### LARGE BUILDINGS

BEPS (Building Energy Performance Standard) aside, what else do we need in order to address efficiency in our buildings? What tools might we need to support efficiency – for tenants, for owners?

- Building/unit performance comparison information
  - For tenants, for leasing decisions and operating decisions
  - For owners, based on benchmarking data
- Engage tenants and landlords on behavior change actionable items so they know what they can do, understand why it matters and the benefit to them to spur action
- Submetering for large residential buildings
- Clear energy performance contracting program
- Enough energy input to take advantage of building efficiency and lower operating costs for tenants
- Policies/structure to encourage energy reduction and carbon reduction as the grid gets cleaner (i.e. we care about efficiency and embodied carbon even if we had all renewable energy supply)

## What needs to be in place in order to support buildings through efficiency improvements – particularly smaller buildings (BEPS 2 &3) with fewer resources/ less experience?

- Take advantage of existing programs that reward buildings for improved efficiency maybe mirroring neighboring jurisdictions that award density bonuses along with tax credits for achieving a certain LEED certification
- Active "extension" program for buildings with information on technical alternatives, how much they cost, how much they yield in efficiency gains, etc.
- Rebates, other financial incentives paired with more specific information
- Wider range of prescriptive paths for more building types as the program expands to smaller buildings
- Open mind that current structure may not be the best tool for the smallest buildings (i.e. 10,000 20,000 square feet)
  - More prescriptive approach like tune-ups or focused electrification?

## How might we need to add to or tweak these ideas to advance equity – in policy and program design or implementation?

- Incentives for investing and building efficiently in typically under-invested areas
  - Could provide benefits to their projects in other parts of the city, given the relatively small number of owners/developers of large buildings
  - Funded by operating cost savings, tax incentives, and/or energy efficiency credits provided by the District

#### SINGLE-FAMILY & SMALL MULTI-FAMILY BUILDINGS

#### What are the best opportunities in the lifecycle of a single-family home / small multifamily property to undertake significant energy efficiency improvements?

- Initial construction
- Whole-house / significant renovation
  - When triggering building code
- When there are clear financial incentives to do so what would encourage people to take on a project if not already planning a big remodel (e.g. tax credits, incentives that improve return on investment)
- Time of sale opportunity to bundle costs into a mortgage
- Best opportunities are small, easy-to-implement changes, like lighting

#### What prevents homeowners from making those improvements now?

- Cost / cash to implement
  - Priorities for spending  $\rightarrow$  a lot of projects start b/c of kitchen, bathroom upgrades
- Disruption to lifestyle
- Hazardous materials removal and disposal (e.g. lead)
  - Because it can be cost prohibitive, often try to scope the project to avoid touching certain building components / to stay below thresholds, and that limits what you'll do in a project
  - Not enough abatement professionals as it is but need to address health & safety issues before you talk about efficiency
- Lack of knowledge / training
  - About energy efficiency opportunities and relative benefits of different solutions
  - Contractors' lack of knowledge in high-performance building strategies and materials which puts work back on owners if they want to pursue
  - Contractors need training on how to install don't want to take on liability for things they're unfamiliar with and that are costly
- Split incentive between landlord paying for improvement, but not reaping benefits because tenant pays utility bills
- Getting consumers to really value the improvements many people take advantage of free steps, like audits, but rarely do more than that once they have to pay
  - Auditors and practitioners have a hard time making any money in this space

## What solutions could address these barriers? What must we have in place to support efficiency improvements at these critical points?

- Funding/ Financing
  - Low interest loans and PACE funding options for residential
  - On-bill financing
  - Access to incentives like efficiency programs
  - Tax credits, esp. refundable ones
- Consumer education, especially re: valuing energy efficiency improvements

Carbon Free DC by 2050 – Existing Building Efficiency 9/30/20

- Ongoing advertising, outreach
- Both about energy savings but also other benefits comfort, noise?
- More connections between contractors and suppliers/distributors of high-performance systems and materials, to provide technical training, support to encourage comfort with these systems
  - Contractors are often the ones with the most contact with the customer, so could be conduits for educating consumers about options
- Disclosure / transparency for building performance in real estate industry/transactions alongside other housing features
  - Asset as well as operational cost information in multiple listing service (e.g. Boulder, Chicago, Berkeley)

## What else must we tackle to get to this goal? Blue sky vision: what's the one big thing you'd do?

- Consumer education need customers to be asking for high-performance because that's what drives things forward
- Analysis of existing building stock and look at lowest hanging fruit in terms of efficiency upgrades and set up mechanisms to target those improvements
- Include lifecycle costs for energy upgrades
- Grants for passive house multi-family construction
- Must tackle indoor air quality at the same time. Could we have protections enforced like with mold, lead?

# Thinking about equity, what kinds of challenges or considerations must we address as we target the efficiency of homes & small buildings? How might we tweak ideas to advance equity?

- Equity plays into who can afford to own a home vs. rent, so thinking about ways to address efficiency for rental units, because renters have less power to effect change
- How to improve efficiency while also battling gentrification and displacement
- Gradual approach: appreciate the small improvements that people can afford and refrain from forcing large-scale improvements which may drive people elsewhere
- Need systems but also training for consumers living in high-performance buildings so they see full benefits
- Resiliency getting to those least able to afford it is important because efficiency also
  improves the ability of residents to shelter in place in summer or winter
- Could DC have special incremental building performance and indoor air quality standards for new affordable housing construction or major retrofits? The federal government has performance standards for affordable housing new construction using federal housing funds that are often stricter than local/state requirements, which could be a model.