Building Performance Standards
Technical Advisory Group (TAG) Meeting #4 Summary

Thursday, March 31, 2022

Attendees

- OSE: Nicole Ballinger, Sandra Mallory, Terry Sullivan, Christine Bunch
- NRDC: Monica Portillo, Olivia Walker
- SBW team: Lucy DeBolt, Faith DeBolt, Poppy Storm, Albert Llaguno - SBW webinar facilitator
- TAG: David Okada, Rebecca Baker, Bobby Coleman, Amy Wheeless, Dina Belon, Edmee Knight, Neil Bavins, Kerry Meade, Ian Brown, Treasa Sweek, Becky Becker, Irina Rasputnis, Alistair Jackson, Joe Malaspino

Agenda Items & Notes

1. **Introduction and Welcome**
    - Edmee Knight joining from Unico (David Okada no longer representing Unico but still attending)
    - Olivia Walker and Monica Portillo joining from NRDC to support notetaking and summaries

2. **Recap of Prior Meetings**
    - Prior meeting slides and summaries are on the BPS Policy webpage under Advisory Group Updates
        - Topics so far have included policy pathways and parameters, and metrics
    - Next meeting: Compliance intervals, alternative compliance options
    - What are we hearing so far?
        - Keep it simple, clear, and certain!
        - Owners want to know, soon, where we are headed to allow for long term planning
        - Provide strong support – both technical and financial
            - Reinvest fines towards incentives
        - Compliance will be especially hard for owners of smaller buildings; will need greater assistance
        - Avoid costs trickling down to tenants. Gentrification concerns.
        - And, don't ignore smaller buildings, including single-family / townhomes, where there are emissions reduction opportunities.
        - Is there an adequate workforce?
        - Don't duplicate state's energy mandate; include energy targets only where not covered at State level
            - Alt views: Seattle GHG metrics only (even where no State energy targets)

        - Alt views: Seattle should lead the way with stronger energy metrics
        - Also - peak demand is a utility issue; Clean Energy Transformation Act will ensure carbon neutral electric utilities statewide
    - Focus on onsite fossil fuel use and district systems; SCL carbon-neutral
        - Alt views: conservation still important; fairness and optics; consistency with other regulations; potential to encourage solar.
    - Metrics should account for density, esp. relative to dense affordable housing (per person/bedroom vs. per sq. ft.)
    - Consider compliance at a portfolio scale (public entities only?)
    - Avoid regulatory overlap for refrigerants, indoor air quality, but…
        - Refrigerant leakage not being adequately addressed
        - IAQ could be compromised as buildings upgraded; health is a broad public concern

3. **Interim Targets Breakout Discussion** (breakout feedback combined for readability)
    - ***Question for TAG:*** How should the city set interim targets?
        - **Universal targets** - defined increments between the average baseline year emissions by building type and the final performance standard, as in this Boston example that we discussed at the last TAG?
            - **If universal**, allow an optional path for individualized interim targets based on a decarbonization plan for that building, to allow some degree of flexibility for alignment with capital planning timelines. If targets are allowed at the building portfolio scale, also allow for these portfolios?
            - *References:*
                - *Tag 3 slides (page 24): https://www.seattle.gov/documents/Departments/OSE/Building%20Energy/Seattle-BPS-TAG-3-Slides-03.03.22.pdf*
                - *Boston Policy: https://www.boston.gov/departments/environment/building-emissions-reduction-and-disclosure#emissions-standards*
        - **Individualized targets** - proportional increments between each specific building's baseline year emissions and the final performance standard, as in the IMT and NWEC Blueprint examples?
            - *References:*
                - *Tag 3 slides (page 23): https://www.seattle.gov/documents/Departments/OSE/Building%20Energy/Seattle-BPS-TAG-3-Slides-03.03.22.pdf*
                - *NWEC Blueprint: https://nwenergy.org/wp-content/uploads/2021/11/2021-11-Blueprint-Seattle-BPS_Final-1.pdf*
    - ***TAG feedback/thoughts/questions***
        - *Universal targets*

- Might overlap and/or conflict with state code, but there could be potential to align and improve on state requirements, also might be more familiar.
- If your building is above average, your building has a lot more breathing room, rewarding early high-performers who improved efficiency on their own volition.
- Viability of universal targets depends on the scope of the groupings for targets, how specific they get.
- The first interim target probably shouldn't be as big of a target as the ones that follow because of the unfamiliarity with the technology/required investments
- Portfolio approach?
    - Portfolio approach could encourage more rapid decarbonization in the most cost-effective way for owners.
    - If we're doing it by portfolio, those with larger portfolios can bury their poor performers, which is not great. Maybe only portfolio for public entities? More flexibility because they serve a public good.

