

June 25th, 2025

Submitted electronically via: comments@cleanegroup.org

Connecticut Climate Resilient Energy Code Project Team

Re: Connecticut Climate Resilient Energy Code

To Whom It May Concern,

On behalf of Northeast Energy Efficiency Partnerships¹ (NEEP), we are pleased to submit comments to the Connecticut Climate Resilient Energy Code Project Team (the project team) on the <u>Draft Connecticut Climate Resilient Energy Code for Multifamily Affordable</u> Housing (CT-CRE Code). NEEP is a non-profit whose mission is to accelerate regional collaboration to promote advanced energy efficiency and related solutions in homes, buildings, industry, and communities. NEEP submits the following comments in support of aspects of the code and recommendations to make the final code more effective. NEEP focuses its comments on the International Energy Conservation Code (IECC) and not on the International Residential Code (IRC) and International Building Code (IBC). NEEP reviewed the IRC and IBC draft language solely for alignment with the IECC sections and errata. NEEP did not evaluate whether the proposed language fully addresses the integration of the CT-CRE code into the IRC and IBC.

NEEP Supports the Following Aspects of the Proposed Code

NEEP wishes to express support for the leadership of the CT-CRE Code in resilience codes and multifamily affordable housing. This code has the potential to provide energy savings, increased resilience, and cost savings for new multifamily affordable structures throughout the state.

Regional Leadership and Replicability

Connecticut's role in developing the CT-CRE Code positions the state as a regional leader. The code's provisions could serve as a replicable model, inspiring and informing the efforts of other states in New England and beyond that seek strategies to increase resident health and safety, energy efficiency, and energy affordability in multifamily affordable housing.

¹ These comments are offered by NEEP staff and do not necessarily represent the view of the NEEP Board of Directors, sponsors, or partners. NEEP is a 501 (c)(3) non-profit organization that does not lobby or litigate.



Focus on Multifamily Affordable Housing

NEEP commends the CT-CRE Code's focus on multifamily affordable housing, as it will help ensure that the benefits of energy efficiency reach all communities in the region. The Code's singular focus on multifamily affordable housing follows the <u>best practice</u> of designing programs specific to each type of multifamily housing ownership structure (e.g., market rate, subsidized affordable, unsubsidized affordable).

Codes Save Money Long-Term by Limiting Retrofits

NEEP supports the project team's comprehensive approach to the code overlay language as an effective strategy for advancing energy efficiency and structural resiliency in new multifamily affordable housing construction. Constructing highly efficient buildings from the outset is a <u>cost-effective</u> way to avoid the need for future deep energy retrofits, which can be <u>expensive and highly complex</u>. Eliminating the need for post-construction retrofits benefits multifamily property owners by mitigating future capital expenditures, avoiding disruptions to tenants, and supporting the long-term preservation of affordable housing by promoting <u>financial stability</u> for subsidized affordable multifamily properties. Ensuring that multifamily housing is built to a high standard extends the useful life of affordable housing buildings, thereby optimizing public investment in these projects.

Preliminary Impact Assessment of Non-Energy Benefits

High-performing buildings also yield important <u>non-energy benefits</u>, including improved indoor air quality, increased resident comfort, and greater tenant satisfaction. <u>Studies have</u> <u>shown</u> that poor indoor air quality has a significant impact on individual health and results in billions of dollars in health care expenditures, lost wages, and reductions in individual economic productivity. Building to the CT-CRE Code in residential units also supports <u>community resilience</u> by improving resident health, comfort, and safety in extreme weather events and power outages. We support the project team's <u>Preliminary Impact Assessment</u> <u>Results</u> report, which aims to quantify the societal and health benefits of the code.

Enhanced Building Envelope Requirements and Thermal Bridge Mitigation

Thermal bridging around building penetrations, balconies, fenestrations, beams, columns, and parapets is a <u>well-documented</u> source of unwanted thermal transfer in multifamily buildings. The CT-CRE Code's strengthened insulation and air sealing requirements align



with <u>best practices</u> on the thermal envelope as a critical component of a high-performance building. Provisions listed under R402.6-R402.6.5 will help reduce unwanted air transfer and improve resident comfort as well as structural and community resiliency.

