



New Jersey Zero Energy Buildings Meeting Minutes

4.21.2021, 1:00 – 2:00 pm

Attendees

- Kai Palmer Dunning, NEEP
- Darren Port, NEEP
- Moses Riley, NEEP
- Ben Adams, MaGran Associates NJ
- Christine Liaukus, NJ Institute of Technology, center for building Knowledge
- Christine Schell, NJ DEP
- Christopher Colacello, NJ BPU
- Crystal Pruitt, NJ BPU
- Glenn Haydu, Architect
- Helaine Barr, NJ DEP
- Jacob Alder, Consultant with Raikin
- Jen Souder, Rutgers Center for Green Buildings
- Karl Hartkopf, NJ DEP
- Kevin Nedza, NJ BPU
- Kyle Holder, NJ Buildings Association
- Marie Daniels, NJ DCA
- Matthew Rivas, NJ DEP
- Myrrh Caplan
- Paul Orlando, NJ DEP
- Rob Austin, NJ DCA Codes and Standards
- Rupe Deshmukh, NJ DEP
- Trina Mallik, Nature Conservancy
- Victor Viscomi
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- Andy Winslow
- Glenn Haydu

Welcome and Introductions

- Slides and notes will circulate after the meeting.

Code Legislation

- [NJ A1145: Establish E Permitting Processing Review System](#)
 - Passed 4/30
 - Directs DCA to develop and implement electronic permitting system to modernize and streamline the permitting process
 - NEEP has E-Permitting and virtual inspection brief and upcoming brief specifically on RVI
 - **Rob:** no information right now, in IT hand, they are developing the system, pretty sure the state will have its own contractor for the software, locals will have to use same software or provide equivalent.
- [NJ A5658: Zero Energy Construction Act](#)
 - Introduced 5/12/20
 - Zero energy “ready” for all new res/comm construction by 2025
 - Directs DCA, BEP and BPU to collaborate on ZE construction resources and rulemaking to reach 2025 goals
 - **Kyle Question:** definition of ZE ready/building is broad and vague in the bill, imagine this was intentional. Wants to know how this works with ICC’s plan to move code process along a zero energy ready trajectory. Think it would be useful to know for this conversation.
 - No one knows, but ICC is moving to a zero energy code and the 2021 IECC is quite close to achieving this.
- [NJ A2108: EV Charging](#)
 - Recently passed out of assembly



- Establishes standards for installation of EV charging stations.
- Authorizes municipal deviation standards; exempts installation at gasoline service station from certain requirements
- [NJ A5160, S3324: Appliance Standards in NJ](#)
 - First time in 15 years they are updated in NJ
 - Addresses 15 res/comm appliance standards
 - Passed out of assembly on Thursday
 - Link to codes: supersedes efficiency levels of some of the water fixtures that are in code, but the bill will require higher efficiency appliances in the state

Guided Discussion: Survey Results

- Robin Murray: was just on a webinar, Who's Delaying Climate Action in MA? Some interesting results on what is delaying radical codes forward
- **Comment:** looking at survey now I am interpreting questions differently, so we may be reading more into things than we should be.
 - Later today and in future meetings we will discuss these issues more in depth
- **What are best next steps for this group?**
 - **David Hattis:** last update there were two proposals related to electrification preparedness: EV in comm/res, electrification in res. Both were approved in 2021 energy code, but appeals took them out, the reason; not consistent with stated intent of energy code. Seattle has different intent for their energy code, so perhaps this is something we could consider doing with ICC or in NJ, crafting a broader statement of intent.
 - **Darren Port:** 4 proposals were taken out, electrification measures, EV charging, electrical outlets next to gas connections for future transitions, pilot lights. Withdrawal of water heating provision was preemption issue. Intent of code: do these belong in IRC, electrical code, where?
 - Regarding intent: is decarbonization directly linked to health and safety, and therefore could you say the intent of the UCC or energy code adoption in general is about reduction in carbon?
- **Christine:** is Rob from DCA on the line? I don't fully understand code adoption cycle. Current legislation being considered would require electrification in buildings. What is the cycle, how long would it take DCA to do that, and would it be easier for DCA to also have legislation that also tells you to do a stretch code at the same time?
 - **Rob:** can argue intent all you like, UCC adopts model codes, can fall back to previous standard if we wish, we just can't go making stuff up (this all decided in 1975). There has to be precedent. Scope of energy code states that it is supposed to conserve energy and EV charging increases energy use in building. This isn't in a model code for us to adopt, so we can't adopt it unless legislation changes, which may happen. NJ is a homerule state, having a uniform code creates consistency and was intentional. 2021 IECC will raise efficiencies by 8-14% which will be an engineering construction challenge.



Roadmaps in Other States

- New Hampshire
- Pennsylvania
 - Collaborative focused just on compliance
 - Two big metro areas: Pittsburgh, Philly, with good compliance infrastructure
 - Then there is the rural areas which struggle with compliance
 - Landscape of code adoption changed when Philly adopted a newer code (through special legislation)
 - It was very clear after this that the roadmap needed to change
 - Trying to get 90% compliance across the state
 - Partnered with PSD to do training around the state, particularly in rural areas, online and in person training
- New Jersey is in a very different place than these states, but they are trying to achieve higher levels of compliance

ZEB Roadmap Discussion

- Format
 - Barriers and Opportunities to achieve ZE buildings
- Zero Energy Code Adoption Proposed Timeline
 - 2022 – DCA adopts 2021 IECC
 - 2024-2025 – Adopt 2024 IECC with zero energy ready and electrification requirements for all building types
 - 2024-2025 – adopt voluntary stretch code with zero energy provisions for electrification, elimination of on-site combustion, grid connectivity
 - In many states, stretch codes are adopted in sync with the base code, which is a good best practice
 - 2027-2028 – adopt zero energy base code for all building types (IECC 2027)
 - **Kyle:** This is only for new construction, correct?
 - Yes
 - **Jen Senick:** Has ASHRAE 90.1 proposed electric building ready amendments?
 - Not much but AHRAE 90.1-2022 likely will include more
 - **Jen Senick:** timelines should reflect commercial codes as well
 - **Rob:** We adopt the IECC Commercial but only for purposes of ASHRAE, since it's referenced
- What are some feasible achievements? Recommendations from the group
 - Research and analysis
 - Trainings
 - Solar ready
 - Leading by example
 - E permitting and RVI
 - Building energy performance standards
 - Expanding utility incentives



- **Ben Adams:** New construction vs. existing buildings, should they be addressed sequentially or simultaneously?
 - Darren: These can be done simultaneously
- **Jacob:** Item 6 and item 10 (EE and electrification for LMI communities and utility incentives) should have a focus on the multifamily residences as well and be sure to tie all work to utility incentives to support those communities

Next Steps and Closing Remarks

- Switching to Zoom
- Roadmap Review
- Next meeting topic