- *Individualized targets*
    - Provides more flexibility, more targeted and tailored support.
        - Flip side of this is that inefficient buildings have an easier path up front, not penalizing bad performances.
    - Allows the city to use the energy star portfolio manager information from Seattle's tune-ups ordinance to set targets. Seems like a more fluid extension of Seattle's existing programs, and could streamline existing kinks in the tune-ups policy.
        - Need to confirm data is accurate, tune-up requirement highlighted that it hasn't always been accurate today, perhaps individualized only makes sense if we can be sure the data is correct.
    - From the Building Owner perspective, individualized makes much more sense. Even among the same building type, each building has very different performance and therefore different needs. Realistically all building owners would like to push off as much as they can, maybe a little leeway in the beginning and a steeper ramp down in the second and third interim cycles would be good to get people up to speed. Better than a flat consistent slope of performance improvement. Can more easily plan 10, even easier 15 years out than 5.
        - On the other hand, while sympathetic towards building owners challenges, if we let everyone push out what makes the most economic sense, we might be missing decarbonization opportunities.
    - Individual targets with steeper curves as time goes on reflects actual building performance investments over time. You plan for the huge

capital improvements further out, while still encouraging reaching for low-cost immediate benefit/savings actions at the start with the lower slope.

- Is individualized more overhead for OSE?
    - Not really, been benchmarking 20k since 2018 (though tune ups have only been for 50k and above for some time).
    - Both paths are fairly administratively intensive. But worried about not having a recommended overall path target because then folks won't know what the general goal is.

4. **Building Decarbonization Plan Discussion** (breakout feedback combined for readability)
    - ***Question for TAG:*** Should the City require an upfront building decarbonization plan for all buildings?
        - If so, how simple or detailed should the plan be? What documentation would be required?
        - How could a decarbonization plan track with the building over time? (Especially for private building owners who may not hold their building long-term.)
        - How frequently / when should decarb plans be updated?
        - Align a decarb plan with State Energy Management Plan requirements? Include initial benchmarking verification?
    - ***TAG feedback/thoughts/questions:***
        - *Level of detail/required documentation*
            - "Plan" might be too generic, can be pretty simplistic and therefore unhelpful. Taking a structured approach to the requirement is key, and it has to be detailed enough to actually be useful.
        - *Tracking over time, over owners*
            - If plans are passed from owner to owner, there could be concerns about small building owners that don't have money to upgrade for compliance or to sell (this will be an issue with or without the plan).
            - There's nothing wrong with a strategic plan, but requiring it stay consistent is problematic. New owners can come on and scrap plans entirely.
                - Fold it into normal asset info of a building when a building is sold, then new owners can validate that information and/or update it. Make it as streamlined and data-driven as possible.
                - Can't make it too prescriptive or binding, then you may encumber the new owners. Targets are firm, owners should be able to decide how to get there.
                - Need to understand what potential burdens could be for new owners if they want to stray from prior plan significantly
            - Could be of a planning tool that clarifies the trajectory. IMT also has an action plan that stays with the building when it transfers ownership – an agreement the new owner agrees to do.

- *Update frequency*
    - Using this as an alternative compliance path makes frequency more complicated - but thinking 5-10 years. Should depend on how often city staff are able to review.
- *Alignment with state energy management plan*
    - Could we just add one additional section to this existing requirement? GHG planning?
- *General*
    - Would use the decarbonization plans as a stick: if a building doesn't meet the target then they have to come up with this plan.
        - If buildings are close or meeting targets, this shouldn't be required. City should be up front with who should expect to have to deal with developing a plan. Requires a level of proactivity that a lot of building owners don't typically have the capacity for.
        - Triggered at more than 10% off target or something
    - Is anyone from the city going to be reading these plans? Is the point just to get the owner to make it or will the city review/respond?
        - If we do this, we have to do it with the ability for the city to read and respond.
        - If not, it's busy work that doesn't have any value
    - Thinking through outreach
        - Can the city use benchmarking data to do some of the initial analysis to identify who needs to do this and who doesn't?
            - Problem with data quality, maybe there's a verification step needed here
            - Use verification step to improve awareness: do I need to do something to meet this target? Avoids buildings getting blindsided too late.

