

Washington, DC 2050

14th Annual Passive House Conference

Dave Epley, DCRA Green Building Division
Kendra Wiley, DOEE Green Building and Climate
Division



GOVERNMENT OF THE
DISTRICT OF COLUMBIA
MURIEL BOWSER, MAYOR

TAG THIS PRESENTATION @DOEE_DC & @DCRA

GOALS: 2032



ADAPT TO CLIMATE CHANGE

CLIMATE READY BUILDINGS

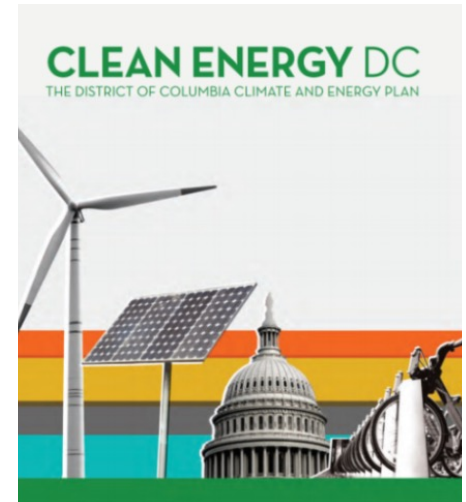
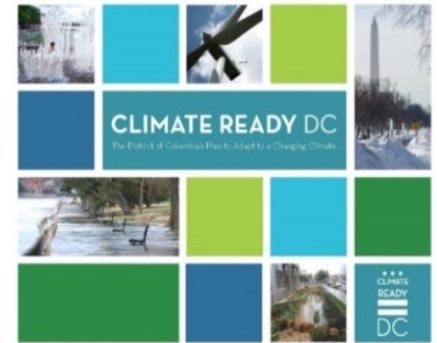
CUT ENERGY USE 50%

100% RENEWABLE ENERGY

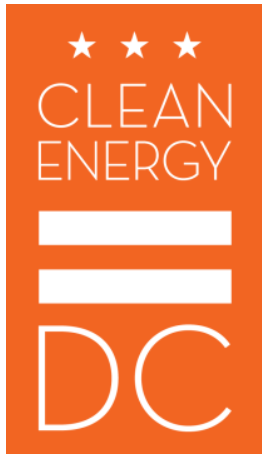
NET ZERO NEW BUILDINGS

NET ZERO RETROFITS

CUT GHG EMISSIONS 50%



Mayor Bowser Commitment to ZERO Carbon by 2050



CLEAN ENERGY DC MEANS....



CLEAN ENERGY DC OMNIBUS ACT OF 2018

New Buildings

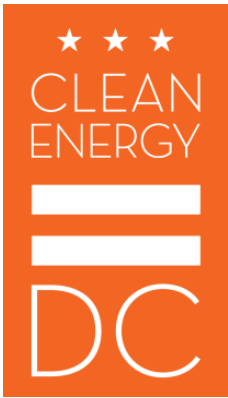
Adopt a Net Zero Energy building code by 2022 (Res) & 2026 (Comm)

Existing Buildings

Improve the performance of existing buildings by implementing a **Building Energy Performance Standard**

100% Renewable Electricity

Require **100% renewable electricity** by 2032, and **10% from local solar** by 2041