Increasing Resilience in Affordable Housing

Resilience is a critical consideration for properties with electric building systems and appliances. Sections C405.13 and C405.14.1 requiring on-site renewable energy systems and storage are crucial components of the CT-CRE Code to ensure resilience for property owners and low- to moderate-income residents.

NEEP Recommends the Following Actions and Revisions to the Proposed Code

NEEP suggests the following actions to the project team on communicating with residents, specifying emergency management information, and addressing formatting issues.

Resident Inclusion and Communication

NEEP commends the project team for including the voices of residents in the code creation process and sharing the results of resident engagement and feedback. The CT-CRE code reflects this feedback, particularly as it relates to emergency response and resiliency. NEEP recommends that the project team create resources that compare the cost of code implementation to the projected monthly or lifetime savings of the code provisions to address the concerns residents expressed about increased costs. These resources could take the form of a one-pager, community meeting, or flyer, among others. Resources should be translated for non-English speaking residents and made accessible to persons with disabilities.

Specify Emergency Management Information

NEEP recommends that the code specify how to furnish the emergency management information noted in E3408.4 and 2702.6 to ease code implementation. This could be through specifying the use of all or part of an industry standard format, such as the US Department of Housing and Urban Development's <u>Multifamily Disaster Preparedness Plan</u> <u>Template</u>, or creating a tailored emergency management plan specific to this project. The Multifamily Disaster Preparedness Plan Template may go beyond the intent of the code, so specifying pieces of the plan may better align with the project team's goals. The project team could include either an existing template or create a tailored version as an appendix



to the CT-CRE code. Emergency management information should be translated for non-English speaking residents and building operational staff and made accessible to persons with disabilities.

Address Issues with Numbering, Formatting & Errata

Below are the numbering and formatting issues NEEP noted within the code language. We focused on the commercial and residential IECC sections.

- Page 12 Table R402.1.3 should be R402.1.2. Values in the table are U-values but are labeled R-values. Glazed Vertical Fenestration SHGC has the same value as the CT code, but is underlined. Mass Wall U-Value is different than CT code but is not underlined.
- Page 12 & 13 Table R402.1.2 Building Envelope Fenestration Maximum U-Factor and SHGC Requirements: It is unclear where the crossed-out and new Table R402.1.2 came from.
- Page 15 Adjust the number on Table R402.1.3 to match formatting if the other two prior tables are included. Glazed Vertical Fenestration SHGC has the same value as the CT code, but is underlined.
- Page 16 It looks like this section is not based on the CT State Building Code. 0.1 CFM should replace 0.28 CFM.
- Page 18 Added section is R402.6.1, not R402.5.1
- Page 20- 21 Sections within R402.7 are labeled as R402.6.
- Page 38 C402.1.3 Old tables are included in the residential IECC section as crossed out to show they are replaced, but this approach is not followed in the commercial section.
- Page 38 and 39 Joist/Framing R-value vs. U-factor not aligned in tables C402.1.3 and C402.1.4. Unheated slabs and Heated slabs lines are not filled in for Table C402.1.4. Why are opaque door table lines not included?
- Page 40 C402.5 language looks to match unamended 2021 IECC language and not the CT State Building Code. The Section C402.5 modification lists C402.5.2 twice instead of C402.5.2 and C402.5.3.
- Page 43 Section C403 in the CT State Building Code already goes up to C403.14 Operable Opening Interlocking Controls. Added section C403.14 Resilient HVAC controls should be renumbered accordingly.
- Page 44 We recommend that any time IBC Section E2702.2.20 is mentioned outside of the IBC, it should be referred to as IBC E2702.2.20 to ensure clarity and



not presented just as 2702.2.20. Additionally, exceptions listed as R403.13 should be C403.13.

NEEP looks forward to seeing the final version of the CT-CRE Code and congratulates the Connecticut Climate Resilient Energy Code Project Team on moving forward with this project.

Sincerely,

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