NYSERDA Clean Energy Communities: NYStretch Energy Code-2020

Q&A:

How many/which municipalities have already adopted NYStretch Codes?


Why does the building industry feel uncomfortable adopting this and how to both see and address their points?

- NYSERDA’s primary goal is to support municipalities considering adoption of NYStretch-2020 and this process may include stakeholder outreach involving local building industry. In cases where concerns are raised by or on behalf of building industry representatives, they generally focus on: If NYStretch-2020 requires new or different building materials and technologies and, if they will be locally available; and,
- Additional construction costs associated with a higher building energy performance standard.

Ultimately, it is up to the local government, in consultation with building industry stakeholders, to determine if NYStretch-2020 makes sense for adoption. However, NYStretch-2020 does not require the use of commercially unavailable building materials or technologies and, based on NYSERDA’s analysis, it is cost-effective. NYSERDA’s residential and commercial cost-effectiveness analysis is available here: https://www.nyserda.ny.gov/All-Programs/Programs/Energy-Code-Training/NYStretch-Energy-Code-2020.

Is legislative action required for a community to adopt this or is authority left to local code officials?

NYSERDA provides a comprehensive Adoption Guide, including a model energy code resolution, to assist local communities in properly adopting NYStretch-2020. The Guide is found here -- https://www.nyserda.ny.gov/All-Programs/Programs/Energy-Code-Training/NYStretch-Energy-Code-2020

Please contact your region’s Clean Energy Communities Coordinator if you are interested in learning more about NYStretch adoption.
Our only concern is the effect this will have on current buildings where someone needs to get a permit to do some work. To get that structure up to the new energy code might be expensive. We have some very old buildings in Town, can we adapt [NYStretch-2020 adoption] for new construction only?

NYStretch-2020 applies to existing building projects in the same way as NYS Energy Code that is in effect now. Essentially, when new work is being done to a system in an existing building, that work needs to comply with NYS Energy Code or NYStretch-2020, if adopted. Areas of a the building that aren’t part of the project scope are not required to be brought into compliance with either the NYS Energy Code or NYStretch-2020. For example, if a building remodel involves exposing framing cavities that are part of the building thermal envelope—such as in an exterior wall—existing building requirements in the NYS Energy Code and NYStretch-2020 are the same. In either case, the existing building framing cavity must be filled to full-depth with insulation—not to meet a specific R-value requirement as would be the case in a new build or building addition. Similarly, if window replacement is not part of an existing building’s project scope, neither the NYS Energy Code nor the NYS Energy Code as amended by NYStretch-2020 requires updating the building’s windows to meet current U-factor requirements.

NYSERDA’s NYStretch-2020 Circuit Riders are available to discuss specific existing building alteration and addition scenarios in the context of either the NYS Energy Code or NYStretch-2020.

NYStretch-2020 Support for Communities Technical, Strategy

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Are municipalities permitted to adopt portions of the Stretch Code a la carte, or must the entire code be adopted?
NYStretch-2020 can be adopted with amendments, in whole or in part. However, to qualify for Clean Energy Communities points and grants, municipalities must either adopt NYStretch-2020 in whole or, if amendments are made, demonstrate that they don’t reduce the overall efficacy of the code as published by NYSERDA.

Design professionals are currently aware of the 2020 ECCCNYS requirements and design their projects to be in compliance with those requirements. What is the most effective way to inform them of all of the increase in requirements after a municipality adopts NYStretch?

NYSERDA’s NYStretch-2020 Circuit Riders are available to municipalities before and after adopting NYStretch-2020. NYSERDA’s website also has a number of helpful resources: https://www.nyserda.ny.gov/All-Programs/Programs/Energy-Code-Training/NYStretch-Energy-Code-2020.

NYSERDA is also in the process of finalizing several training modules on NYStretch-2020. In the near term, this training will be available by webinar only. NYStretch-2020 as well as NYS Energy Code training sponsored by NYSERDA will be published here and marketed statewide: https://www.nyserda.ny.gov/All-Programs/Programs/Energy-Code-Training/Energy-Code-Training-and-Support-Services.

An increase of $1.81 sq ft? Is this figure pre covid prices?

