030

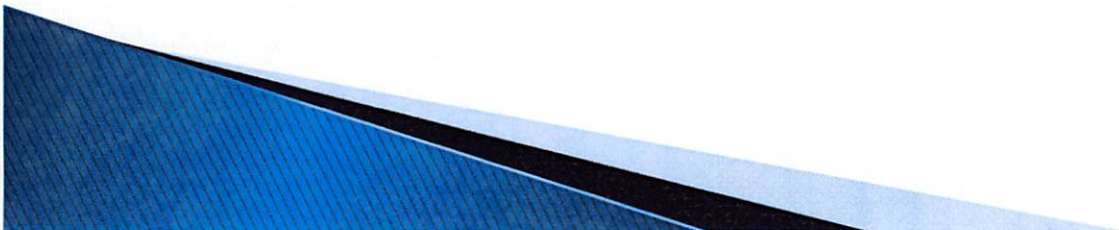
6,000 MW – SOLAR BY 2025

3,000 MW – ENERGY STORAGE BY 2030

9,000 mw – OFFSHORE WIND BY 2035

KEY “CLIMATE SMART” ACCOMPLISHMENT IN 2020

DOBBS FERRY WAS CERTIFIED as “*BRONZE*” CLIMATE SMART COMMUNITY (CSC) BUT WE NEED TO CONTINUE TO MAKE PROGRESS ON CLIMATE AND CLEAN ENERGY GOALS.

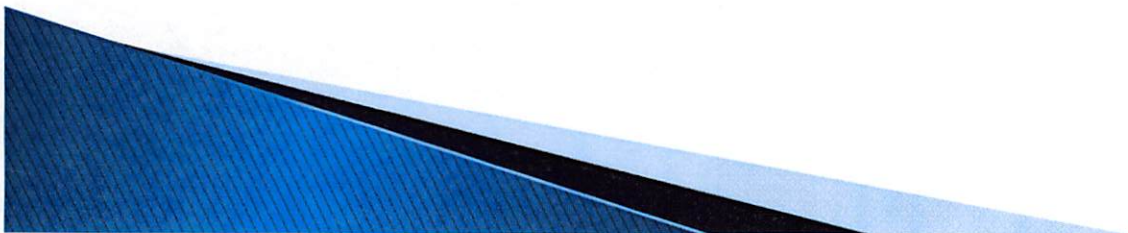


DOBBS FERRY DESIGNATED A CLEAN ENERGY COMMUNITY (CEC): 2017

NYSERDA'S CEC PROGRAM BASED ON THE ADOPTION OF A MENU OF 10 HIGH IMPACT ACTION ITEMS HAS ENABLED:

- ❖ CLEAN ENERGY ACTIONS
- ❖ SAVING ON ENERGY COSTS
- ❖ SECURING GRANTS FOR CLEAN ENERGY PROJECTS

NYS CSC: Dobbs Ferry was **among** the first villages/towns in the NYS to secure **CSC grant of \$306,656 from CSC grant** for Embassy Community Center (Heating & Cooling Center).



10 HIGH IMPACT ACTIONS FOR CLEAN ENERGY COMMUNITY: NYSERDA 2017


- > Benchmarking - Adopt a policy to report the energy use of buildings
- > Clean Energy Upgrades - Achieve 10% reduction in greenhouse gas emissions from buildings
- > LED Street Lights - Convert street lights to energy efficient LED technology
- > Clean Fleets - Install electric vehicle charging stations or deploy alternative fuel vehicles
- > Solarize, Clean Heating and Cooling, or Solar for All Campaigns
- > Unified Solar Permit - Streamline the approvals process for solar
- > Energy Code Enforcement Training - Train compliance officers in energy code best practices
- > Climate Smart Communities Certification - Get certified by the NYS Department of Environmental Conservation
- > Community Choice Aggregation - Put energy supply choices in your community's hands
- > Energize New York Finance - Offer energy upgrade financing to businesses and non-profits

CURRENT CEC's INCLUDE FOR EXAMPLE:

Beacon, Marbletown, Croton on Hudson, and Hastings on Hudson – Undertaken **8–9** of a total of 10 CEC High Impact Action items.

Dobbs Ferry, New Paltz and Red Hook – Undertaken **6** actions.

