

DC'S NEW BUILDING ENERGY PERFORMANCE STANDARDS

★ ★ ★ DEPARTMENT
OF ENERGY &
ENVIRONMENT

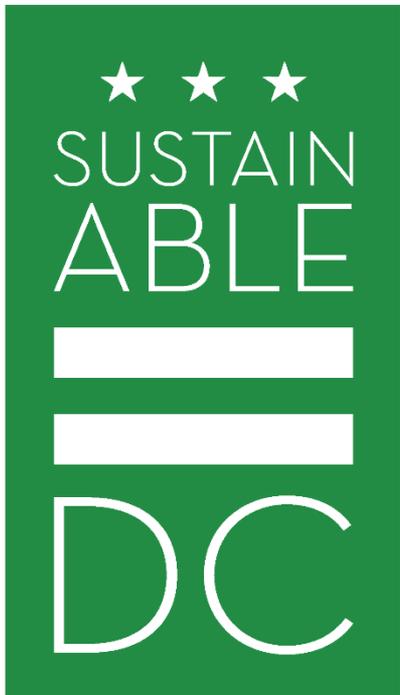
★ ★ ★ WE ARE
WASHINGTON
DC GOVERNMENT OF THE
DISTRICT OF COLUMBIA
MURIEL BOWSER, MAYOR

SUSTAINABLE DC VISION



Make DC the healthiest, greenest, most livable city in the country.

GOALS: 2032



ADAPT TO CLIMATE CHANGE

CLIMATE READY BUILDINGS

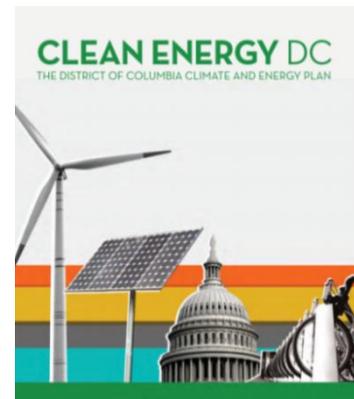
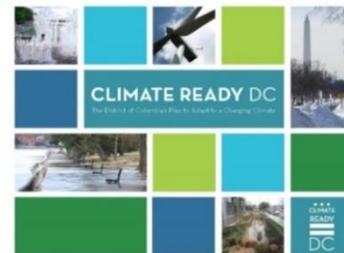
CUT ENERGY USE 50%

