

**Energy Efficiency and Housing Advisory Panel
Meeting 5, November 18th**

Attendees

- Commissioner RuthAnne Visnauskas, NYS Homes and Community Renewal (Chair)
- Janet Joseph, NYS Energy Research and Development Authority
- Peggine Neville, NYS Department of Public Service
- Gina Bocra, Chief Sustainability Officer, New York City Department of Buildings
- Dan Egan, Senior Vice President of Energy & Sustainability at Vornado Realty Trust
- Bret Garwood, Chief Executive Officer at Home Leasing, LLC
- Jin Jin Huang, Executive Director at Safari Energy, LLC
- Jamal Lewis, Senior Policy & Technical Assistance Specialist at Green & Healthy Homes Initiative
- Sadie McKeown, Executive Vice President, Chief Operating Officer at The Community Preservation Corporation
- Daphany Sanchez, Executive Director at Kinetic Communities Consulting
- Elizabeth Jacobs, Acting Executive Director of the Akwesasne Housing Authority
- Bill Nowak, Executive Director of New York Geothermal Energy Organization
- Molly (Dee) Ramasamy, Head of Deep Carbon Reduction at Jaros, Baum & Bolles
- Clarke Gocker, Director of Policy and Strategy at PUSH Buffalo
- Amy Sugimori, Director of Policy and Legislation at 32BJ SEIU

Not in Attendance

- Kyle Bragg, President at 32BJ SEIU (represented by Amy Sugimori)
- Laura Vulaj, Senior Vice President & Director of Sustainability at SL Green Realty Corp.

Agenda

Welcome & Meeting Objectives (*Commissioner Visnauskas*)

Housing Subgroup – Report out from Expert Roundtables (*Sadie McKeown*)

- Convened three expert roundtables in early November
 - Designers, Installers and builders (single family)
 - See slides for information on critical barriers, top policy actions to consider, industry actions to reduce GHG and the impact of COVID, and promising models from other jurisdictions or industries.
 - Buildings, Designers, and Installers (Multifamily)
 - See slides for information on critical barriers, top policy actions to consider, and examples from other jurisdictions
 - Landlords, Owners, and Managing Agents:
 - See slides for information on critical barriers, top policy actions to consider, examples from other jurisdictions, measures hard to achieve in

affordable housing, info on leveraging outreach and engagement, and potential unintended consequences

- Roundtable roundup
 - See slides for information on barriers and policy actions to consider
- Feedback/questions:
 - *Bill* noted that something that didn't come up is San Francisco banned fossil fuels in new construction. Also, a few places we discussed electrification ready in regard to existing buildings – until there is a ban of fossil fuel in NYS, new buildings need to be electrification ready as well.

Commercial & Institutional Subgroup Report-Out (*Dan Egan*)

- Similar themes came out of this subgroup's discussion as what Sadie covered – see slides for more info
 - Mandates that require energy efficiency improvements and on-site emissions reductions in buildings and appliances with hard dates as a market signal
 - Large discussion about financing and incentives for building efficiency and electrification at scale
 - Training and education of building decarbonization to improve behavior and operations for health and comfort
 - Information to increase market adoption and accelerate the transition to energy efficient, all-electric buildings
 - Resilience and climate adaptation strategies for all-electric buildings and hazard mitigation planning
 - See slides for cross-panel issues

Focal Discussion: Building Codes and Standards

Janet Joseph: Good segue way to the next discussion – a deep dive on building codes and standards. Joined by codes experts at DOS and NYSERDA who will be providing a presentation on how they currently work and how they could evolve over time to address GHG constraints

Presentation by Kevin Duerr-Clark, (NY DOS) and Chris Corcoran (NYSERDA)

Additional staff: John Addario, Emma Gonzalez (DOS), John Lee (NYSERDA)

Joined by Sarah Crowell (DOS), Brad Tito (NYSERDA) from Land Use and Local Government Panel

What the team will be doing is underscoring how these tools currently work, and how those tools could evolve and be used in the future. The team is not presenting specific policy proposals but think of this as food for thought as the council deliberates on the approach the state should be taking to send a clear signal to decarbonize. The issue will be figuring out how to use codes/standards effectively to send a signal and make progress in the different segments (Single Family/Multi Family; update/downstate) as they will need to move towards neutrality on different timelines. But first we need to understand how they work/the legal constructs.