5. Emissions reductions potential

- ***Question for TAG:*** What ballpark level of emissions reductions can be expected in the first compliance cycle? Reminder: City Climate Action Plan goal is 39% across all commercial/residential buildings by 2030.
    - If 2026-2030 were the first compliance cycle, is that feasible when you consider the building types you are familiar with in Seattle? E.g., in the portfolio you manage or types of buildings you've worked in, or have market knowledge of, etc. How many buildings (a percent estimate, for example) could replace by 2030:
        - Domestic Hot Water?
        - Heating?
        - Other?
    - If not by 2030, then by when could each of the above be replaced?

- ***TAG feedback/thoughts/questions:***
  - To meet 39% by 2030 for commercial you've got to go after space heating - doubt we're going to be able to switch heating over entirely by 2030.
  - For multifamily and hospitality, it's best to target domestic hot water, often the primary source of emissions and ripe for fuel switching.
    - For DHW, probably 90% of builds that could do it relatively affordably (though the rapid and widespread transition would put outsized demands on workforce and appliance market), at that transition alone would have large impact on emissions in non-commercial spaces.
    - For space heating, about 50% of buildings could reasonably switch over by 2030. Those would be the simpler buildings that don't have very complex heating systems.
    - The remainder is food service cooking, and then more niched uses - commercial dryers, amenity bbq on a MF build, fire features in lobbies, back-up generators… a lot to consider for decarbonization plans.
  - Not expecting most current equipment to reach end-of-life by 2030, going to have to proactively replace equipment that wouldn't otherwise consider replacing, especially given the number of buildings built in the last ten years.
    - Other markets passing policies that gas systems are required to be replaced with electric systems at EOL starting in Year X.
    - Harder to wrap our heads around operating costs issues and resulting split incentive issues. Where can we move the cost needle elsewhere to make decarbonization more economically feasible right now?
    - Information on market perspective of fossil fuel use in buildings would be useful to inform/encourage investments.
    - For schools and other public buildings, replacing all gas boilers with electric will be costly and difficult (much easier to replace like for like at the moment).
  - In other jurisdictions, they do community-wide equipment need and cost estimates for transitions which causes local markets to make discounts on new equipment with the understanding that everyone will be buying up by 2030.
    - Financial impact study sector by sector would be beneficial for the market and helpful for planning and budget estimating for building owners and managers.
    - Could also be used to inform financial mechanisms to make this transition easier.
  - Will it be a huge lift for Seattle City Lights to understand electric system capacity issues at peak use times?
    - City lights is doing these assessments. From the capacity standpoint, this won't happen everywhere overnight, feel we'll be able to meet the capacity on the system scale with the gradual transition.
    - Panel capacity will still be an issue, but energy efficiency as part of this will be huge in limiting stress on the system.

- But if we don't have capacity in the right way, what are we going to do about it?
    - This came up in Denver in an interesting way - already high demand in summer for AC and historically low demand in winter for gas heating, so transitioning heating to electric is still under that summer capacity.
        - Lots of local builds until very recently built without AC, so this unfortunately will not be replicated in Seattle.
        - However, many older Seattle builds were retrofit from electric to gas heating in the 2000s, so they have the capacity to switch back to electric relatively easily.

6. Net Zero goal

- ***Question for TAG:*** What, then, is the end date for Seattle meeting net zero?
    - 2036 – 2040?
    - 2041 – 2045?
    - 2046 – 2050?
- ***TAG feedback/thoughts/questions:***
    - Does "Net Zero" open the door to comply with offsets?
        - Technically, Seattle City Lights is net zero emissions (with 9% offsets).
        - "Net" gives wiggle room for the odd gas use (bbqs, hospitals, etc) and offset somehow.
    - Main bulk of buildings by 2040, stragglers by 2045, and then addressing non-compliers by 2050.
    - Concerns about space issues with the transition (ex. Heat pumps are huge). 2050 will allow for full life cycle use of current equipment and transition, seems most realistic but 100% will still be challenging.
        - "If you build it they will come" can't make policy based on current innovation, have to trust that we will innovate to meet policy.
        - Can't be locked into what's financially feasible at the moment, if we don't aim for sooner and trust that market will rise up to make this work than we'll be wasting a lot of time and will be dealing with other costs down the line.