SDC 2.0 Working Group: Goals, Actions and Targets
Climate, Energy, & Built Environment

*KEY: Yellow highlights are proposed new text.

CLIMATE & ENVIRONMENT

**CE GOAL 1: Reduce greenhouse gas emissions from all local sources sufficient to eliminate emissions by 2050.**
- Incorporate longer-term carbon neutrality goal, which is the context for the interim 2032 goal.

**Target:** By 2032, reduce greenhouse gas emissions by 50%, relative to 2006 levels
- Clarify the baseline, which is 2006 and not 2012

CE 1.1 Build awareness and provide resources to empower people and organizations to take actions to reduce their share of greenhouse gas emissions.
- Broaden to include online and offline ways to help individuals & organizations (businesses, nonprofits, etc.) take action to reduce their own carbon footprint.
- Should compare with other marketing/awareness/education related actions from other sections of the plan to either streamline or avoid duplication.

CE 1.2 Establish a price on carbon and use revenue generated to support activities that invest in clean energy, energy efficiency, clean transportation, and climate adaptation.
- Clarify that "financial tools" refers to carbon pricing in some form, though leave open the specific policy mechanism
- Specified what is meant by “climate protection programs”
- Could also use revenue to provide rebates or other consumer protections

CE 1.3 Report District emissions on a regular basis to track the reductions that can be attributed to specific initiatives.

CE 1.4 By 2020, develop plan to achieve Carbon Neutrality by 2050.
- The Mayor has committed DC to carbon neutrality by 2050 and to develop such a plan by 2020, so it would be good for SDC to echo this.
- This is also a good way to incorporate the 2050 goal while keeping the plan and its targets 2032-focused.

CE 1.5 Measure and eliminate methane leaks into the atmosphere throughout the District.
- Methane leaks, particularly from the natural gas distribution system, are a significant contributor to GHG emissions.

CE GOAL 2: Advance physical adaptation and human preparedness to increase the District’s resilience to future climate change.

**Target:** By 2032, require all new building, major infrastructure, and neighborhood plans to consider climate risks and identify adaptation solutions.
• Need target to reflect human as well as physical adaptation.
• Neighborhood plans is one way to incorporate people, but there might be others.

CE 2.1 Evaluate the vulnerability of the District's energy infrastructure to the anticipated impacts of climate change and identify and implement strategies to make it more resilient.
• Need to not only evaluate vulnerabilities but take concrete action to reduce them.

CE 2.2 Improve emergency preparedness, planning, and community preparedness to respond to climate change events including extreme heat, storms, and flooding with a focus on those most vulnerable.
• Minor changes to align with Climate Ready DC and to include both emergency & community preparedness.

CE 2.3 Require all planned unit developments, large tract review, and publicly financed projects to assess climate risks and incorporate climate adaptation solutions.
• Minor changes to align with Climate Ready DC.

CE 2.4 Ensure transportation infrastructure can withstand the upper ranges of projected climate change impacts.

CE 2.5: Fully implement and regularly update the Climate Ready DC Plan.
• The Climate Ready DC plan lays out 77 actions to prepare for the impacts of climate change.

ENERGY

EN GOAL 1: Improve the efficiency of energy use to reduce overall consumption.

Target: By 2032, cut intensity of District-wide energy use by 50%, relative to 2006 levels.
• Consensus that the target should be adjusted to reflect Clean Energy DC, which showed it was very difficult to achieve, but did not reach consensus on the right fix.
• One suggestion was to use an intensity rather than absolute target, but again there was not consensus as other energy and climate goals are absolute.
• Using 2006 as a baseline aligns with the GHG goal and reduces confusion

EN 1.1 Expand regular tracking and disclosure of energy performance to all buildings.
• "Regular" allows for variation of frequency based on building type/size, as annual disclosure is not appropriate for single-family homes, or smaller multifamily or institutional buildings.

EN 1.2 Establish an Energy Performance Standard for buildings, phased in by building size.
• Could move this to the Built Environment section or keep in Energy but create an action in BE3 focused on audits and retrofits.
• Remove the word "Minimum" because it creates confusion

EN 1.3 Fully implement and regularly update the Clean Energy DC plan
• Comprehensive Energy Plan, now complete, is called the Clean Energy DC Plan
• This action by reference captures all 57 actions in Clean Energy DC, though many are also reference elsewhere

EN 1.4 By 2023, launch a citywide educational and behavioral campaign to lower citywide energy use and expand awareness of the District’s resources for efficiency and renewables.
  • Added 5 year timeframe to move this along.
  • Adding language about expanding awareness of resources to Clean Energy DC.
  • Additional details should help make this action more actionable.