Kevin Duerr-Clark:

- Building codes of New York – 2 laws govern the laws we have
 - Executive law governs uniform code; energy law governs energy code
- They are two distinct laws with distinct sets of requirements, but they do converge together at state fire prevention and building code council
 - DOS provides support but they are responsible for setting updates to the codes
 - It's an array of stakeholders that make up the code council
- Uniform code
 - Regulates both commercial and residential construction
 - Focuses on design, construction, modification of new/existing buildings
 - Eight books in the uniform code (see slide)
 - Hundreds of additional references that have been included within the code
 - Electric code is specific edition (2017 NEPA electrical code)
 - Mandated statewide except NYC
 - Local jurisdictions enforce the code, but they can also adopt more restrictive local standards upon approval from the Code Council
 - Council needs to verify it is stricter, municipality must show why they need it, needs to meet article 18 requirements, and accepted engineering practices
 - Zoning/land use are separate from building codes
 - Codes are how buildings are built; zoning is where they are built
- The Energy Code
 - Similar in some ways
 - Covers residential, commercial
 - Enforced at local level
 - Mandatory statewide (including NYC)
 - Does have more restrictive local law option – but less criteria for achieving this. Just need to file with code council and it has to be more strict (easier process)
 - Scope overlap a bit
 - Similar to the uniform code, the energy code also has standards incorporated into it
 - ASHRAE 90.1 2016
- International Code Council
 - In NYS, our codes are based on ICC model code books
 - Developed through a consensus process – in-depth process anyone can participate in.
 - Updated every 3 years.
 - Currently, codes are based on 2018.
 - Coming up in the 2021 IECC code is a net zero code appendix
- Things to consider moving forward
 - Energy code and uniform code do overlap

- The uniform code also addresses some of the things the energy code does
- HVAC: energy code may deal with energy efficiency; uniform may deal with how it is installed
- Current focus is on energy efficiency and not necessarily on electrification
 - DOE determinations
 - Changes to energy code for electrification must consider DOE determinations
 - Energy law requires code council to consider 10-year payback period.
 - When making changes to the code, must always evaluate and balance benefits/costs to regulated parties

Chris Corcoran

- Energy code progression
 - Significant improvements have been made in energy efficiency
 - Over 50% energy use reductions in last 40 years
 - The model energy codes are progressing, but not quite fast enough to get to our goals in CLCPA. This is part of why NY stretch has been developed (put out last fall)
 - Opportunity to move beyond the base model codes
 - New York City, the City of Beacon, and the village of Hasting-on-Hudson have adopted the Stretch Energy Code as the legal standard for energy efficiency
- Project Stretch Energy Code Progression
 - Slide provides overview of energy savings over the previous codes
 - Want to keep driving down EUIs, promote efficiency in new construction
 - Challenges
 - Focus is on new construction, additions, major renovation. Some buildings not impacted
 - Federal preemption: can limit what can/cannot be done w energy codes.
 - Example: Would like to promote air source heat pumps in NYS, but code cannot do that
 - What it does best is drive low EUIs in new construction
 - It's a piece of the puzzle
- Summary of Key Codes
 - Advanced Energy Code
 - Energy code that is more stringent than the national model codes to reach lower energy use intensity (EUI) through improved envelope efficiency, equipment specifications, and lighting power
 - CA, WA, VT doing this
 - On-site Emissions-based Code
 - A construction code that limits the on-site emissions from new construction and significant renovations
 - Building Performance Standard/Mandate

- A law to limit energy consumed or emissions from buildings that are more stringent over time by specific dates
 - Appliance Standards
 - Appliance Efficiency Standards: Regulate the energy or water efficiency for products sold or installed in New York State not preempted by Federal rules
 - Appliance Emissions Standards: Limit the emissions for products sold or installed in NYS
 - Point-of-Sale/Lease Efficiency Requirements
 - Prescriptive improvements to buildings required prior to a sale or to buildings/spaces/units prior to a lease
 - Electrification-Ready Code Provisions
 - Heat pump ready: Upgrades to building/unit electrical panel and wiring/outlets at the location of the appliances in order to accommodate future heat pump installation
 - EV ready: Upgrades to building electrical panel and wiring/outlets to accommodate future installation of EV charging equipment in parking spaces
 - PV ready: Upgrade to building electrical panel to accommodate future installation of solar PV panels on the roof
- Potential decarbonization pathways
 - See graphic
 - Two buckets
 - New construction vs. existing buildings
 - new construction
 - The goal is to have a low EUI and decarbonize new construction
 - a number of policy levers that could be pulled
 - existing buildings
 - more difficult and will take more time
 - older building stock that was meant for fossil fuels
 - many policy levers
 - appliance emissions standards could potentially have greatest impact
- Potential approaches and illustrative timeline
 - See slide

Questions and Discussion

- **Jin Jin**: To Kevin: you mentioned the code council has to consider 10-year payback – what elements go into that calculation? Is carbon part of it? If not, will it be included?
 - **Kevin**: The calculation considers overall efficiency. Doesn't take carbon into account
 - To Chris: Do the proposed policy options need to go through 10-year payback analysis?