Bedford, Philipstown and Pound Ridge – Undertaken **5** actions.

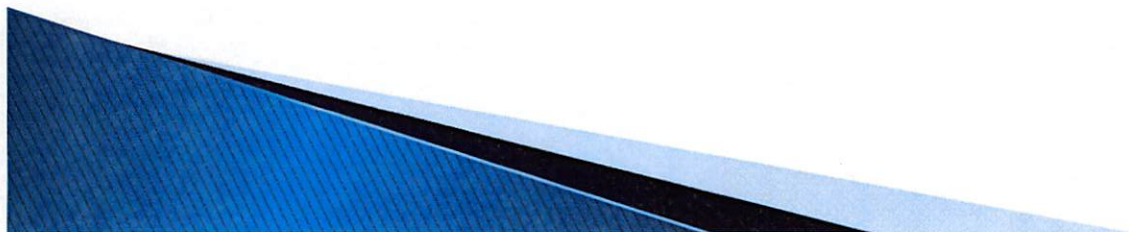
 Village of Dobbs Ferry	Westchester	Mid-Hudson	10,875	Designated CEC	Small Community	6
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List of Completed High Impact Actions

- Benchmarking - Municipal Buildings,
- Clean Fleets – Expired Version,
- Climate Smart Communities Certification - Bronze,
- LED Street Lights - Cobra Head Fixtures,
- Solarize – Expired Version,
- Unified Solar Permit

NYSERDA NEW “*LEADERSHIP GRANT*” CYCLE (2020)

- ▶ HIGHLY COMPETITIVE FUNDING ACCESSIBLE TO ALL NYS CITIES, TOWNS & VILLAGES
- ▶ POINT BASED SYSTEM BASED ON HIGH IMPACT CEC ACTIONS ADOPTED
- ▶ DF SUBMISSION TO NYSERDA’S CEC PORTAL WILL NEED TO BE UPDATED



HIGH IMPACT ACTIONS FOR 2020: DOBBS FERRY

ACTIONS COMPLETED

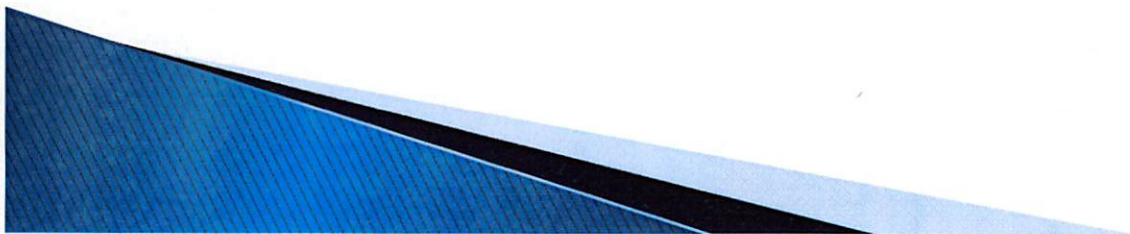
- ▶ CSC Designation as Bronze
- ▶ CCA Renewal (Sept 8, 2020)
- ▶ HEAT SMART CAMPAIGN

▶ IMMEDIATE ACTIONS TO BE CONSIDERED BY VILLAGE OF DOBBS FERRY

- ▶ **ENERGIZE FINANCE:** New York State's Property Assessed Clean Energy (PACE) public benefit statute (Article 5-L of the General Municipal Law) facilitates paying for energy related improvements to eligible buildings by authorizing municipalities to secure repayment of the financing through a benefit assessment lien.
- ▶ **NY STRETCH ENERGY CODE 2020:** Locally-adoptable stretch energy code. 20% more efficient than the residential provisions of the 2018 International Energy Conservation Code (IECC) and roughly 7% more efficient than the commercial provisions of ASHRAE 90.1-2016 for an overall increased efficiency of 11% over the 2020 NYS Energy Code.