50% RENEWABLE ENERGY

NET ZERO NEW BUILDINGS

NET ZERO RETROFITS

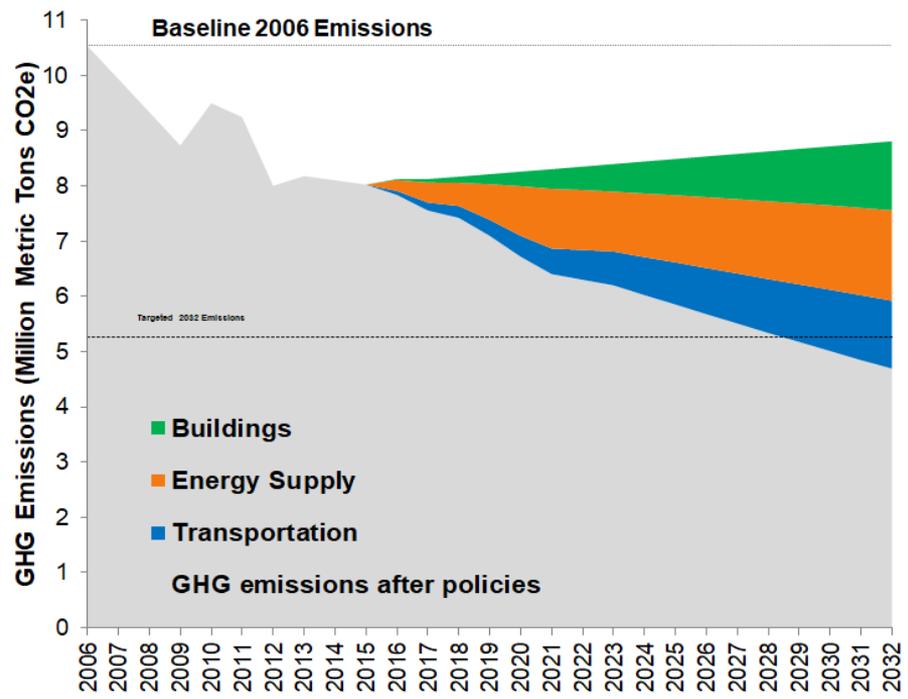
CUT GHG EMISSIONS 50%



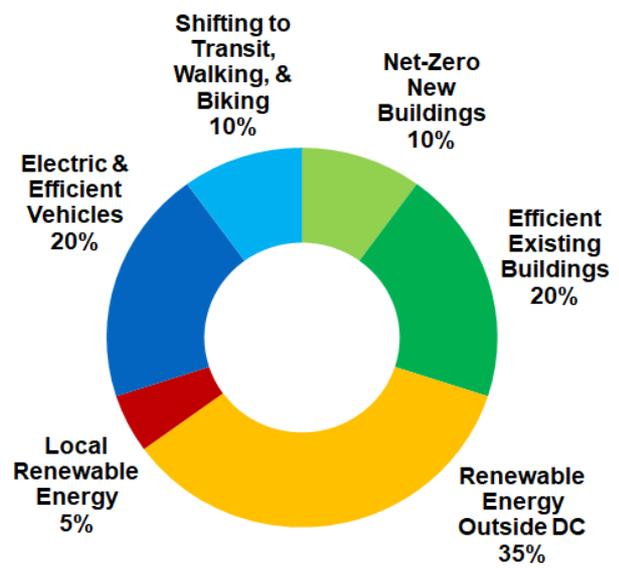
MAYOR BOWSER: COMMITTED TO ZERO CARBON BY 2050



ESTIMATED GHG SAVINGS: 56%

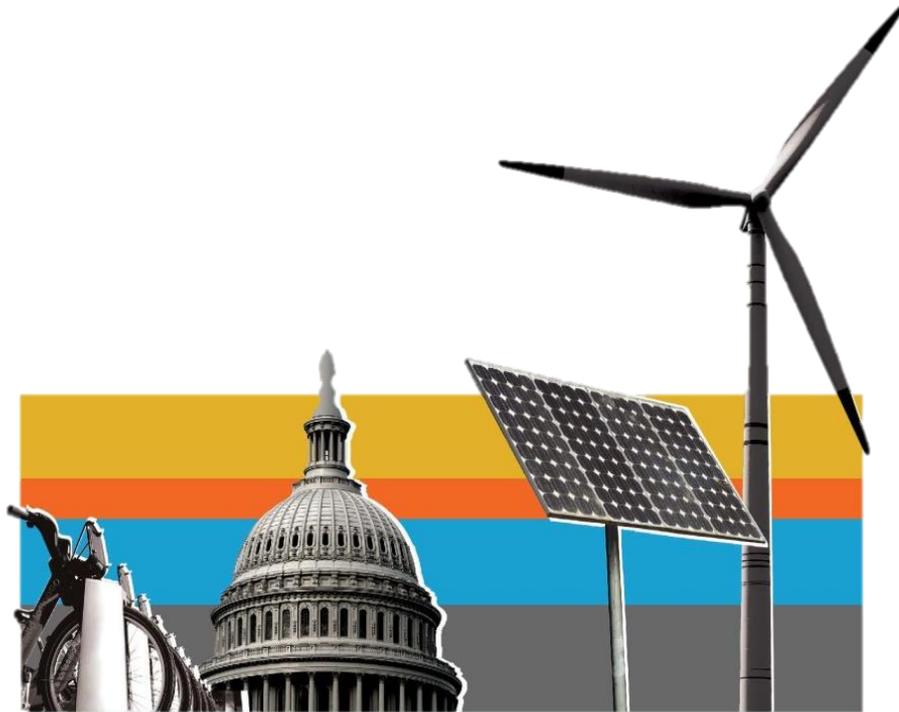


RELATIVE IMPACT OF ACTION AREAS





CLEAN ENERGY DC OMNIBUS AMENDMENT ACT OF 2018, TITLE III....