- **Chris:** These policies would require new regulatory authority, so you'd need to consider what requirements as they are implemented
 - **Janet:** In order to have something other than a 10-year payback, we'd need a legislative change in NYS. Many things on Chris's slide would require legislative or regulatory changes. If we stay within confines of current structure, we'd make incremental progress. But nothing close to what we need
- **Gina:** Some of these concern me that they would have SEQR consequences and we don't have much funding to address those. Hope NYSERDA and DOS are thinking about how we would handle that
 - **Chris:** Good point - a thought from our side. Something we'll be looking at closely and appreciate your thoughts on what is most helpful
- **Bill:** Great presentation, put a lot in perspective and pleased to see emissions-based codes. An important distinction to make at this point – emissions efficiency is more in line with what we're doing. What would need to happen for NY to change to an emissions-based code?
 - **Chris:** Would require the legislature to pass a bill directing the code council to address this
- **Dan:** Follow up comment. As a caveat for anything emission-based – let's be aware of variability of emissions in NYS (upstate vs. down) and the disparity in how emissions can be measured. Could inadvertently create perverse incentives.
 - **Chris:** Yes. One thing we focused on is on-site emissions [i.e., from fossil fuels burned at the
- **Sadie:** Why have so few municipalities adopted the stretch code and what is their incentive?
 - **Chris:** CEC is just getting ready to launch and this is a component of that. They've adopted in advance. Beyond that, it's a time issue. Usually spend about 6 months in advance to them adopting it
 - **Sadie:** How do you get them there to wanting to adopt it? Is there a scaled approach?
 - **Janet:** The voluntary adoption approach is not necessarily a path to scale and doesn't send a clear market signal. It lubricates the system if you will. Proves what can be done. Would need to be a statewide standard to get to scale.
 - **Sarah:** This is something we've heard from local governments that have considered adopting but are not because their legislature is concerned about having more stringent requirements which might dissuade developers. It's an issue and would agree that a standard approach would work better. Especially those where the demand is a bit weaker. Smaller municipalities also rely on DOS for support in enforcing building/energy codes and when they're enforcing different types of codes, they'll get less support unless it's standard.
 - **Sadie:** I know there are councils of mayors or municipal administrators where they gather and discuss. Is there a forum for building commissioners, etc.? Also surprised that some haven't adopted this to deter development.
 - **Sarah:** I think [approach to development] likely depends on the region

- **John Addario:** With respect to a trade group, yes, there's the New York State Building Officials Conference
 - **Sadie:** Is this a place to influence adoption of stretch code?
 - **John A:** Yes, about 9 chapters across state, but normally get hundreds at each conference. Required to do 24 hours in service training annually
- **Jamal:** Knowing that existing buildings are really important – is there a pathway to achieve these goals through property maintenance code?
 - **John A:** Not sure it's the right tool – nothing that really triggers anything. Wouldn't result in them upgrading.
 - **Jamal:** Some municipalities have complaint-based systems. This could trigger inspection, but not upgrades?
 - **John A:** Yes, that's currently the situation
 - **John Lee:** There are opportunities to address new regulations in many parts of the Construction Codes, including the Property Maintenance Code, Existing Building Code, and even the Fire Code. NYC's Local Law 97 is in the Building Code as a property maintenance provision alongside Local Law 11 façade maintenance requirements. However, all these approaches require legislative action. The Stretch Energy Code has allowed NYSERDA to advance more stringent standards, but the schema is still dependent on voluntary adoption by local jurisdictions and therefore the Stretch Code is inadequate as a comprehensive approach to regulating emissions.
- **Sarah:** One final thought from local government perspective. As these recommendations get built out, cost/expertise at local level should be considered. Consider building their capacity and support them in implementing and enforcing more complex codes.

Janet: Right point to end on. A lot to dig into and follow up on.

Next Steps (Commissioner Visnauskas)

- Climate Action Council meeting on November 24th, 2pm EST (<https://climate.ny.gov/>)
- Further collaboration, review and refinement of options/recommendations through subgroups
- ID areas and begin reach out for cross-sector collaboration
- Deeper dives into disadvantaged communities impacts and recommendations
- Review and incorporation of survey results
 - Survey open through November 30, 2020; email eehpanel@nyserda.ny.gov for the survey link