FUTURE HIGH IMPACT ACTION ITEMS TO CONSIDER: Dobbs Ferry

- CLEAN ENERGY UPGRADES : VILLAGE HALL HVAC SYSTEM
- SOLAR & BATTERY STORAGE LAW
- CLEAN FLEETS: Purchase of Electric Vehicles for Village Operations
(*Incentive Program*)





NYStretch Energy Code

Information for Community Adoption

Dobbs Ferry Board of Trustees

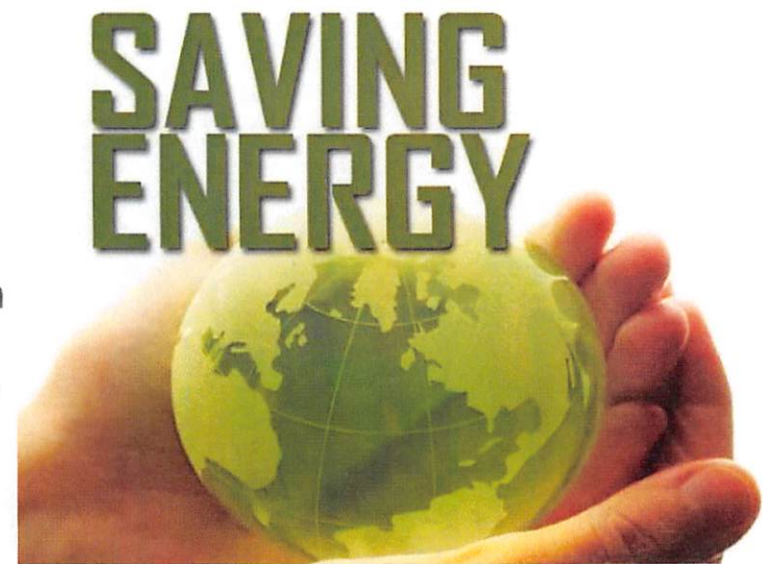
October 13, 2020

Marilyn Dare, NYSERDA Senior Project Manager
Mike Dewein, NYStretch Outreach Consultant

What is NYStretch Energy Code 2020?

- **Readily adoptable local energy code**
More efficient than 2020 ECCCCNYS.
Expressly authorized by Article 11 of NYS Energy Law
- **Overlay of 2018 IECC / 2020 ECCCCNYS**
NYStretch prepares municipalities for future code cycles
- **Based on proven technologies, systems & construction techniques.**
Integrates best practices from programs such as ENERGY STAR for Homes
- **A pivotal tool in supporting energy/climate goals.**

Roughly 11% more efficient than 2020 ECCCCNYS.
Less than 10-year payback on average



Benefits to Communities

Energy Benefits

- Savings of ~11% over ECCCCNYS
- Cost Effective
- Paybacks < 10 years
- Greater GHG reductions than ECCCCNYS
- Residential code near net zero
- Verifiable performance



Non-Energy Benefits

- Healthier indoor environments
- Greater comfort = resident, occupant satisfaction
- More resilient buildings
- Boosts the local economy:
 - Energy saved in the community STAYS in the community
 - Economic Development via green developers and green workforce expansion
- Energy efficiency increases property values
- Saves tenants and owners money
- Allows code officials greater autonomy/flexibility
- Encourages Plan Review and Site Inspection by Third Parties / HERS Raters

NYStretch vs. 2020 ECCCNY

NYStretch requirements include:

Building Envelope:

Improved window performance, increased insulation requirements, air leakage testing, air barrier commissioning, mandatory mechanical ventilation

Lighting/Electrical:

Reduced interior and exterior lighting power, lighting controls, whole-building energy monitoring

Mechanical

Improved Equipment requirements and Controls

Compatibility:

Renewable energy and electric vehicle readiness

Miscellaneous:

Commercial kitchen equipment efficiencies; introduces Passive House compliance path

Options:

Communities may also adopt code appendices requiring solar installations for New Construction

NYStretch vs. 2020 ECCCCNYS

Economics

- Commercial Savings and Incremental Cost

Weighted average results:

- Percentage Savings: 7.1%
- Incremental Cost: \$1.14 / SF
- Simple Payback: 10.5 years*

*Before NYSERDA or utility incentives

Based on prescriptive and mandatory provisions. **Results will vary depending** on building and construction type, location in NY State, and use of performance compliance paths.