EN 1.5 Launch program to accelerate deep energy retrofits in at least 20% of all buildings, by floor area.
  • New action
  • 20% of floor area is target from Clean Energy DC model and is achievable.
  • This could go here or in BE3.
  • The idea here is to accelerate deeper retrofits than the Performance Standard (EN1.2) would require

EN GOAL 2: Increase the proportion of energy sourced from supplies that are both clean and renewable.
Target: By 2032, increase renewable energy to make up 50% of the District's energy supply. Make more aggressive—we’re so close to already achieving this.
  • Sources must be both clean and renewable, that is it would not include sources like nuclear or black liquor

EN 2.1 Reduce the use of fossil fuels for electricity generation and heating, and eliminate dirtiest fuels by 2023.
  • Changed it to be an action, not just introducing legislation.
  • Broaden to include more than power generation

[EN 2.2 MOVE TO EN3.5]

EN 2.3 Build and support commercial and residential renewable energy projects -- including expanded use of community solar -- sufficient to get 10% of citywide electricity from local generation.
  • Combined with existing EN 2.4 to include community solar
  • Goal should be a percentage of generation, not number of systems

[EN 2.4 Combined with EN 2.3]

EN 2.5 Provide residents with renewable energy by default, sourced from regional wind and solar farms, by 2023.
  • Replaced completed action with new action related to supporting new renewable energy development.
  • This is a reference to Pepco’s Standard Offer Service, the default residential electricity supplier.

EN 2.6 Expand the use of renewable sources of heating and cooling.
  • New action
  • Thermal decarbonization is critical and deserves attention.
• Especially since the renewable target in EN2.2 is entirely electricity-focused.

**EN GOAL 3: Modernize energy infrastructure for improved efficiency and resilience.**
Target: By 2032, all residents in DC should have access to a backup power system facility within walking distance that can supply enough electricity to serve critical needs during power outages using clean, distributed energy resources.
• Old target was quantifiable, but did not capture broader goal of energy resilience
• Need to cross reference Built Environment Target 2 to define “walkable”

**EN 3.1** Fully leverage the capabilities of smart meters and smart grid infrastructure.
• Original action, rollout of smart meters, has been completed but full smart meter capability is not being enabled.
• Need to establish and implement an easy process for energy service providers, planners, regulators, and consumers to access the AMI data in appropriate ways without compromising personal privacy

**EN 3.2** Improve the reliability and resilience of transmission and distribution, leveraging optimal smart grid technologies and energy storage
• Expand action beyond just reliability.
• Narrative should address how we might measure resilience, such as with PEER and RELi.

**EN 3.3** Remove all barriers to modernizing electricity infrastructure to enable the deployment of neighborhood-scale energy systems and distributed energy resources.
• Need to modernize electricity infrastructure in a manner that will help DC achieve its carbon neutrality target while providing resiliency, efficiency and innovation
• Need a a stakeholder-driven planning and evaluation process for optimally using distributed energy resources, microgrids, and district energy systems.

**EN 3.4** Work with local educational and workforce development institutions to train District residents for work in the renewable energy and energy efficiency industry.

**EN 3.5 [MOVED FROM EN 2.2]** By 2020, complete a neighborhood-scale energy system development plan that will identify and target high load growth areas and vulnerable communities in DC, and begin implementation of at least two systems.
• Moving beyond feasibility study is important, but per-ward metrics will be challenging to implement. This is one option.
• Another is simply to say build X neighborhood energy systems, but the X is tricky.
• In the narrative, make sure storage is included as integral part of resilience.
• Need action element.

**BUILT ENVIRONMENT**

**BE GOAL 1: Strategically increase urban density, livability, and walkability to sustainably and equitably accommodate future population growth within the District’s existing urban areas.**
• Added detail to define how we are planning to sustainably and equitably accommodate growth.
• Kept density part of this goal which can also be a metric.

Target: By 2032, accommodate the District’s projected population growth of 250,000 residents, while prioritizing the quality and accessibility of urban fabric, such as by prioritizing transit oriented development, housing availability for all income levels.

• Added detail to define how we are planning to sustainably and equitably accommodate projected growth.
• The growth number is a projection, not the goal itself, so it is useful to have in the target but the revised target makes clear that the growth isn’t the target, its accommodating the growth in a sustainable way that is the target.

BE 1.1: Increase affordable and workforce housing that accommodates different family sizes and is energy & water efficient.

• Adjusted language to address issues of equitability, a range of affordable housing, family sizes and efficiency.

BE 1.2 Expand brownfield redevelopment incentives and certification programs.

BE 1.3 Reduce required parking minimums and restrict surface parking for large developments.

BE 1.4 Modify zoning regulations to facilitate the best overall uses for underutilized land and air space, including access and integration of nature and its ecological services, accessory dwelling units, and/or solar installations.

• Included more generalized language to allow for a diversity of uses and breadth of potential zoning updates.

BE GOAL 2: Develop active and vibrant neighborhoods to create new economic opportunities, increase health and walkability, maintain community culture and identity, biophilic design, and support a high quality of life.

• Updated to be more explicit about the role of walkability, access to public transit, access to food, recreation, education, human health, and community in defining a high quality of life in a neighborhood.
• Human health and wellness should be specifically addressed and cross-reference with other goals.

Target: By 2032, provide essential services within 10-minutes and a variety of services and amenities within a 20-minute walk of all residents.

