



New Jersey Energy Code Collaborative

February 13, 2025

Agenda



12:45pm	10 minutes	Welcome	BPU/Rutgers/NEEP
12:55pm	10 minutes	History of the Draft NJ ZEB Roadmap	NEEP
1:05pm	20 minutes	Review of the Draft ZEB Roadmap	NEEP
1:25pm	10 minutes	2024 IECC Adoption Process & Status in NJ	DCA
1:35pm	5 minutes	Brief Review of RECI-Funded Projects in NJ	Rutgers
1:40pm	15 minutes	NJ ECC and Subcommittees	NEEP/Rutgers
1:55pm	5 minutes	Wrap up and Next Steps	
2:00pm		End	

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.



History of the DRAFT NJ ZEB Roadmap: A Living Document



New Jersey Energy Master Plan (EMP and other relevant statutes)



- **2019:** Governor Phil Murphy issued **Executive Order (E.O.) 28**, updating New Jersey's **Energy Master Plan (EMP)** and directing the Board of Public Utilities (BPU) to develop a statewide clean energy strategy.
- **2020:** The **Global Warming Response Act (GWRA) 80x50 Report** identified pathways to cut greenhouse gas emissions **80% below 2006 levels by 2050**.
- **2023:** Governor Murphy updated the EMP and signed:
 - **E.O. 315:** Accelerated the clean energy goal to **100% by 2035** through efficiency and renewables.
 - **E.O. 316:** Advanced **building electrification** for commercial and residential sectors.

Memorandum of Understanding (MOU)

- On February 6, 2021, BPU signed a **Memorandum of Understanding (MOU) with NEEP and Rutgers** to:
 - Convene the **New Jersey Energy Code Collaborative**
 - Engage key stakeholders, including:
 - Building Design and Construction Industry
 - Energy Efficiency Contractors
 - Representatives from Labor and Environmental Organizations
 - University Based Organizations
 - Municipal Staff
 - Division of Codes and Standards of the Department of Community Affairs (DCA)
 - Department of Environmental Protection
 - Develop a **Zero Energy Buildings Roadmap**
- This MOU was directly referenced in E.O. 316 from February 2023

Draft New Jersey Zero Energy Building Roadmap & the Energy Code Collaborative



- Purpose of Energy Code Collaborative
 - 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.
 - This language was first presented to stakeholders on 10/31/22
 - Since then, the structure of the NJ ECC has been further developed to include several subcommittees

Visit the New Jersey Energy Code Collaborative website:
<https://njenergycodecollaborative.org/>

Project Team


- **Project Facilitators:** NEEP and Rutgers, Built Environment and Green Building Group co-facilitate the NJ Energy Code Collaborative
- **ZEB Advisory Group:** Guided the development of the initial ZEB Roadmap in 2021
- **ZEB Collaborative:** Working group that informed development of the initial ZEB Roadmap in 2021
- **Subject Matter Experts:** Provided recommendations and feedback to Project Facilitators
- **Public Stakeholders:** Participated in listening session and/or provided comments on the ZEB Roadmap
- **NJ Energy Code Collaborative:** Now beginning its work in a committee structure to dive into potential strategies for net zero buildings

Stakeholder Engagement

- Listening sessions:
 - Held on: 10/26/2021, 1/22/2022, 3/30/2022
 - Engaged key stakeholders:
 - Home builders
 - Fuel gas merchants & utilities
 - Tenant associations
 - Energy equity advocacy groups
 - Environmental organizations

Feedback & Review Process

- NJ Department of Community Affairs (DCA) reviews:
 - Feedback received on 10/31/2022, 12/13/2022, 5/5/2023, 5/16/2024
- Other Stakeholder Feedback:
 - Collected through May 2024
- Governor’s Office review and approval for release and reconvening the ECC:
 - October 2024: Review by the Governor’s Office
 - January 2025: Draft approved for public release

 **View Stakeholder Comments & Responses:** <https://njenergycodecollaborative.org/wp-content/uploads/2025/01/NJ-ZEB-Roadmap-All-Comments-January-2025.pdf>