BENCHMARKING

Lowers minimum building square footage required to benchmark over time;
Creates data verification requirements

ENERGY PERFORMANCE

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

BENCHMARKING 101

Clean and Affordable Energy Act of 2008 requires all private and DC-owned buildings to report their calendar year (CY) energy and water use to the DOEE for public disclosure by April 1 annually.

Covered Building List

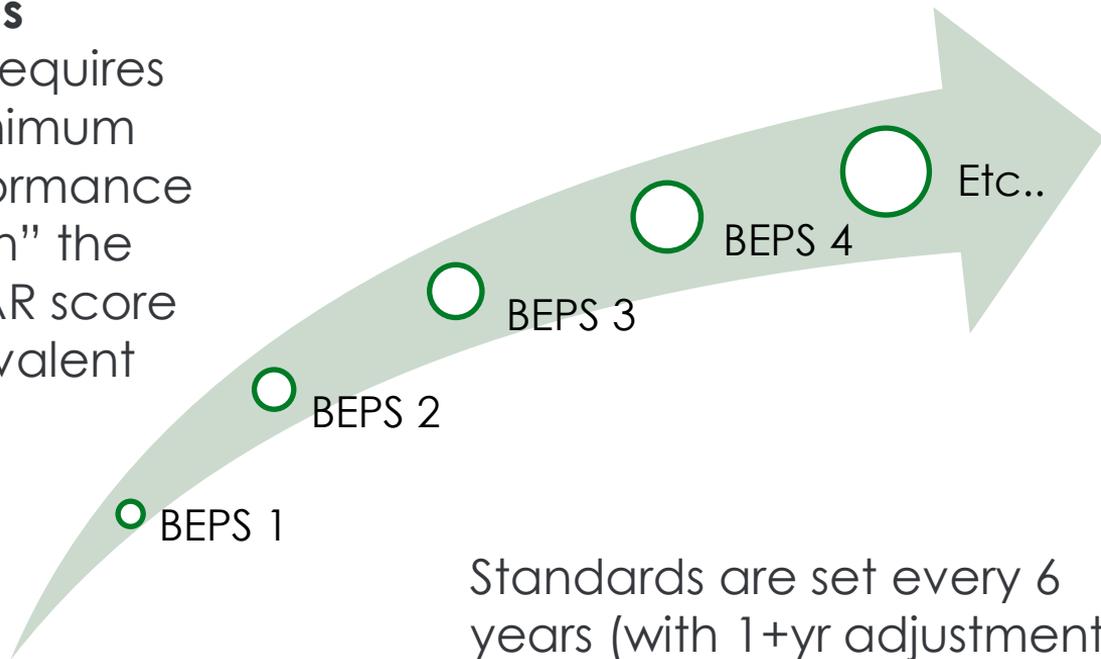
- ❑ CY2009 and on – DC-owned buildings >10,000 sq. ft.
- ❑ CY2013 and on – Private buildings > 50,000 sq. ft.
- ❑ CY2021 and on – Private buildings > 25,000 sq. ft.
- ❑ CY2024 and on – Private buildings > 10,000 sq. ft.

Third Party Data Verification Required

- ❑ Beginning CY2023 and every three (3) years etc.

BUILDING ENERGY PERFORMANCE STANDARD 101

Clean Energy DC Omnibus Amendment Act of 2018 requires an establishment of a minimum threshold for energy performance that will be “no lower than” the local median ENERGY STAR score by property type (or equivalent metric).



Standards are set every 6 years (with 1+yr adjustment for COVID in Period 1).

