New Jersey Energy Code Collaborative

Code Compliance and Workforce Subcommittee

Meeting Minutes

May 02, 2025, 10:00 – 11:00 AM

Attendees

- Ahmed Chaudry, NJEDA
- Andy Garcia, NJEDA
- Brian Penschow, AIA
- Cathy Yuhas, NJEDA
- Charlotte Weigel, NEEP
- Cornelia Wu, NEEP
- David Hattis, Rutgers
- Dragana Thibault, NEEP
- Helaine Barr, NJDEP
- Indrani Pal, NJBPU
- Jason Kliwinski, Senior Energy Code Researcher for Rutgers
- Jennifer Senick, Rutgers
- Jennifer Souder, Rutgers
- Ian Rayfield, NJDCA
- Liepa Braciulyte, NASEO
- Matthew DeMarco, M&E Engineers, Inc
- Mia Sinha, TRC
- Mikaila Ullal, NJIT
- Nicole Provost, NJDEP
- Ryan Richardson, NJ Dep. of Labor and Workforce Development
- Stacy Richardson, NJBPU
- Stephanie Staub, NJ Pathways
- Stephanie Walsh, Rutgers
- Valerie Diaz, ASHRAE

1. Introduction

Cornelia Wu (NEEP) opened the meeting by stating a brief antitrust disclaimer. Cornelia introduced the project team: Dragana Thibault (NEEP), Stacey Richardson (NJ Board of Public Utilities), Jennifer Senick and Jennifer Souder (Rutgers Center for Urban Policy Research), and Jason Kliwinski (Industry professional retained as Senior Energy Code Researcher for Rutgers). She provided background on the mission and roles of the facilitator organizations, including the NJ Board of Public Utilities (NJBPU), Northeast Energy Efficiency Partnerships (NEEP), and Rutgers. Cornelia reviewed the goals of the New Jersey Energy Code Collaborative and its focus on developing a Zero Energy Building Roadmap. Guiding Principles were presented with an emphasis on principles of collaboration, transparency, and evidence-based decision-making. The meeting summary will be circulated to participants for review before being posted online.

2. Energy Code Enforcement Workforce Gap Analysis

Dragana Thibault (NEEP) presented findings from a recent study conducted by NEEP on code enforcement workforce challenges across the Northeast and Mid-Atlantic. The study was prompted by conversations with building departments reporting staffing shortages and upcoming retirements. The study is based on 500 survey responses collected, with 338 from

New Jersey, thanks to support from the NJDCA. Key findings included a high percentage of code officials expecting to retire by 2034, existing vacancies already impacting enforcement, and a general lack of awareness among young people about careers in code enforcement. Respondents also cited burnout, the complexity of codes, and limited training resources as challenges. Some of the proposed solutions drawn from the survey included increasing compensation and benefits, expanding recruitment through high schools and trade schools, and providing clear career pathways through internships and mentorships. Respondents also emphasized the importance of ongoing training and certification support, and interest in more opportunities to learn about energy codes and new technologies. NEEP will use the findings to develop a regional Code Enforcement Workforce Roadmap to guide state and local partners in recruitment, training, retention, and collaboration strategies.

3. NJ Energy Code Compliance Baseline

Jennifer Souder (Rutgers) discussed the NJ Energy Code Compliance Baseline Study, conducted by DNV and NMR for Rutgers and BPU in 2022. The study found significant savings opportunities through improved compliance and recommended targeted energy code training for code officials and professionals. While most code officials reported attending regular training, there was a desire for more frequent, energy-code changes and new technology-specific training. Respondents preferred both online and in-person options. Design professionals requested additional online training as well as state resources dedicated to the energy code, such as an email or hotline where they can ask questions and get answers. There is a desire for training on topics like air sealing, air barriers, building science, and emerging technologies.