Cost-effectiveness analysis was performed pre-COVID. Residential and commercial cost-effectiveness reports are available here and provide a detailed explanation of the methodology and data sources behind the analysis: https://www.nyserda.ny.gov/All-Programs/Programs/Energy-Code-Training/NYStretch-Energy-Code-2020. Current market conditions and supply chain disruptions are driving all pricing upwards and cannot at this time be predicted. Material and labor pricing is impacted whether or not a municipality adopts NYStretch-2020.

How do Modular homes comply with NYStretch-2020 requirements?

NYSERDA is working with New York State Department of State to provide a more detailed response to this question and will update the FAQ document here soon: https://www.nyserda.ny.gov/All-Programs/Programs/Energy-Code-Training/NYStretch-Energy-Code-2020. Please contact NYSERDA’s NYStretch-2020 Circuit Riders for notification when this FAQ document is updated.
What happens if a residence is to be built without ducts? Does that totally disqualify the building from meeting Stretch standards?

No. NYStretch-2020 does not prescribe or limit options for HVAC equipment. All buildings, whether or not they are heated or cooled using a ducted system, must comply with the NYS Energy Code or the NYS Energy Code as amended by NYStretch-2020 (if locally adopted).

Please delineate compliance options for "new hot water supply requirements." Must a heat pump water heater be installed?

No, NYStretch-2020 does not require heat pump hot water heaters to be installed.

NYStretch-2020 amends the NYS Energy Code with new requirements for hot water supply that applies to new residential construction only. Please download NYStretch-2020 here: https://www.nyserda.ny.gov/All-Programs/Programs/Energy-Code-Training/NYStretch-Energy-Code-2020. New requirements for hot water supply are found in Section 3.10 and, generally, they are designed to reduce heat loss through piping. NYStretch-2020 Circuit Riders are available to answer any follow-up questions.

In residential construction, an unconditioned basement would no longer be allowed to have ductwork run through it. Have the payback and energy savings calculations taken into consideration the energy impact of conditioning the basement?

Yes, it was considered under the NYSERDA Residential Cost Benefit analysis found here: https://www.nyserda.ny.gov/All-Programs/Programs/Energy-Code-Training/NYStretch-Energy-Code-2020. Please also note, as a reminder: where basement walls are insulated and part of the building thermal envelope, the basement is considered within conditioned space.

It would be helpful to know the total cost, cost per square foot, and amount of the cost that was paid for through subsidies for the case studies.

NYSERDA will work on collecting this information. Please contact a NYStretch-2020 Circuit Rider to ensure you receive the information once available.
Does the Energy Stretch Code include any consideration of the materials used in construction? How can NYSERDA encourage low-energy or net-zero projects to limit the use of concrete and petroleum-based products and instead incentivize materials with low embodied energy, especially those that sequester carbon?

NYStretch-2020 is a supplement to the NYS Energy Code and does not evaluate embodied energy or carbon. Several NYStretch-2020 provisions contribute to the enhanced durability of building through third party verification, and in that way, can extend the lifecycle and embodied energy investments of a building.

In a two-story home where we would typically run the ductwork in an attic, we would no longer be allowed to do that. Correct?

NYStretch-2020 prohibits duct systems—including ducts and air handlers—from being installed in unconditioned space in new buildings and additions. There are two new additions to the NYS Energy Code, which provide detail on when duct systems can be considered within conditioned space (R403.3.7 Ducts located in conditioned space) and how to accommodate ducts in ceiling insulation (R403.3.6 Ducts buried within ceiling insulation). Please note: if the home’s roof is sealed and insulated as part of the building thermal envelope—rather than the ceiling separating the second floor from the attic area—the attic is considered part of conditioned space.

Can you clarify the new EV and solar requirements for both commercial and residential?

Please download NYStretch-2020 here: https://www.nyserda.ny.gov/All-Programs/Programs/Energy-Code-Training/NYStretch-Energy-Code-2020. These requirements are found in sections 1.26 and 1.27 (commercial buildings) and 3.14 (residential buildings). In short, however, these are “readiness” requirements applying to new construction, to ensure that basic accommodations are made to more easily allow future addition of photovoltaics and/or electric vehicle charging.