Economics: Single Family and Multifamily by Climate Zone

Climate Design Zone	Single-family			Multifamily		
	Total Annual Energy Cost Savings (\$/dwelling unit)	Total Incremental Costs (\$/dwelling unit)*	Simple Payback (Years)*	Total Annual Energy Cost Savings (\$/dwelling unit)	Total Incremental Costs (\$/dwelling unit)*	Simple Payback (Years)*
4A-NYC	\$265	\$1,910	7.2	\$156	\$1,625	10.4
4A-balance	\$264	\$2,463	9.3	\$148	\$1,488	10.1
5A	\$407	\$2,202	5.4	\$198	\$1,745	8.8
6A	\$431	\$1,914	4.4	\$205	\$1,791	8.7
NY State	\$389	\$2,156	5.5	\$165	\$1,590	9.7

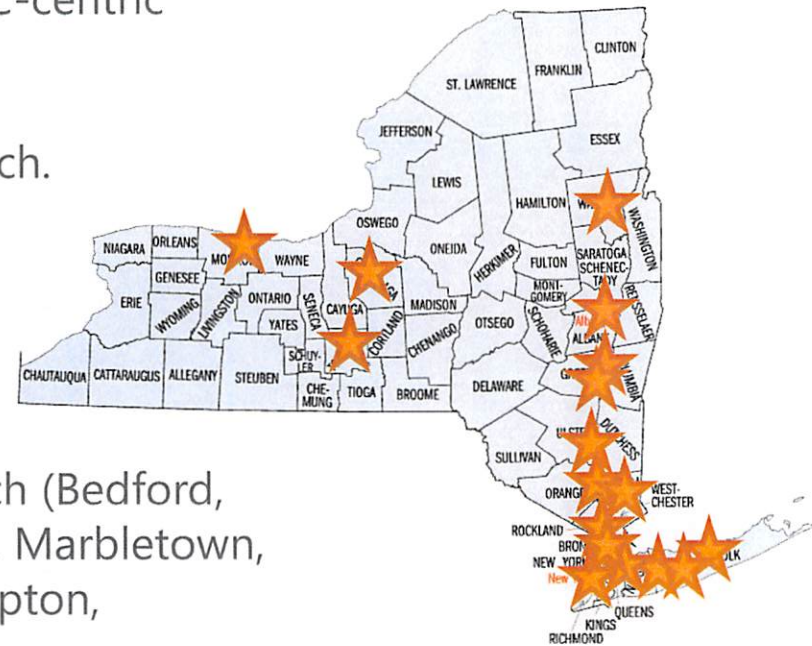
Statewide average Residential energy cost savings is 19.7%

***Before NYSERDA or utility incentives**

Based on prescriptive and mandatory provisions. **Results will vary depending** on building and construction type, location in NY State, and use of performance compliance paths.

NYStretch – Community interest

- New York City's 2020 Energy Code is NYStretch with NYC-centric amendments.
- Hastings-on-Hudson and Beacon have adopted NYStretch.
- Ithaca using NYStretch as part of their Green Building Code.
 - Goal: Carbon-neutral community by 2030
- Many other communities expressing interest in NYStretch (Bedford, New Salem, New Rochelle, Tarrytown, Pelham, Kingston, Marbletown, Dobbs Ferry, Saratoga, Bethlehem, Glens Falls, Southampton, Easthampton, Huntington)



Available Resources

- Template legislation: resolution/legislation template to help facilitate local adoption
- Side-by-side comparison of NYStretch to 2020 ECCCCNYS
- Single volume code manual – coming soon
- Training: for Code Officials, Architects, Builders
- Updated REScheck and COMcheck tools
- FAQs document
- NYSERDA staff, CEC and Outreach Coordinators available for guidance/meetings
- www.nyserda.ny.gov/stretchenergy2020

Best Practices & Implementation Examples: Hastings-On- Hudson

- NYSERDA and Circuit Rider (CR) Team met with Mayor to explain benefits of NYStretch (early May 2020)
- CR team met with Code superintendent to discuss areas of concern
- CR team held several virtual meetings with Champions from Sustainability Cmte to discuss potential barriers and logistics
- CR Team's discussions with Code Enforcement Officers built their comfort with the NYStretch implementation
- Town Board adopted NYStretch June 16, 2020



