Energy Codes for New Construction
Meeting #3

NJ Energy Code Collaborative

March 02, 2026

Agenda

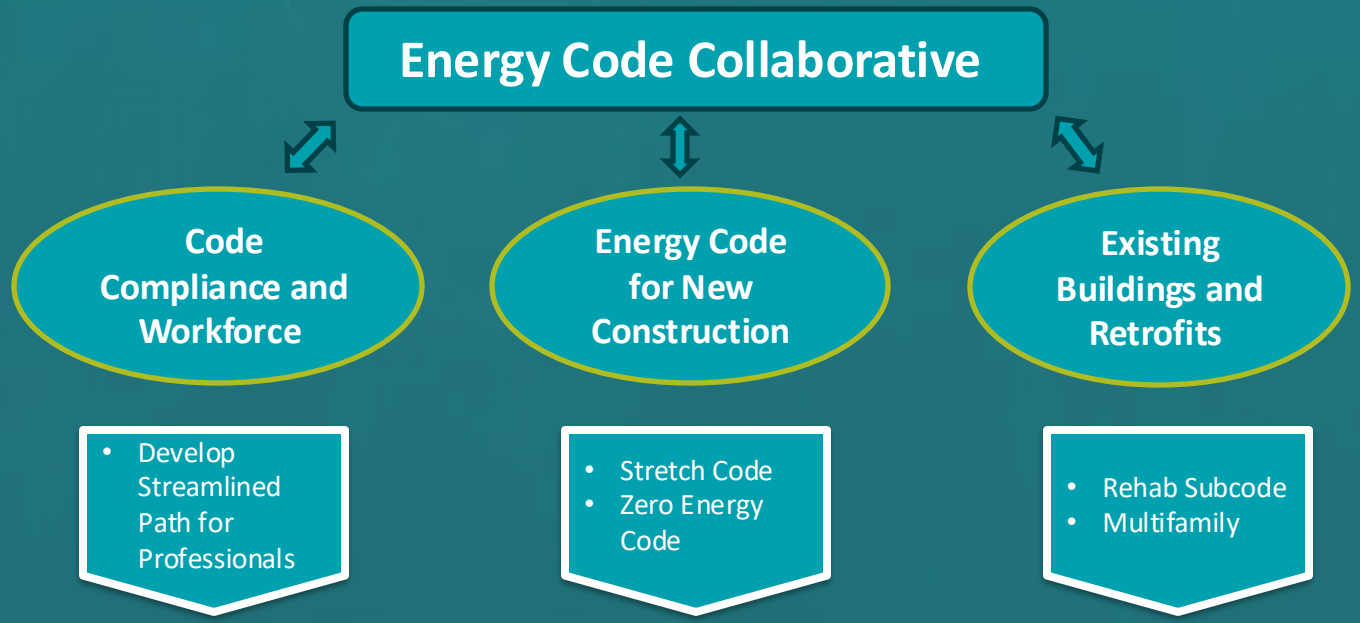
- NJ UCC adoption update (impact of executive order)
- Report out from the Stretch and Zero Energy Code Working Group
- Discussion on incentives and their alignment with available codes

Meeting Guidelines – Antitrust Statement

- Throughout our meetings, participants shall comply with competition law requirements and shall not enter into any discussion, activity or conduct that may violate any applicable competition law. Should the meeting discuss matters that contravene competition law requirements, it is the responsibility of participants to notify the Moderator who will discontinue the discussion or close the meeting.

NJ ECC Purpose

Establish a timely and robust, stakeholder-guided process to research and develop a New Jersey Zero Energy Building Roadmap that provides options to build government and market capacities to effectively advance an increasingly more energy-efficient building energy code and improve administration, enforcement and compliance, aligned with relevant clean energy policies of the State, including the Energy Master Plan goals and recommendations.



Zero Energy Building Roadmap

The Roadmap, as a living document, presents three concurrent pathways with explicit actions and timing for implementing zero energy building strategies, primarily through the adoption/amendment of building codes. These pathways, adopted together, are designed to lead New Jersey to implement zero-energy building codes for both new construction and existing buildings by 2030 or sooner.