BEPS APPLICABILITY

As the benchmarking requirements ratchet down in square footage over time, the buildings will be required to meet the BEPS in the following periods until all buildings 10,000 sq. ft. and over are following the performance standards.

BEPS 1:

Private buildings >50,000 sq. ft.
and DC-owned >10,000 sq. ft.

BEPS 2:

Private buildings >25,000 sq. ft.
and DC-owned >10,000 sq. ft.

BEPS 3:

Private buildings and
DC-owned >10,000 sq. ft.



BEPS APPLICABILITY EXAMPLE # 1

My multifamily housing unit is 45,000 sq. ft.

- Does BEPS 1 apply? NO, because it is under the 50,000 sq. ft. threshold for private buildings.

When do I start benchmarking?

- Benchmarking is not mandated for my building until April 1, 2022, but I could voluntarily start early to begin understanding the energy usage in my building.

When does BEPS apply?

- Not until the 2nd BEPS period. But if I start strategic energy management strategies now, I could save money and be above the standard when it is applicable to my building.



BEPS APPLICABILITY EXAMPLE # 2

My office building is 22,000 sq. ft.

- Does BEPS 1 apply? NO, because it is under the 50,000 sq. ft. threshold for private buildings.

When do I start benchmarking?

- Benchmarking is not mandated for my building until April 1, 2025, but I could voluntarily start early to begin understanding the energy usage in my building.

When does BEPS apply?

- Not until the 3rd BEPS period. But if I start strategic energy management strategies now, I could save money and be above the standard when it is applicable to my building.



WHEN BEPS APPLIES

My multifamily building is 150,000 sq. ft.

Does BEPS 1 apply?
YES, so let's see if my building meets the performance standard.

My ENERGY STAR Score was a 72.

The BEPS for my property type was an ENERGY STAR Score of 64. My office building meets the standard!

What do I need to do to comply?

Nothing for BEPS 1!
But I should look ahead to BEPS 2 and make sure my building continues to meet the standard.

For this example, 2018 data was used.



WHEN BEPS APPLIES AND I DON'T MEET THE STANDARD

My office building is
80,000 sq. ft.

Does BEPS 1 apply?
YES, so let's see if
my building meets
the performance
standard.

My ENERGY STAR
Score was a 40.

The BEPS for my
property type was
an ENERGY STAR
Score of 68. My
office building *does*
not meet the
standard.

What do I need to
do to comply?

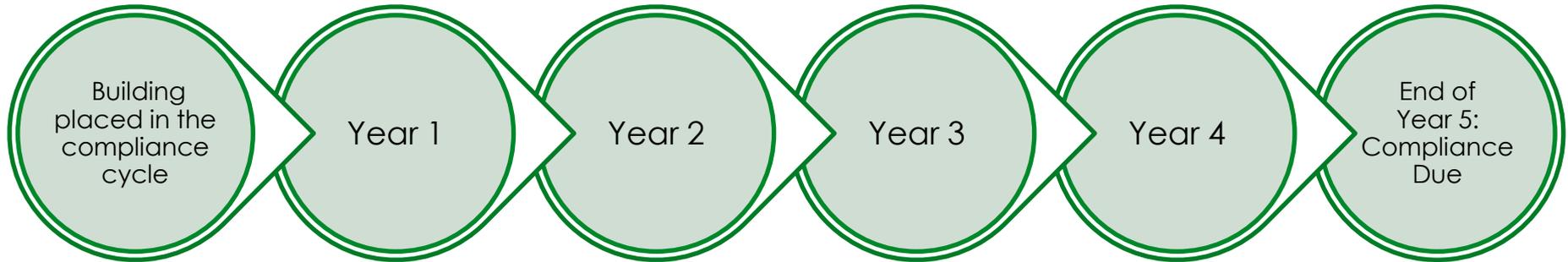
I have options. Let's
go to the next slide
to learn more!

For this example, 2018 data was used.



