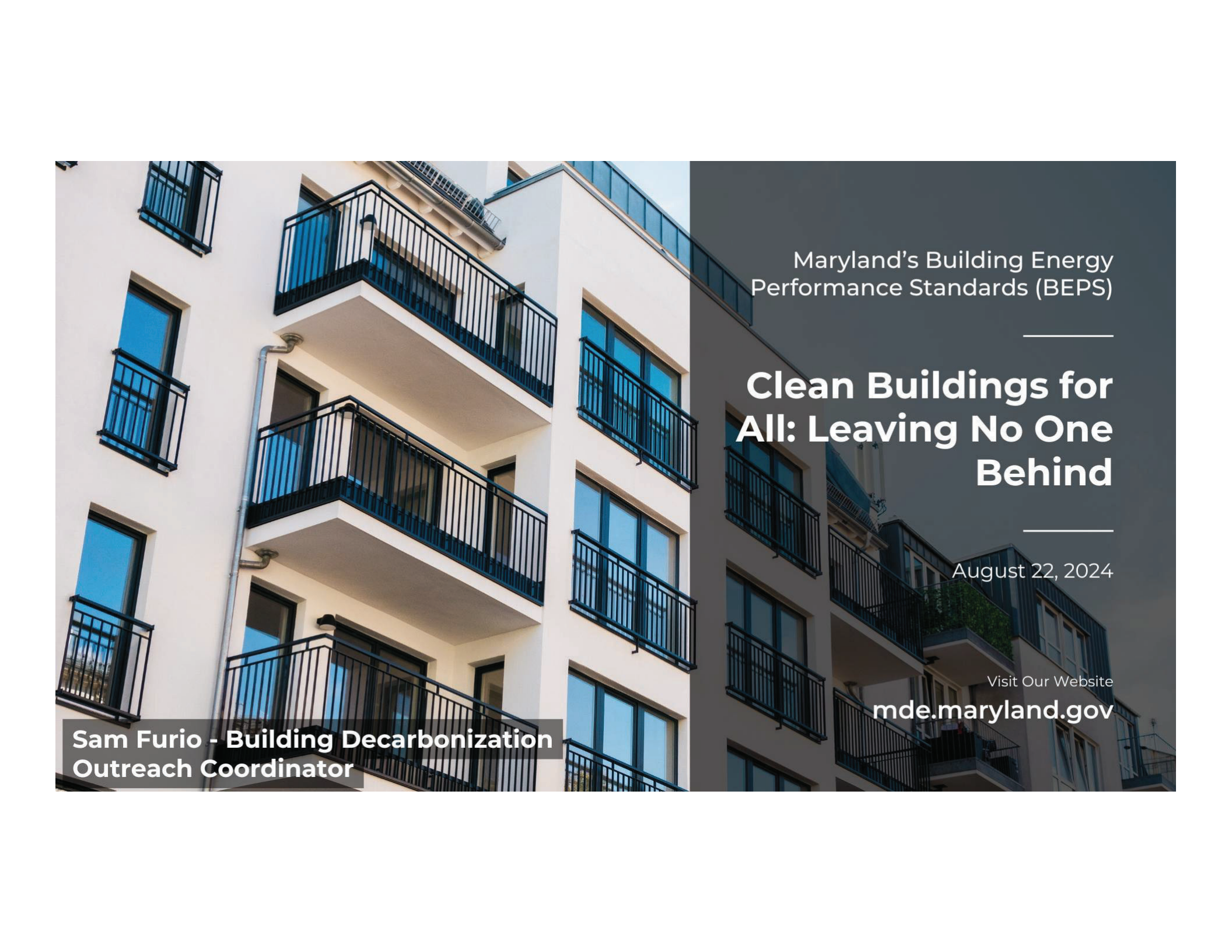


Appendix P – BEPS Informational Session 3: Clean Buildings for All:

Leaving No One Behind – August 22, 2024.



Maryland's Building Energy
Performance Standards (BEPS)