- New Building Base Code Path
- Stretch Code/Zero Energy Code Path
- Existing Building Path

2024 IECC Adoption Update

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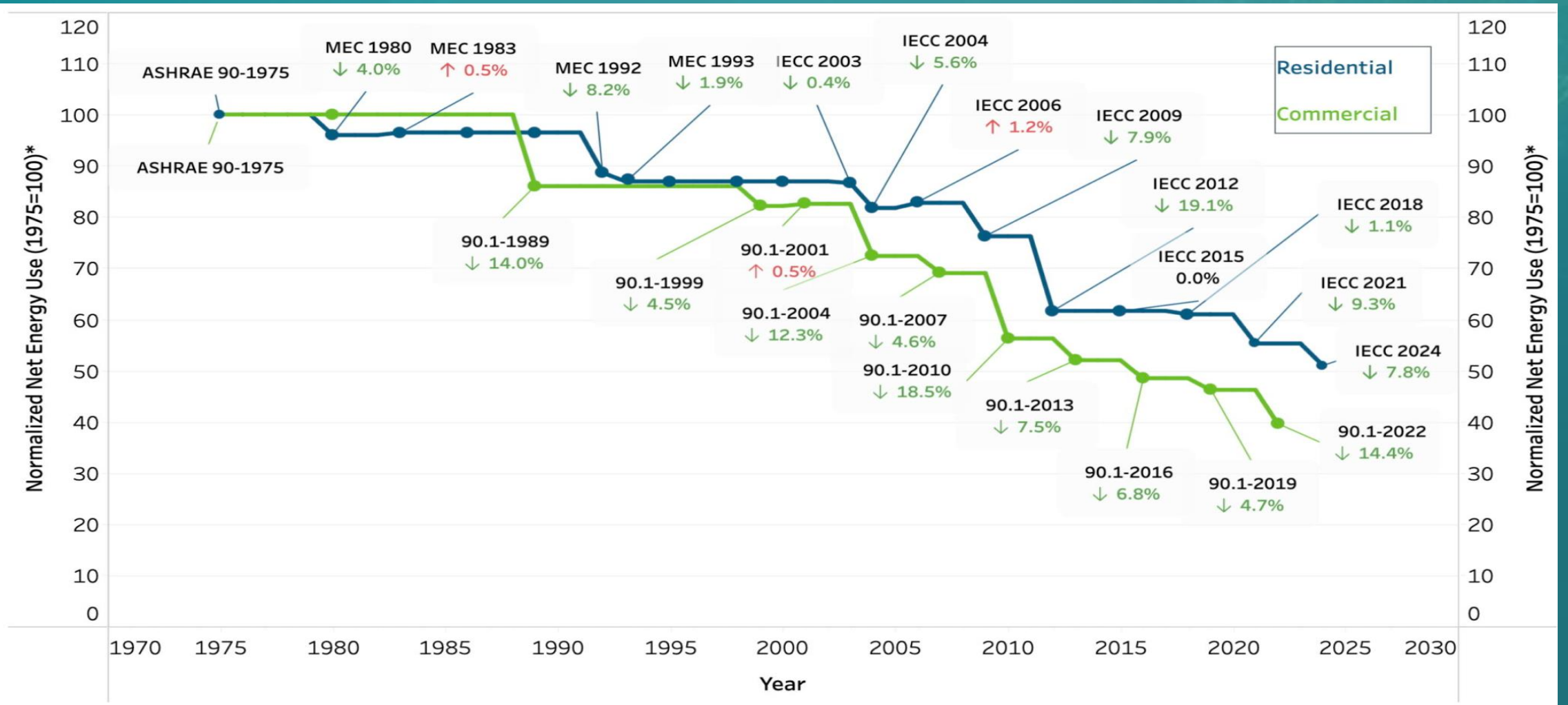
- The public comment period on New Jersey's proposed adoption of the 2024 IECC closed on December 19. The next step in the process is review by the Governor's Office of the updated **Uniform Construction Code**.

- In early 2026, Governor Mikie Sherrill took office and issued several executive orders, including **Executive Order No. 7**, which established a **90-day pause on the proposal and adoption of new state agency rules**. This pause temporarily delays adoption of updates to the UCC, including the Energy Subcode, and is expected to shift the overall timeline.

- Under New Jersey Rules for Agency Rulemaking, a rule must be adopted and filed with the Office of Administrative Law within **one year of publication in the New Jersey Register**, or it expires. Based on the proposal publication date, **adoption of the UCC must occur by October 20, 2026**.

Stretch and Zero Energy Code Working Group – Report Out

Code Energy Reduction History



Source: DOE

What is a Stretch or Net Zero Code?

Base codes

The minimum energy efficiency levels set in the state-adopted version of a national model code, which may have state specific amendments.

Stretch & Net Zero codes

Stretch codes are building energy codes that require building construction above the minimum energy efficiency levels of the base code.

Net zero codes require demonstration that all site energy is provided from renewable sources generally either installed onsite or offsite.