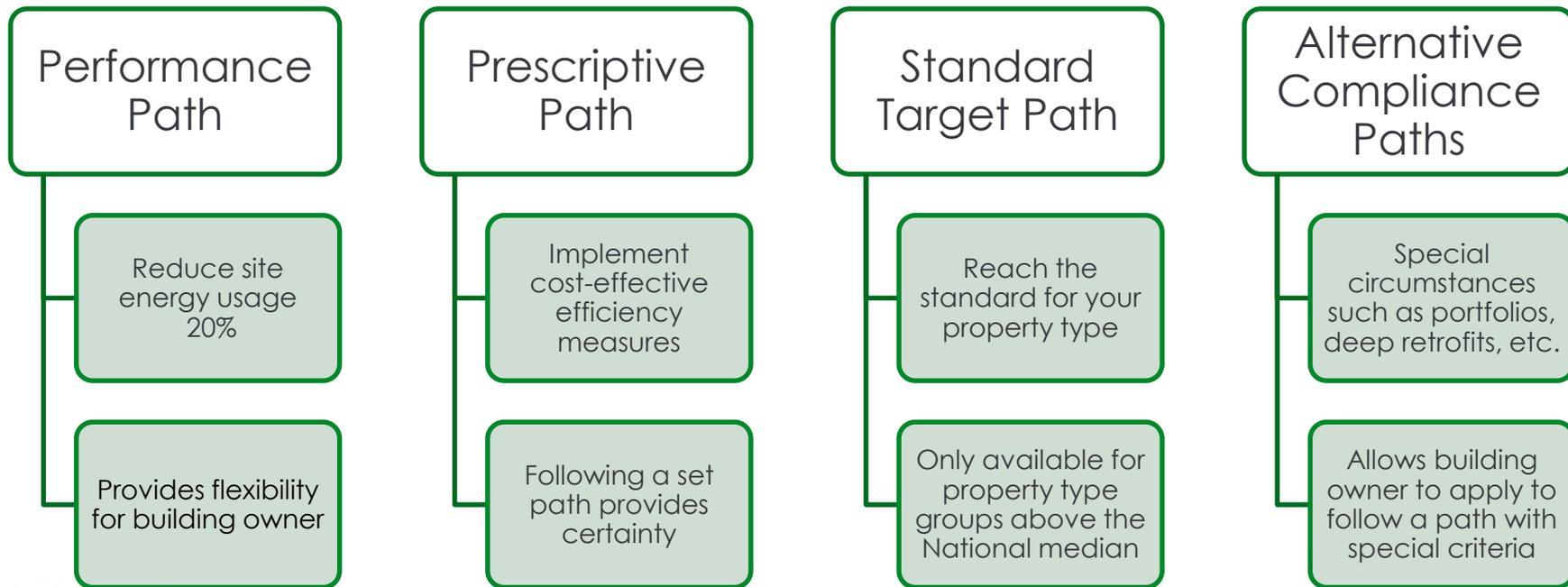
COMPLIANCE CYCLES

Buildings that do not meet the standard for a BEPS period will be placed in a 5-year compliance cycle (COVID-adjusted 6 years for Cycle 1). The building owner has until the end of the cycle to bring their building into compliance.