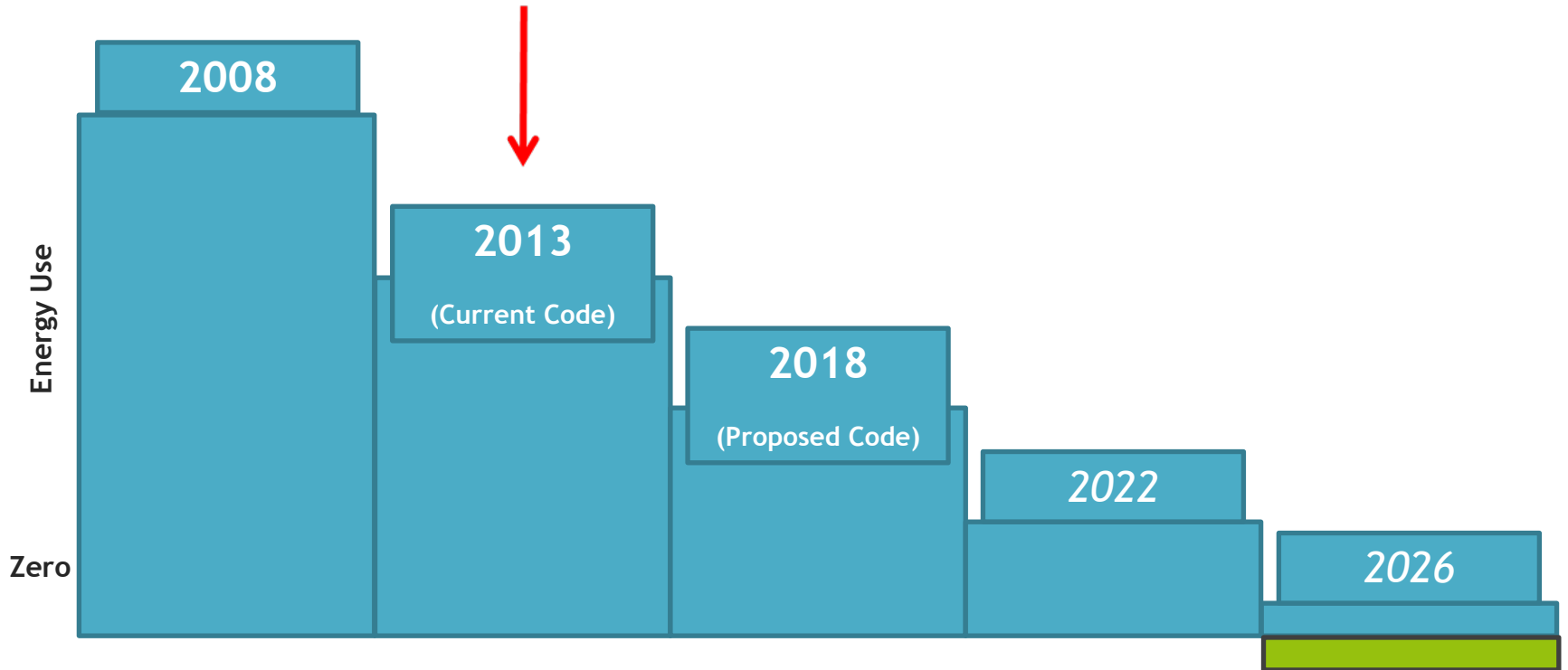


NET-ZERO ENERGY BUILDINGS

- Residential new construction 2022
- Commercial new construction 2026
- In anticipation and to help prime the market, a voluntary NZE Program was launched (in pilot phase)
- Proposed DC 2017 Energy Codes includes DC NZE Pathways and NZE alternative compliance pathways (ex: PHIUS+)



THE PATH TO NET-ZERO ENERGY (COMMERCIAL)



BUILDING ENERGY PERFORMANCE STANDARD

- DOEE establishes a minimum threshold for energy performance that will be “at least” the local median ENERGY STAR score by building type (or equivalent)
- 5-year compliance cycles - 1st cycle begins 2021
- Compliance paths for bldgs. below minimum:
 - Performance: Reduce energy usage 20%
 - Prescriptive: Implement cost-effective energy efficiency measures
 - Other as determined by DOEE
- Create BEPS Task Force for implementation plan, recommend amendments and complementary programs/policies

**More than 2,700 buildings
impacted by BEPS!**

- 916 buildings over 50k sf
- 561 buildings 25-50k sf
- 1,269 buildings 10-25k sf

EFFECTIVE ENFORCEMENT PROCESS

```
graph LR; Design --> Permit; Permit --> Inspection; Inspection --> C_of_O[C of O]; C_of_O --> Occupancy
```

Design

Permit

Inspection

C of O

Occupancy

ENFORCEMENT PROGRAM

- **Plan review** and permitting
- Green/energy **Inspections**
- Post-occupancy **data** & tracking
- **Policy** & **code** development
- **Solar** and other green tech
- Community **outreach** & **education**
- **Technical assistance** to building industry
- **Net-Zero Energy** Assistance



BUILDING CAPACITY & TRANSFORMING THE MARKET

FUNDING/INCENTIVES

INNOVATION

TECHNICAL
ASSISTANCE



FUNDING, INCENTIVE & TA STRUCTURE

Design | Plan Review

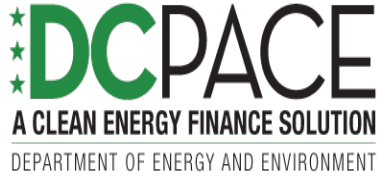
- NZE Design Assistance Grants
- Financing (Green Bank, DC PACE, DCSEU)
-
- Accelerated Permitting
- Technical Assistance
- DCSEU NZE Construction Incentive