Typical Stretch Code Areas of Focus

Topics covered by stretch codes

Energy Efficiency

– Envelope, Fenestration, Air Leakage, ERV, Fan Power, Heat Pump, Water Heating

Electrification

– Heat and Hot Water (NO/limit combustion), EV Ready, Grid Connected/Responsive

Renewables

– PV ready, percentage on site required, off-site/community

Stretch Codes Metrics

Approaches to Stretch Codes

- Percent better than base code, *(ME 2025)*
- Metrics such as Energy Use Intensity (EUI), Home Energy Rating System (HERS), Thermal Energy Demand Index (TEDI), *(MA)*
- Prescriptive, Performance w/backstop, *(MA)*
- Point Based, *(VT)*
- Programmatic (Passive House, DOE ZERH), *(MA)*

NJ Clean Energy Program Energy Efficiency Incentives

Pathways offer increasingly higher savings:

- **High Performance**
  Deeper energy savings with tiered incentives
- **Streamlined**
  More efficient than code compliance
- **Bundled**
  Two or more eligible energy efficiency improvements

Pathways for Higher Savings

https://cleanenergy.nj.gov/programs/energy-efficiency/new-construction-program

Base and GHG Incentives

Pathway	Incentive Rate	GHG Reduction Bonus	
		Tons CO2e per kSF	$/SqFt
Bundled	$0.25 /SqFt	n/a	n/a
Streamlined	$0.50 /SqFt		
High Performance *Non-Proxy*	$1.00 /SqFt		
High Performance *LEED V4.1*	$1.00 /SqFt		
High Performance *ENERGY STAR®*	$1.00 /SqFt	0.7 - 0.99 tons	$0.25
High Performance *DOE Zero-Energy Ready Home*	$1.75 /SqFt	1.0 - 1.99 tons 2.0 - 2.99 tons	$0.50 $1.00
High Performance (choose one): *PHIUS Core 2021* *PHIUS Zero 2021* *PHIUS CORE REVIVE 2021* *PHI Classic V10* *PHI Plus V10* *PHI Premium V10*	$2.50 /SqFt	3.0+ tons	$1.50

- Streamlined– 5% better than project's relevant code
- High Performance Non-Proxy (ASHRAE) –5% site energy savings compared to baseline
- LEED v4.1– 5% better than ASHRAE 90.1 2019 or 9% better than 2016
- Enegy Star MF & US DOE ZER– 10% site energy savings compared to IECC 2021 or 15% compared to 2019.
- PHIUS – meet PHIUS standard & develop baseline for comparison to show energy reduction (generally 40 to 85% better than code)

IECC Appendix RG: Stretch Code

RG101.1 Simulated Building Performance Compliance

- Building Envelope thermal conductance 15% better that prescriptive factors in table R402.1.2
- Dwelling Units with Fuel-burning appliances for space heating, water heating or both requires 30% reduction of annual energy costs from standard reference design
- All other Dwelling Units require 25% reduction of annual energy costs from standard reference design
- Dwelling units larger than 5,000sf of living space above grade require an additional 5% reduction

IECC Appendix RG: Stretch Code

RG101.2 ERI Based Compliance

– Requires ERI less than or equal to values in Table RG101.2 (OPP = Onsite Power Production)
(ERI of 62 to 61 is current max based on IECC 2021)

TABLE RG101.2 (R406.5) MAXIMUM ENERGY RATING INDEX

CLIMATE ZONE	ENERGY RATING INDEX NOT INCLUDING OPP	ENERGY RATING INDEX WITH OPP
0 and 1	46	27
2	46	26
3	45	24
4	48	32
5	49	37
6	48	39
7	47	43
8	47	43

IECC Appendix RC: Zero Energy Residential Building Provisions

RC103.5 ERI-based Compliance: ERI analysis requires rated design be shown to have an ERI less than or equal to both values indicated in Table RC103.5 when compared to reference design

CLIMATE ZONE	ENERGY RATING INDEX NOT INCLUDING RENEWABLE ENERGY	ENERGY RATING INDEX INCLUDING ADJUSTED OPP
0	42	0
1	42	0
2	42	0
3	42	0
4	42	0
5	42	0
6	42	0
7	42	0
8	42	0

Other Options for a Stretch/Net Zero Energy Codes/Standard

IgCC: The International Green Construction Code is a model code developed by the International Code Council (ICC), ASHRAE, USGBC, and IES to regulate the environmental impact of buildings. It provides mandatory, enforceable green building requirements for new and existing commercial structures, focusing on energy efficiency, water conservation, and sustainability.

ASHRAE Standard 189: is a comprehensive, code-enforceable standard providing minimum requirements for the design, construction, and operation of high-performance green buildings. It covers sustainability, water efficiency, energy efficiency, indoor environmental quality, and materials, acting as a technical basis for building codes.

LEED Zero Carbon/Energy: Zero Carbon recognizes buildings with net-zero carbon emissions from energy consumption and occupant transportation. Zero Energy Recognizes buildings that achieve a source energy use balance of zero.

Architecture 2030 Zero Code (commercial, institutional, mid to high rise residential): national/international building energy standard that combines energy-efficient construction with on-site or off-site renewable energy to achieve net-zero carbon (ZNC) performance.

Discussion

For more information

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