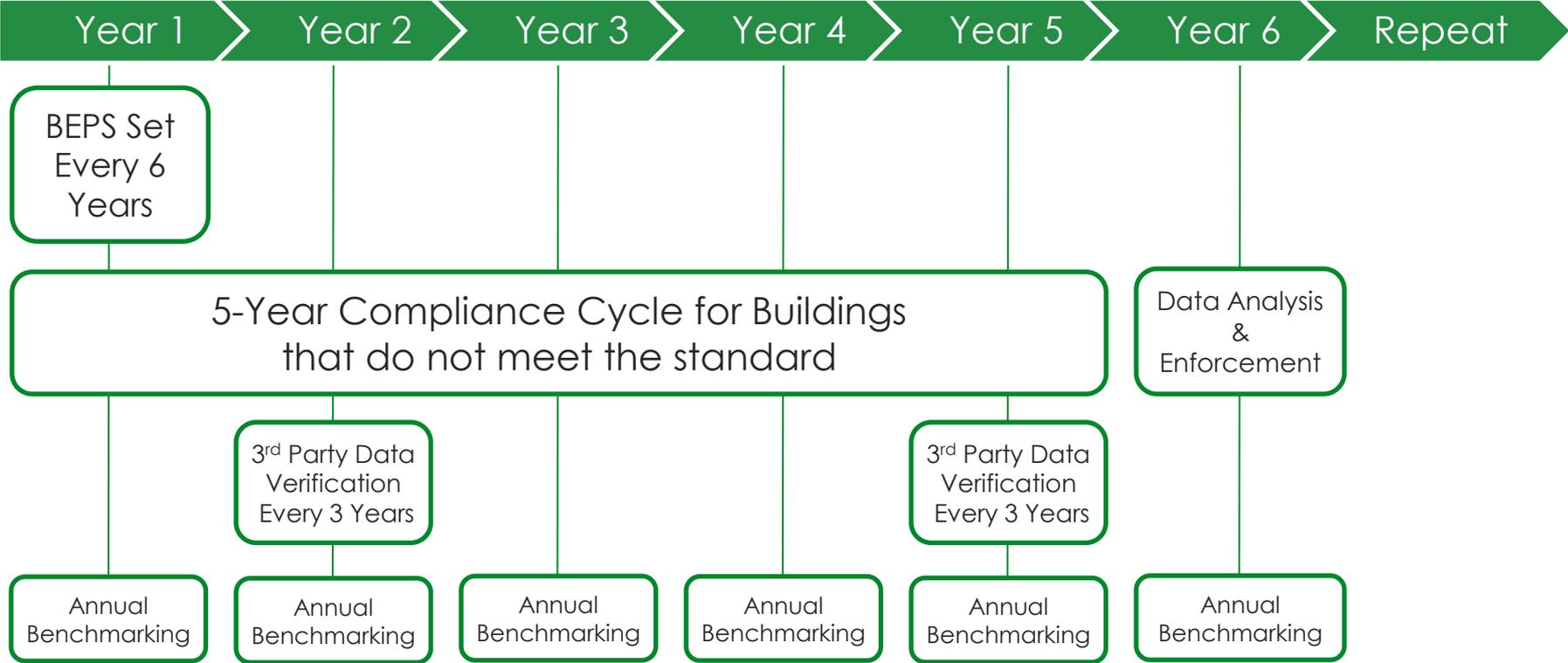


COMPLIANCE PATHS

Building owners have a variety of paths to choose from to bring their buildings into compliance:



BEPS REVOLUTION



BEPS PROGRAM IMPLEMENTATION

- BEPS Task Force – meets every other Tuesday – open to the public
- Draft rules ready for public comment late Summer 2020
- Minimum of one round of public comment, open for 30 days (extended to 60 days)
- Final rules published in late 2020
- BEP Standards announced this Fall

WHAT YOU CAN DO NOW

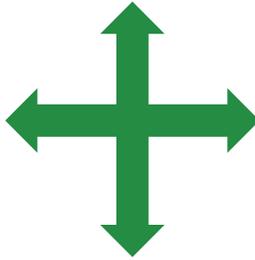
- Double-check your benchmarking data
- Compare 2019 scores to the 2018 median for your property type to get a sense of how your building is performing
- Get an on-site energy audit to understand building characteristics, equipment, and energy use
- Identify energy conservation measures
- Engage with building tenants
- Create an internal team to start aligning energy actions
- Develop a strategic energy management plan

ALIGNMENT: ASSISTANCE, INCENTIVE, FINANCING



DC
SUSTAINABLE ENERGY
UTILITY

HIGH-PERFORMANCE
BUILDING HUB





DC
SUSTAINABLE ENERGY
UTILITY

COMMERCIAL & INSTITUTIONAL REBATES AND SERVICES

STANDARD REBATES

- Lighting
- Refrigeration
- Motors
- Food Service & Vending
- HVAC

INSTANT REBATES

- Lighting

DIRECT INSTALLATION

- Cost share with a DCSEU-provided contractor

CUSTOM REBATES

- Technical assistance and rebates for any measure or operational improvement you are making in your District-based building that provides cost-effective electric or natural gas savings.