Best Practices & Implementation Examples: City of Beacon

- Handoff by Hudson Valley Regional Council to NYSERDA and CR Team who held several virtual meetings on details and next steps (initial meeting - late January 2020)
- CR Team follow up discussions with City Code Enforcement Officers; built their comfort level with NYStretch implementation
- CR Team presented at live 3/9 City Council workshop
- City Council adopted NYStretch at council meeting, March 17, 2020



Case Studies: Buildings that Meet or Exceed NYStretch

Affordable and Sustainable Multifamily Housing for City of Hudson, Hudson, NY

- Developed by: Galvan Initiatives Foundation, Inc.
 - Designed by: River Architects, PLLC
 - 75-unit mixed use
 - Panelized wall assemblies
 - ASHP: HVAC w/ energy recovery, ventilation and humidity controls
 - CO2 DHW
 - PV
-
- Adaptive re-use of existing buildings



Case Studies: Buildings that Meet or Exceed NYStretch

CreekView Apartments, Canandaigua, NY

- Developed by: Baldwin Real Estate Development Corp.
- Designed by: Sustainable Comfort, Inc.
- Full Net Zero energy
- On-site PV
- GSHP coupled to VRF
- GSHP-coupled DHW
- Ventilation
- Passive house levels of insulation



NYStretch

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NYStretch Energy Code–2020



NYSERDA



The NYStretch Energy Code–2020 (NYStretch) is a voluntary, readily adoptable energy code that calls for higher efficiency standards in new and renovated building construction projects.

When buildings are built above and beyond the minimum code requirements of the 2020 Energy Conservation Construction Code of New York State (ECCCNYS), they can make meaningful strides in mitigating climate change. The efforts pay off—buildings that are built to NYStretch requirements save **10–12%** in energy costs over those built to the 2020 ECCCNYS. Those energy cost savings will pay back the additional cost of construction in less than 10 years.

NYStretch Energy Code–2020



NYSERDA

What are the benefits?

- **Save money and energy:** Use less energy and reduce living and operational costs for your constituents with lower utility bills and better building envelopes.
- **Help the environment:** Reduce your greenhouse gas emissions and reliance on fossil fuels.
- **Boost the local economy:** Develop your existing workforce, build expertise in newer technologies, and create more green jobs.
- **Improve community growth:** Increase community attractiveness and property values as more home and business owners are looking for green and energy-efficient buildings.
- **Increase property values:** Encourage the use of NYStretch locally so future occupants (renters, tenants, and owners) of new and renovated buildings that meet this code will benefit from the long-term energy and cost savings.

Where does NYStretch go beyond the 2020 ECCCNY?

- **Building envelope:** Improved insulation and window performance, air barrier commissioning, air leakage testing, and mandatory mechanical ventilation
- **Lighting:** Reduced interior and exterior lighting power and lighting controls
- **Electrical:** Whole-building energy monitoring
- **Compatibility:** Renewable and electric vehicle readiness

What resources are available?

- **Code Manual:** NYSERDA provides a single-volume code manual that aids in consistent interpretation among code officials and offers reliable standards.
- **Template Legislation:** A NYStretch Adoption Guide with a resolution/legislation template is available to help facilitate local adoption of NYStretch.
- **NYStretch Training for Code Officials, Architects, and Builders**
- **Updated RESCheck™ and COMCheck™ tools**
- **FAQs Document**

For assistance with adoption, contact NYSERDA's outreach coordinators at nyserda.ny.gov/cec-coordinators.

Learn more and access resources at nyserda.ny.gov/stretchenergy2020.

NYStretch Energy Code–2020



NYSERDA

Frequently Asked Questions



GENERAL QUESTIONS

1. What is a stretch energy code?

A stretch energy code is simply an energy code that is more stringent than New York State's base energy code that can be adopted by local jurisdictions. Jurisdictions on Long Island, in the Hudson River valley, in the state of Massachusetts, and elsewhere, including New York City, have adopted stricter energy standards to ensure constituents enjoy reduced energy costs. Local adoption of a stretch energy code shows leadership by protecting the environment while creating healthier, more comfortable buildings with lower operating costs. In order to prevent a patchwork of stricter energy codes, the New York State Energy Research and Development Authority (NYSERDA) developed a model stretch energy code that is effective, flexible, and enforceable.