Occupancy

- Pay-for-performance (draft)
- Case Studies
- Professional Directory
- Technical Assistance



DC GREEN BUILDING FINANCING & INCENTIVES

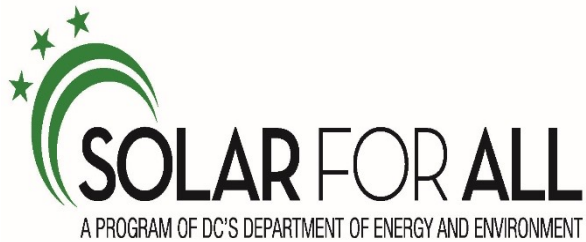


▶ SPECIAL TAX ASSESSMENT

▶ CASH-FLOW POSITIVE

▶ REBATES

▶ PAY FOR PERFORMANCE



▶ COMMUNITY SOLAR

▶ LMI BENEFITS

▶ CREDIT ENHANCEMENTS

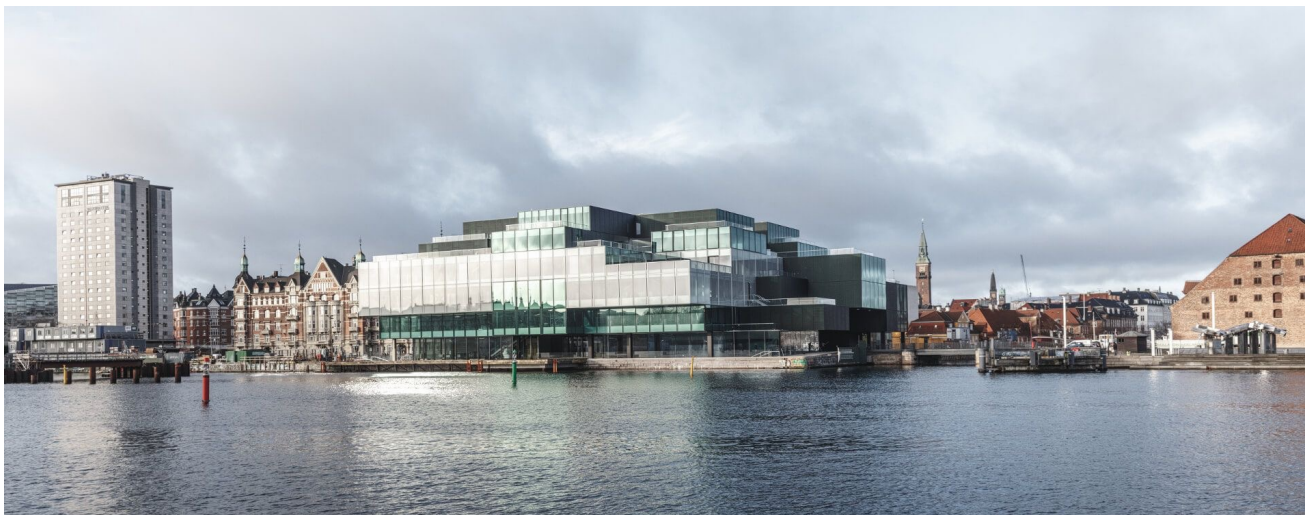
▶ LOANS AND INVESTMENTS

HIGH PERFORMANCE BUILDING HUB

The District with IMT and partners to design a hub to support the building industry and owners through this transition by creating a platform for collaboration, innovation, capacity building, training, and technical assistance.

Types of assistance and support in consideration:

- Training in high-performance building design & construction
- Support for high efficiency projects
- Direct technical assistance
- Targeted research and resource development
- Market support and development
- Opportunities for knowledge exchange and collaboration



BLOXHUB,
Copenhagen
Image Credit: WSP

DMV Net-Zero Energy Coalition

Join!



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[Professional Directory](#)



[Resources](#)

A net-zero energy building is defined as one that is highly energy-efficient and produces onsite, or procures offsite as necessary, carbon-free renewable energy in an amount sufficient to offset the annual energy use associated with operations.

THANK YOU!

Dave Epley

Department of Consumer and Regulatory Affairs

Green Building Division

Email: david.epley@dc.gov

Kendra Wiley, JD, LEED AP O+M, ENV SP

Department of Energy and Environment

Green Building and Climate Branch

Email: kendra.wiley@dc.gov