PAY FOR PERFORMANCE

- Designed for commercial, and institutional (C&I) building larger than ~100,000 square feet, the program offers incentives for energy conservation measures based on pre- and post-project metered data that determines actual energy saved.

www.dcseu.com

NO-COST TECHNICAL SUPPORT



DC
SUSTAINABLE ENERGY
UTILITY

IDENTIFYING OPPORTUNITIES

- Site walkthroughs
- Capital planning assistance
- No-cost technical assistance
- Interval data analysis
- Peer-to-peer information exchange
- New technology seminars

FINDING SOLUTIONS

- Project planning & prioritization
- Unbiased review of vendor quotes
- Data logging baseline energy usage
- Guidance on operations and maintenance adjustments

PROJECT ANALYSIS

- Cash flow and ROI analysis
- Post-installation data logging
- Project savings regression analysis

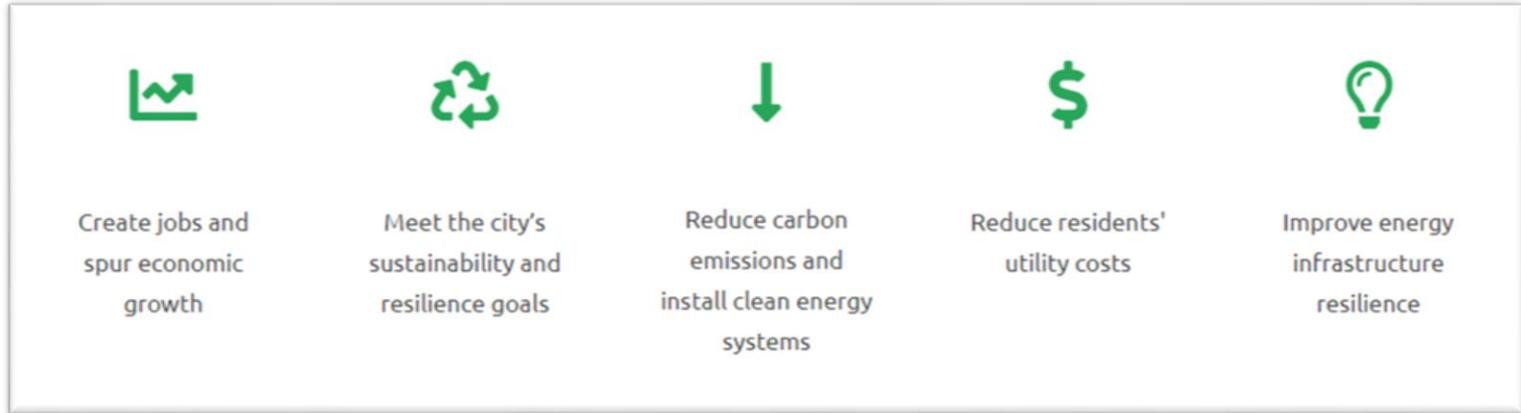
CALCULATING IMPACT

- Demonstrating value to decision makers
- Analysis of reduced operations and maintenance costs
- Increased comfort and employee performance
- Guidance on PR