2. What is the NYStretch Energy Code–2020?

NYStretch Energy Code–2020 (NYStretch) is a model, voluntary, locally adoptable stretch code that saves more energy than the forthcoming 2020 Energy Conservation Construction Code of New York State (2020 ECCCNY).

This fact allows NYStretch to be adopted by any jurisdiction in New York. NYStretch amends the 2020 ECCCNY with a standard that is 10–12% more efficient, depending on climate zone and building type. Many of the changes are already being considered for the next national energy codes. To a large degree, NYStretch is an early look at New York State's next energy code.

3. Why did NYSDERDA develop NYStretch?

NYSERDA and its team of stakeholder advisory groups and consultants developed NYStretch to provide a stretch code that is easily adoptable and enforceable, provides a consistent signal to the market, and delivers energy and greenhouse gas savings. NYStretch is a pivotal tool for New York jurisdictions to accelerate the savings obtained through their local building energy codes.

The 2020 ECCCNY will be the minimum energy efficiency requirement for new buildings in New York State. However, technologies and strategies exist that are significantly more efficient than the state's minimum code requirements. NYStretch will be 10–12% more efficient than the 2020 ECCCNY and will significantly reduce energy consumption, operating costs, utility costs, and greenhouse gas emissions.

Developers often build homes and buildings to meet the State's base energy code with lower initial capital costs than energy-efficient or green building designs. This approach passes higher utility costs to renters, tenants, and owners. While homes and buildings built to NYStretch may cost more initially, long-term energy and cost savings will be passed on to renters, tenants, and owners.

Adopting a stretch code also prepares design and construction firms for future state code requirements and can increase property values and overall community attractiveness as more homeowners are seeking green or energy-efficient homes. Multiple popular online real estate websites now have filters for prospective homeowners to search for green or energy-efficient homes. Similarly, more corporations are adopting sustainability plans and initiatives, which often include energy efficiency requirements for the buildings they operate.

4. How can communities benefit from adopting and enforcing a stretch energy code like NYStretch?

Voluntary stretch codes are permitted by law in New York State, as a more stringent local energy code. Communities can benefit from adopting and enforcing a stretch energy code in many ways, including, but not limited to:

- Significant energy and utility cost savings for homeowners, tenants, renters, and building owners
- Reduced building operational costs
- Reduced environmental impact
- Increased occupant comfort and health

- Increased real estate value and community attractiveness
- Research and development stimulation and commercialization of products that improve energy efficiency performance
- Green job creation related to next-generation technologies, code enforcement, quality control, building commissioning, energy auditing and modeling, among others.

A more stringent energy code requires homes and commercial buildings to be more efficient, which reduces the amount of electricity, natural gas, and fuel oil used. While energy efficiency improvements often make sense to implement financially, these improvements may not be implemented for a variety of reasons. Adopting a stretch energy code is an effective way to implement energy efficiency and renewable energy measures, as it will be required by law for the communities that adopt it. In turn, communities that adopt a stretch energy code will reduce energy costs for current and future homeowners and renters and mitigate operating costs for small and large businesses located within the community.

5. What are the key changes in NYStretch compared to the 2020 ECCCNY?

Changes from the 2020 ECCCNY in NYStretch are highlighted by the sidebar markings to indicate the specific change in the code. The key changes include:

- Envelope: improved insulation and window performance, air-barrier commissioning, and air-leakage testing
- Lighting: reduced interior and exterior lighting power and lighting controls
- Electrical: whole-building energy monitoring
- Renewable and electric vehicle readiness
- Mandatory mechanical ventilation for residential buildings

SCOPE

6. Which building types are covered by NYStretch?

NYStretch covers the same building types as those covered by the ECCCNY. For jurisdictions that adopt NYStretch as a local energy code, it will amend the base 2020 ECCCNY and become the binding energy code language for building projects in that municipality.

7. Does NYStretch apply to major renovation projects as well as new construction?

Yes, in the same manner that the ECCCNY is applicable to major renovation and new construction projects.

8. Does NYStretch apply to minor additions to existing buildings?

As it is with the ECCCNY, additions to existing commercial and residential buildings that are large enough to require code compliance are treated as renovations. In both cases, these additions can follow the performance approach to code compliance or a simplified prescriptive path.