• Updated to address that core and essential services provided within 10 minutes. Additional ancillary services provided in 20 min walk.
• Definition of essential should include public health and food stores

BE 2.1 Ease permitting requirements for temporary arts, community, and business uses.
BE 2.2 Create programs to support increased economic development, especially those that support new businesses with a priority for those developed by District residents.
- Feedback was that the action was too specific. Adjusted language to allow for broad solutions.

BE 2.3 Develop incentive programs to convert vacant property into community assets for cultural or community centers, or to support local business and maker spaces.
- Action was too specific and was complete.
- New action with more general language written to continue intent of original action.

BE 2.4 Encourage integration of live-work situations including telecommuting, live-work units, and transit-oriented-development workforce housing.
- Action was too specific and was completed.
- New action with more general language written to continue intent of original action.

BE 2.5 Locate high-density housing -- including affordable and workforce housing -- close to commercial zones, transit corridors, and Metro.
- Language made more specific to address locations where additional housing density would be most beneficial and specifically adding affordable & workforce housing to be included in this.
- Strengthened statement to say "locate" not just "encourage."

BE 2.6 Develop and implement neighborhood revitalization plans with a vision toward holistic sustainability, including net positive energy, net zero water, zero waste, and regenerative design.
- Changed language of the action to make more broad based on the intent and vision of EcoDistricts and Living Community Challenge.
- In the SDC 2.0 narrative, include detail on these programs and how this will be implemented.

**BE GOAL 3: Improve the sustainability performance and operation of existing buildings, including reducing energy use, advancing health, and enhancing overall livability.**

- Expands goal and further defines sustainability performance.

**Target:** By 2032, audit 100% of existing commercial and multi-family buildings and implement improvements to achieve carbon reduction goals.

- Includes audit requirement and implementation goal consistent with Clean Energy DC to make the target more implementable and specific re: decreasing energy use.

BE 3.1 Rehabilitate all public housing to be green, healthy, and capable of meeting net-zero energy standards.

BE 3.2 Audit and eliminate environmental health threats such as mold, lead, and carbon monoxide in 100% of the District's affordable housing.

- No amount of health hazard is acceptable so change from 50% to 100%
- Incentivize affordable housing to improve housing quality, health, energy efficiency, and livability.
BE 3.3 Develop a green building workforce by training District residents, built environment professionals, and building operation and maintenance staff in latest green skills, including construction, operations, maintenance and performance auditing.

- Expands action to not stop at 100, to call out workforce development, and to include professional community.
- Also expanded skill types to include construction, ops and audits.
- Can we add some sense of scale or numerical target to this?

BE 3.4 Build public-private partnerships to expand best practices for building operations and maintenance.

BE 3.5 Retrofit and modernize all public buildings to reduce portfolio energy use by 50%, maximize installation of renewable energy technology, and improve health and livability.

- Updated to give efficiency metric first, which is step 1 before maximizing renewables.
- Energy metric should be portfolio-wide, to keep eye on ball and also provide flexibility
- Broadened because LEED isn't the only standard available and in some cases is not the most sustainable

BE 3.6 Complete onsite or virtual energy assessments of all District homes and buildings.

- Basic home energy assessments could be cost effective.
- A virtual audit could be more cost effective
- Could be made available at time of sale requirement. Fits with financing opportunity at point of sale.

BE GOAL 4: Ensure the highest standards of sustainability performance and operation for new construction, including driving toward net-zero energy use, advancing health, and enhancing overall livability.

Target: By 2032, meet net-zero energy use standards with all new construction projects and develop policies or regulations to improve the sustainability, livability, and resilience of new development.

- Broaden target to include more than energy (resilience, full lifecycle cost, ongoing performance, health, etc.) as a metric for sustainability of new construction.

BE 4.1 Update the Green Building Act to require higher levels of LEED certification, energy efficiency, renewable energy requirements, and broader sustainability metrics for public projects.

- Requirements for public projects should expand beyond LEED to include other sustainability metrics, including efficiency.
- Intended just to be public buildings – private buildings are addressed through Green Construction Code.

BE 4.2 Provide incentives for new building projects to achieve beyond code targets such as Living Building Challenge, WELL Building standard, or net zero energy certification.

- Current action doesn't move the needle far enough for private development.
• By stating the goal or Living Building Challenge, WELL, or Net Zero Energy, there may be steps along the way that can also be incentivized such as LEED Gold.
• In narrative, discuss that incentives could be financial or structural (i.e. permit review time).

BE 4.3: Incorporate best practice sustainability principles into neighborhood planning.

BE 4.4: Adopt the latest green construction codes for all new construction and major renovations.

BE 4.5 Require all new buildings to achieve at least net-zero energy use by 2026.
• Includes deadlines consistent with Clean Energy DC.

BE 4.6 Require all new construction or major renovations of publicly-owned buildings to meet net zero standards by 2022.
• The government must lead by example — and net zero construction is the best high-impact, high-profile way to make this happen.
• This will get the gov't buildings out ahead of the 2026 NZE code.