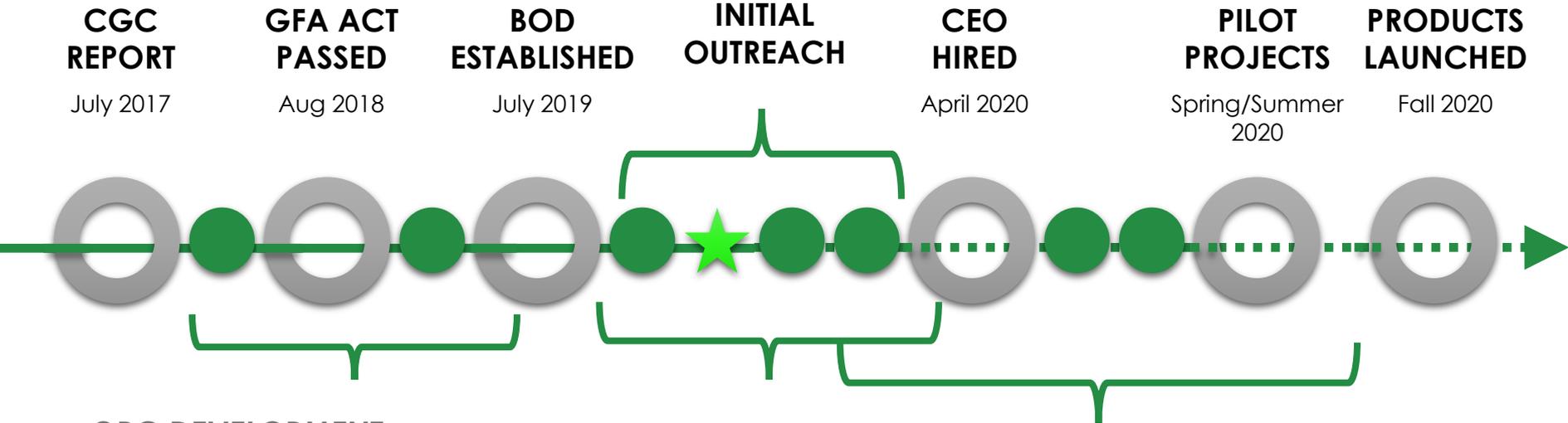
DC GREEN BANK

The DC Green Bank's mission is to leverage public purpose funding to attract private capital to:



The DC Green Bank can be used by residents or businesses to complete sustainable projects that normally would not happen. DC Green Bank will offer loans, leases, credit enhancements, and other financing services to close funding gaps for clean energy projects and energy efficiency improvements.

DC GREEN BANK SCHEDULE



CGC REPORT

July 2017

GFA ACT PASSED

Aug 2018

BOD ESTABLISHED

July 2019

INITIAL OUTREACH

CEO HIRED

April 2020

PILOT PROJECTS

Spring/Summer 2020

PRODUCTS LAUNCHED

Fall 2020

ORG DEVELOPMENT

- Legislative Development
- BOD Selection
- Market Analysis
- Start-up Planning

ADMINISTRATIVE START-UP

- Bylaws Adopted
- Consultants Hired
- Banking & Insurance
- Staffing & Management

Education, engagement, and product development

HIGH-PERFORMANCE BUILDING HUB

DOEE is working with IMT and partners to design a hub to support YOU through this transition by creating a platform for collaboration, innovation, capacity building, training, and technical assistance.



IN CONSIDERATION:

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

Go to imt.org/hub to sign up for updates!

CONSTRUCTION CODE UPDATE

2017 DC Construction Codes adopted May 29, 2020

- 23% reduction in site EUI (over 90.1-2010 baseline)
- Significant changes made to the Energy Conservation Code – Commercial
 - Updates to 90.1-2013, with local amendments
- Minor updates to the Energy Conservation Code – Residential and Green Construction Code
 - Updates to 2015 IECC, with local amendments
- Effective immediately for new construction, one year grandfather for existing
- Energy Conservation Code alternative compliance paths expanded to include:
 - Appendix Z – DC's voluntary NZE code for commercial and multifamily
 - Living Building Challenge, Passive House (PHI/PHIUS), and LEED + LEED Zero

LEARN MORE!

doee.dc.gov/service/BEPS
info.beps@dc.gov
info.benchmark@dc.gov

- Sign up for the newsletter
- Attend a BEPS Task Force meeting
- Participate in a targeted focus group
- Attend a future education session or webinar
- Submit public comments on the rules
- Tell your friends/coworkers/clients about BEPS!