9. Are multifamily buildings considered residential or commercial buildings under NYStretch?

NYStretch does not modify the definitions of residential and commercial buildings. Therefore, multifamily buildings will be handled identically in the 2020 ECCCNY and in NYStretch.

LOCAL ADOPTION AND ENFORCEMENT REQUIREMENTS

10. How do communities adopt NYStretch?

Local jurisdictions will follow their normal procedures for introducing an amendment to a local law. A NYSERDA representative may be available to present NYStretch to members of a committee or at public hearings and to answer questions.

NYSERDA has developed template language for a resolution, amendment, or ordinance. It is included in an Adoption Guide and Model NYStretch Adoption Bill to assist local municipalities with adopting NYStretch.

11. Does NYStretch need to be approved by the New York Secretary of State?

No, pursuant to Article 11, section 11-109 of the New York State Energy Law, and subject to the provisions and requirements of that section, any municipality has the power to promulgate a local energy conservation code that is more stringent than the 2020 ECCCNY.

However, after a local law, revision, or amendment has been enacted, it must be filed and indexed by the Department of State.

12. When does the local law need to be filed with the New York Secretary of State?

Within 30 days of enactment. Instructions for filing a local energy conservation construction code can be found here: dos.ny.gov/DCEA/pdf/Energy/Filing-of-a-Local-Energy-Conservation-Construction-Code-11-109.pdf

13. How are interpretations of NYStretch handled?

A jurisdiction's local code official in the municipality is permitted to interpret provisions of NYStretch that are (1) in addition to the provisions of the 2020 ECCCNY or (2) more stringent than the provisions of the 2020 ECCCNY. NYSERDA plans to offer code officials interpretation assistance in the form of a hotline or a technical consultant.

14. How would NYStretch be implemented and enforced?

Implementation and enforcement will be handled by the same authority who handles implementation and enforcement of other building codes in a community.

15. Can a jurisdiction adopt just the residential or commercial portion of the NYStretch?

Yes. While a jurisdiction may adopt one or both of the Commercial and Residential provisions, it is NYSERDA's desire, but not a rule, that the NYStretch be adopted as written. Changes to or deletions of the provisions contained in NYStretch may affect energy savings, cost savings, and enforceability. Jurisdictions are encouraged to contact codes@nyserderda.ny.gov before considering any changes to the NYStretch.

16. It seems like the NYStretch has efficiency requirements for HVAC equipment that exceed federally mandated levels of efficiency. How can local jurisdictions have the authority to mandate higher levels of efficiencies for HVAC equipment?

NYStretch does not mandate the use of HVAC or water-heating equipment measures that exceed federal energy efficiency levels.

RESIDENTIAL BUILDING QUESTIONS

17. How does a new home meet the residential requirements of NYStretch?

The compliance paths include the same paths as in the ECCCNY, including versions of RESCheck™. NYStretch also allows for Passive House approaches.

18. For residential buildings, is additional testing equipment and verification required to meet the NYStretch compared to the 2020 ECCCNY?

Yes. For example, a provision in NYStretch requires that a mechanical ventilation system be tested and verified to ensure it is working properly so as to deliver the expected performance and energy savings.

19. How much energy will each new home save if built to meet NYStretch?*

On average, residential buildings that meet NYStretch can save an estimated 19.7% in terms of energy cost compared to those built to the 2020 ECCCNY. Likewise, a homeowner would see, on average, an estimated 19.7% reduction in their utility bill over the course of one year. The prescriptive residential provisions of NYStretch were modeled using whole building energy simulation software to quantify energy savings beyond what will be expected under the 2020 ECCCNY.

**Note that these savings strictly reflect energy efficiency components and do not include any energy offset by renewable energy generation such as solar photovoltaic (PV) panels. Additional savings would be realized for projects that include renewable generation technologies.*

20. How much more does it cost to build a new home to meet NYStretch compared to the current 2020 ECCCNY?

There are multiple ways to comply with NYStretch. Third-party incremental cost analyses show that incremental costs range from \$1,506 to \$2,463 per home for single family homes. Multifamily apartments will have incremental costs ranging from \$1,488 to \$1,750 per dwelling unit.