4. Related Workforce Initiatives

Stephanie Walsh (Heldrich Center for Workforce Development, Rutgers) shared findings from a workforce equity analysis conducted by the Heldrich Center for NJBPU. The study was motivated by the need to ensure equitable access to growing opportunities in energy efficiency careers. The study included interviews and surveys with workers, business owners, associations, and unions. Findings revealed barriers to entering and completing training, such as childcare, transportation, and the cost of training. The difficulty in finding instructors with current knowledge and field experience was noted. The speaker explained that the study helped inform strategies now being implemented through BPU's stakeholder efforts, including the Building and Industry Leadership Team (BILT) group.

Jennifer Souder (Rutgers) transitioned to a summary of the BILT (Building and Industry Leadership Team) initiative. Four sessions have been held since June 2024, each focusing on different aspects of workforce development, including employer needs, wraparound services, and the Clean Buildings Hub. The next session is scheduled for June. The ECO-TEC initiative is led by ASHRAE and ICC, with support from NASEO. New Jersey is a partner, and the initiative will bring targeted training to the state.

Jennifer emphasized that the goal of this subcommittee meeting is to gather input from attendees on their experiences, challenges, and solutions related to code enforcement and workforce development. The subcommittee's discussion will help inform the broader collaborative and the conversation would help shape the subcommittee's goals.

5. Discussion

Stephanie Staub (NJ Community College Consortium), using her 30 years of union experience, emphasized the strong potential to formalize training pathways using existing non-credit and credit programs. Stephanie asked what the baseline requirements are for individuals seeking careers in code enforcement and suggested that identifying those steps would help workforce development efforts?

Brian Penchau (AIA NJ) built on the previous comments by suggesting that adjacent professionals, such as architects and engineers, could be recruited with minimal additional training. Brian proposed establishing a network of code official advisors to offer informal guidance, noting that the complexity and volume of online information can be a barrier to entry.

Jason Kliwinski (Senior Energy Code Researcher for Rutgers) added that some architects have noted that energy efficiency is often under-enforced and suggested that DCA develop a guide for municipal inspectors or consider a privatized model of enforcement similar to other certification systems.

Jennifer Senick (Rutgers) asked for clarification on whether the workforce data shared earlier referred to code enforcement or compliance.

Dragana Thibault (NEEP) clarified that the study was focused on code enforcement.

Jennifer Souder (Rutgers) acknowledged the distinction and expressed appreciation for ideas that targeted both enforcement and compliance.

Stacy Richardson (NJBPU) noted two major themes from the discussion: improving existing systems and increasing accessibility to the field in light of impending retirements.

Stephanie Staub (NJ Community College Consortium) responded to earlier questions and emphasized that the subcommittee's goal should be to influence the built environment by ensuring code officials understand both the how and the why behind energy efficiency.

Brian Penchau (AIA NJ) described challenges with private inspections and a lack of trained personnel, noting that legislative changes allowing private inspections have not solved the staffing issue.

Jason Kliwinski (Senior Energy Code Researcher for Rutgers) added that during COVID, professionals like architects were allowed to self-inspect buildings due to staffing shortages and

said this model is used in NYC. Jason noted it's not ideal long-term but can be helpful in addressing immediate workforce needs.

Brian Penchau (AIA NJ) pointed out that few professionals in NJ meet the criteria for self-certification under new legislation and added that long field experience, not just credentials, is essential for effective inspection. Brian emphasized that this is a multi-layered training issue.

Jennifer Senick (Rutgers) asked about the role of technology in inspections.

Brian Penchau (AIA NJ) said AI tools like UpCodes have made code navigation easier and more efficient. Technology is not going to replace humans but can make their work easier. Brian also brought up the need to aim beyond net zero buildings and toward regenerative designs.

Jason Kliwinski (Senior Energy Code Researcher for Rutgers) noted that many building inspections still rely on traditional methods and proposed creating digital checklists to help inspectors, particularly those with less experience.

Brian Penchau (AIA NJ) said such checklist tools are used by private inspectors but not widely adopted in the public sector. Brian supported creating a unified checklist for energy code inspections.

Cornelia Wu (NEEP) shared that NEEP worked on a remote virtual inspection with ICC, where ICC had developed a checklist for remote virtual inspections that could also be helpful for in-person reviews.