Draft Roadmap Released as “Living Document”: Collection of Strategies



- The first draft of the ZEB Roadmap was posted to the NEEP Website for reference in October 2022
- The ZEB Roadmap was designed as a “living document” that will be updated as new information becomes available
- The original draft ZEB Roadmap was updated to incorporate stakeholder input
- Additional reviews were conducted by DCA and the Governor’s Office
- In January 2025, the updated draft ZEB Roadmap was approved and publicly re-released: <https://njenergycodecollaborative.org/roadmap/>



DRAFT Zero Energy Roadmap Summary



Draft Roadmap Outline

- Section 1: Introduction
- Section 2: Background
 - 2A: Energy Efficiency Policy in NJ
 - 2B: The UCC
 - 2C: DCA Authority to Reduce Energy Demand to Protect Health and Safety
 - 2D: NJ Code Enforcement
 - 2E: NJ Code Compliance
 - 2F: State Owned Buildings
 - 2G: NJ Rehab Subcode
 - 2H: The Energy Code Collaborative
- Section 3: The NJZEB Roadmap
 - 3A: Roadmap Recommendations Table
 - 3B: Roadmap Recommendation by Year
 - 3C: Roadmap Recommendation by Path
- Section 4: Additional Energy Efficiency State Considerations to Support Zero Energy Buildings
- Section 5: Additional Research to Ensure Successful ZEB Implementation
- Appendices
 - Appendix A: Relevant State Policy Encouraging Zero Energy Buildings in New Jersey
 - Appendix B: Other Relevant Resources
 - Appendix C: Common Roadmap Acronyms
 - Appendix D: Regional Building Performance Standards Examples

Strategies as Outlined in Draft Zero Energy Buildings Roadmap



- New Building Base Code Path
- Stretch Code/Zero Energy Code Path
- Existing Building Path
 - Changes to the Rehab code
 - Building Performance Standards (BPS)

New Building Base Code Path: Example Strategies

- Adopt the latest IECC & ASHRAE 90.1 versions every three years as permitted by the UCC Act
 - After 3 years of previous adoption and within a year of the release of the new version
- Target adoption of the 2024 IECC & ASHRAE 90.1-2022 by end of 2025, with an effective date in 2026 (on track)
- Develop and implement training for code officials and design professionals based on Rutgers' compliance study
- Consider appendices of latest IECC version and alternative compliance pathways (e.g., DOE Zero Energy Ready Homes, Passive House)
 - Conduct cost-effectiveness analysis
- Review and adopt future IECC & ASHRAE updates

Stretch Code Path: Example Strategies

Stretch Code:

- Consider the need for enabling legislation
- Consider utilizing the Appendices of the 2024 IECC (if not adopted as a base code) as a voluntary stretch code
- Consider alternative compliance options for high-performance buildings, such as:
 - DOE Zero Energy Ready Homes
 - Passive House (Phius or PHI)
- Consider a statewide voluntary stretch code with consistent minimum requirements for municipalities
- Provide resources and training to support implementation
- Consider use of the 2027 IECC as a Stretch Code and adopt subsequent versions when they become available after the base code is updated (Ex. 2024 Base, 2027 Stretch; etc.)

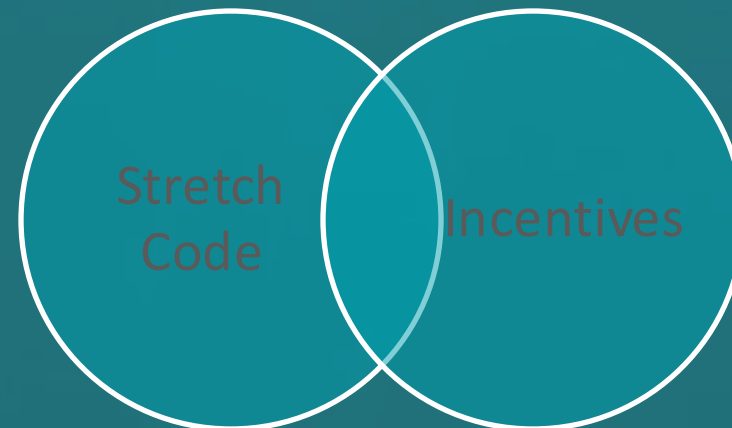
Zero Energy Code:

- To be determined

Stretch Code Tied to Incentives

- Consider a structure where builders can receive incentives for going above and beyond the model code requirements
- Possible actions: creating minimum “above code”* requirements that need to be achieved to unlock incentive opportunities
- Consider a formalized statewide stretch code (of the 2027 IECC, or 2024 IECC Appendices if not adopted as base code) that could set minimum requirements that are consistent throughout the state

*"above code" is used interchangeably with "stretch code"



Existing Building Code Path: Example Strategies

- Consider energy and cost saving updates to the NJ Rehabilitation Subcode as consistent with UCC governing provisions.
- Launch Incentivized Building Energy Performance Standards Pilot Program



2024 IECC Adoption Process & Status in New Jersey





Review of Resilient and Efficient Codes Implementation (RECI) Funded Projects in New Jersey

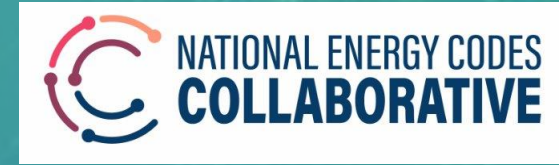


Energy Code Official - Training & Education Collaborative (ECO-TEC)



- Led by ASHRAE and ICC with support from NASEO and state partners (including NJ), the goal of ECO-TEC is to develop and deploy education and training resources focused on the energy code official community. State Agencies will coordinate implementation in NJ.

Energy Code Implementation (ECI) Fellow



- RECI 1: National Energy Code Collaborative
- Prime recipient: ACEEE
- Energy Code Implementation Fellow
 - Experienced practitioners
 - 2-year term
 - The Fellow will support BPS energy code-related efforts
 - NEEP will support the work of the Fellow

Preparing the Market for Evidence-based Building Performance Standards (BPS)



RUTGERS



- Cooperative Agreement with US Department of Energy and Rutgers, BPU, NJIT, NEEP, Energy Solutions, and community-based organizations. Tasks include best practice research, building energy modeling, an incentivized Lead by Example Pilot, stakeholder engagement, and development/dissemination of a Playbook and Toolkit for other states.

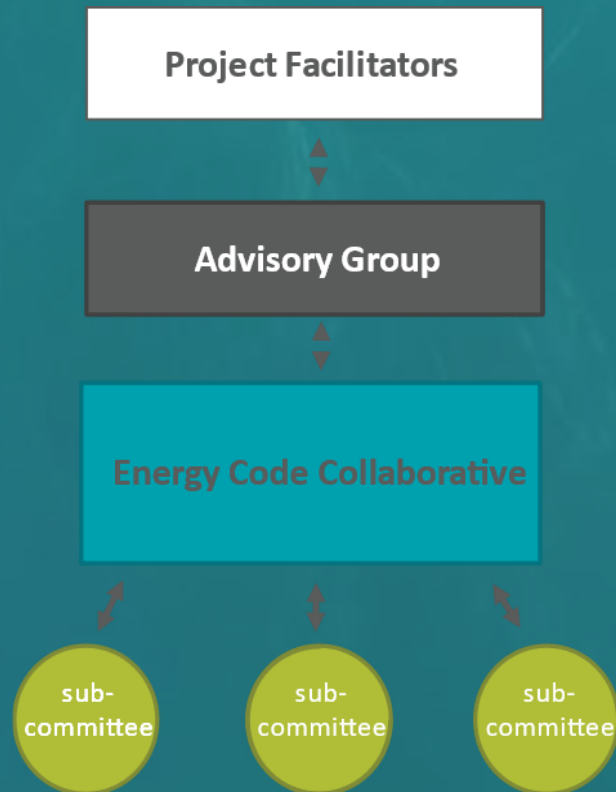


The New Jersey Energy Code Collaborative and Subcommittees



Organizational Structure

Energy Code Collaborative



Subcommittees- Potential Areas of Focus:

- Code Adoption
- Code Amendments
- Stretch Code
- Building Performance Standards (BPS)
- Code Compliance and Enforcement
- Workforce Development and Training

Next Steps



- Create Subcommittees
- The Subcommittees review and deliberate example strategies as contained in the Draft ZEB Roadmap or other strategies as relevant
- NJ ECC intends to meet quarterly
- The Subcommittees will meet monthly in between NJ ECC meetings
- The Subcommittees will periodically report out quarterly to NJ ECC their recommendations for next steps

Questions?

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