NYStretch–Average Residential Savings, Costs, and Payback

Building Type	Annual Energy Cost Savings (\$/home)*	Incremental Cost of Construction (\$/home)*	Simple Payback (years)*
Single Family Home	\$348	\$2,057	5.9
Multifamily Unit	\$171	\$1,591	9.3
Weighted Average NY State	\$278	\$1,795	6.4

*Results will vary depending on building and construction type and location in NY State.

Adoption of a more stringent standard for buildings may result in slightly higher costs for new construction, but costs will be offset by the energy cost savings associated with a home that meets NYStretch. In the case of single family homes, the costs will be offset within 4 to 8 years, depending on location. Similarly, the costs for a multifamily building can be paid back in 10 years or less. In addition, for existing homes undergoing significant renovation, there are numerous efficiency programs across the state that provide financial incentives. These programs can help reduce the up-front costs and allow for faster returns on the investment in energy-saving measures. Check with your local utility company about financial incentives or rebate programs that may be available.

COMMERCIAL BUILDING QUESTIONS

21. For commercial buildings, what other compliance paths are there in NYStretch aside from the prescriptive path?

Like the 2020 ECCCNY, NYStretch allows commercial buildings to comply using the performance paths in ASHRAE. However, in NYStretch, the IECC performance path is not available for commercial buildings.

22. For commercial buildings, is additional testing and/or verification required to meet NYStretch?

Yes. For example, NYStretch includes a new section for air-barrier commissioning. This section requires design and construction checklists, field inspections, and a compilation of a final commissioning report, among other requirements not in the 2020 ECCCNY.

23. How much energy and money will each new commercial building save if built to meet NYStretch*?

The prescriptive commercial provisions of NYStretch were modeled using whole building energy simulation software to quantify energy savings beyond the 2020 ECCCNY, following the ASHRAE prescriptive path. Depending on the building type, climate zone, and compliance path selected, commercial buildings that meet NYStretch will save an estimated 7.1% in terms of energy cost compared to those built to the 2020 ECCCNY.

**Note that these savings strictly reflect energy efficiency components and do not include any energy offset by renewable energy generation such as solar PV. Additional savings would be realized for projects that include renewable generation technologies.*

24. How much more does it cost to build a new commercial building to meet NYStretch compared to the 2020 ECCCNY?

Adoption of a more efficient standard for buildings is likely to result in slightly higher initial costs for new construction, but lower energy bills. Initial costs will differ based on building type, the heating and cooling system included in the design, and the compliance path selected. Based on a NYStretch cost study of the prescriptive provisions for commercial buildings, the incremental costs and simple payback for the most cost-effective packages are as follows:

NYStretch – Average Commercial Savings, Costs, and Payback

Building Type	Percentage Savings*	Incremental Cost (\$/sq ft)*	Simple Payback (years)*
Large Office	4.1%	\$0.31	3.3
Stand-alone Retail	15.8%	\$3.39	13.3
Secondary School	8.1%	\$0.55	5.4
Large Hotel	8.7%	\$1.64	8.8
Full-service Restaurant	12.1%	\$4.29	4.6
Outpatient Healthcare	6.1%	\$2.85	12.0
Warehouse	12.9%	\$0.77	13.3
10-story High-rise Apartment	3.0	\$0.43	11.5
20-story High-rise Apartment	3.4%	\$0.47	13.5
Weighted Average NY State	7.1%	\$1.14	10.5

*Results will vary depending on building type and location in NY State.

In addition, there are numerous efficiency programs across the state that provide financial incentives. These programs can help reduce the up-front cost of complying with NYStretch and allow for faster returns on investment in energy-saving measures. Check with your local utility about financial incentives or rebate programs that may be available.

25. How does NYStretch work with green building programs such as LEED® for New Construction?

Both NYStretch and LEED for New Construction have the option to use ASHRAE 90.1 Appendix G modeling protocols.

26. Does NYStretch require installation of solar panels for commercial buildings?

No, but Section C405.11 does require buildings to be solar-ready per the provisions of Appendix CA of the 2018 IECC. However, municipalities may decide to adopt Appendix CC which requires buildings to comply with at least one of five options, one of which is to add on-site renewable energy.

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