Jennifer Senick (Rutgers) asked if tools like LiDAR (Light Detection and Ranging) and infrared imaging are used for inspections.

Brian Penchau (AIA NJ) said these tools are mostly used in private audits and are not standard for basic code enforcement.

Jennifer Senick (Rutgers) mentioned an older DOE grant that explored such tools but found low adoption at the time.

Jennifer Souder (Rutgers) brought up a related topic from the National Energy Codes Collaborative: improving accessibility of information. The attendees were asked for ideas for improving training access or awareness.

Stephanie Staub (NJ Community College Consortium) said general public awareness of code enforcement as a career is very low. Recommended outreach to students in design and construction programs who might consider compliance careers.

Jason Kliwinski (Senior Energy Code Researcher for Rutgers) noted that low salaries and limited benefits make these careers less appealing.

Stephanie Staub (NJ Community College Consortium) highlighted that part-time roles and flexibility could appeal to certain job seekers, especially if marketed effectively.

Brian Penchau (AIA NJ) clarified the distinctions between code officials and building inspectors and highlighted issues with salary inflation and potential for abuse in part-time arrangements. Brian suggested regional workforce sharing models might help.

Brian Penchau (AIA NJ) asked if anyone had observed other frictions in the adoption of new technologies and whether the cost, training time, and lack of software support may be limiting factors.

Jennifer Senick (Rutgers) asked whether DCA provides technology training.

Ian Rayfield (DCA) responded that DCA might publish articles or provide training through CEU classes, but additional support would likely require legislation. Added that CEU classes are not usually offered by the department itself and noted that making energy code training mandatory would likely require a legislative change.

Cornelia Wu (NEEP) noted that some states use circuit riders, experts available by phone or email, to support local code officials.

Liepa Braciulyte (NASEO) explained that the ECO-TEC project will develop four trainings: IECC 2024, ASHRAE 90.1-2022, a train-the-trainer course, and a course on careers in energy codes. The project will engage with technical training institutions and look for existing statewide workforce plans. The project team is forming an advisory board to guide the work and invite participants to reach out if they are interested in learning more or join the advisory board.

Jason Kliwinski (Senior Energy Code Researcher for Rutgers) suggested looking into the home inspector industry as a possible resource for recruitment.

David Hattis (Rutgers) added that DC has a robust third-party enforcement model that includes conflict-of-interest safeguards. NJ could look at what they are doing.

6. Next Steps

Jennifer Souder (Rutgers) confirmed that a meeting summary would be shared for review and could help refine the subcommittee's goals. Once approved by the attendees, the meeting summary will be posted to the NJ Energy Codes Collaborative website. Jennifer invited topic suggestions for future meetings and noted that meeting frequency was still being determined.

Acronyms and Abbreviations

AIA NJ – American Institute of Architects New Jersey

ASHRAE – American Society of Heating, Refrigerating and Air-Conditioning Engineers

BILT – Building and Industry Leadership Team

BPU (NJBPU) – New Jersey Board of Public Utilities

BUILD - Builders Utilization Initiative for Labor Diversity

CEU – Continuing Education Unit

DCA (NJDCA) – New Jersey Department of Community Affairs

DC – District of Columbia

DEP (NJDEP) – New Jersey Department of Environmental Protection

DNV – DNV is independent expert in assurance and risk management

DOE – U.S. Department of Energy

ICC – International Code Council

IECC – International Energy Conservation Code

LEED – Leadership in Energy and Environmental Design

LiDAR – Light Detection and Ranging

M&E – Mechanical and Electrical (as in M&E Engineers, Inc)

NASEO – National Association of State Energy Officials

NEEP – Northeast Energy Efficiency Partnerships

NJEDA – New Jersey Economic Development Authority

NJDEP – New Jersey Department of Environmental Protection

NJIT – New Jersey Institute of Technology

NMR – NMR Group, Inc.

TRC – TRC Companies (Consulting & Engineering Firm)