Clean Buildings for All: Leaving No One Behind

August 22, 2024

Visit Our Website

mde.maryland.gov

**Sam Furio - Building Decarbonization
Outreach Coordinator**



Agenda

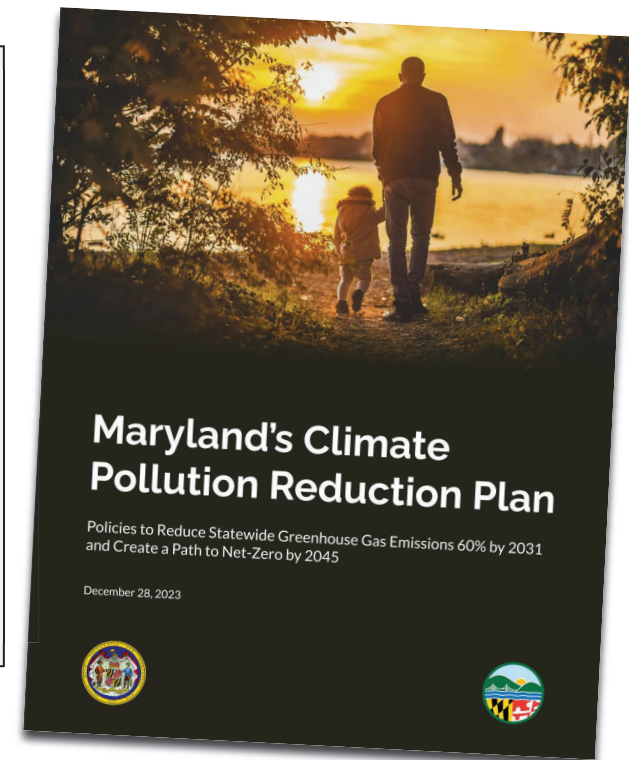
1. Climate Pollution Reduction through Building Decarbonization
2. Benefits For All
3. Maryland Energy Administration:
Clean Buildings Hub
4. Q&A





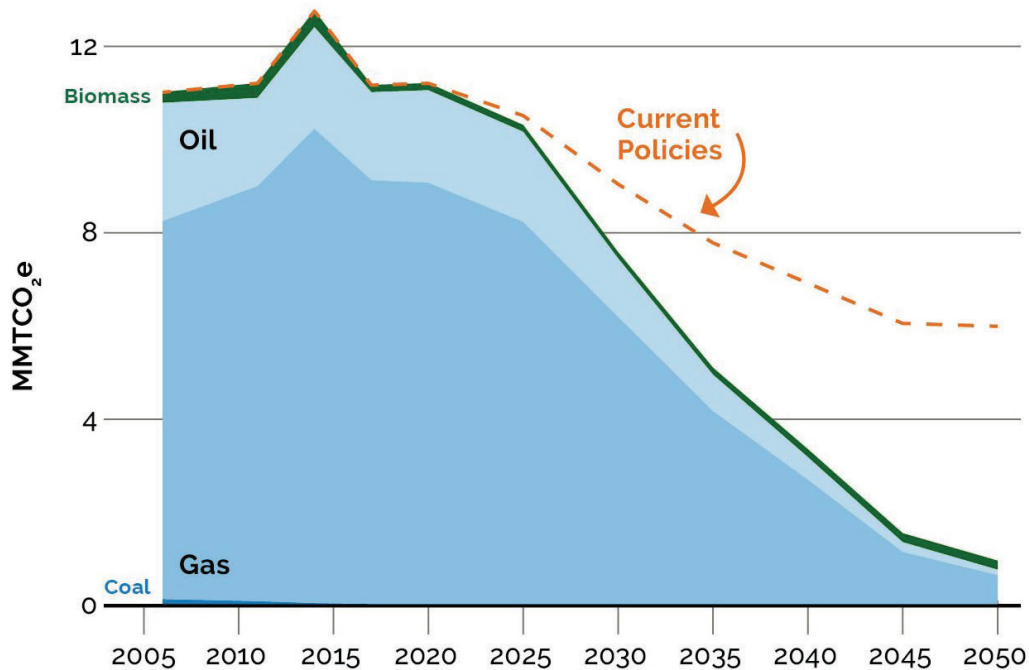
Climate Plan Objectives

1. Reduce statewide greenhouse gas emissions 60% by 2031 (from 2006 levels)
2. Set the state on a path to achieve net-zero emissions by 2045
3. Create net economic benefits for Maryland, including more than 27,000 green jobs
4. Full plan at mde.maryland.gov





Electrification of Buildings



Building Energy Performance Standards and federal incentives for heat pumps reduce emissions, but not enough

New policies, such as **Zero-Emission Heating Equipment Standards** and **Clean Heat Standards** will reduce emissions fast enough to achieve our goals



Electrification Creates Local Jobs

Upgrading a boiler to a heat pump can't be outsourced

Implementing this Plan will create an additional **27,000 jobs** between now and 2031

Electricians and heat pump installers will benefit





Lower Energy Costs for Families



The average Maryland household saves **\$2,600** annually by using heat pumps and EVs instead of gas appliances and gas cars.

Savings increase to **\$4,000** annually for households that switch from oil or propane to heat pumps and EVs.



Federal Tax Credits

Take Advantage of Existing Incentives for Zero-Emission Devices

The Inflation Reduction Act offers tax incentives and rebates for making improvements around the house. More details at energy.gov/save

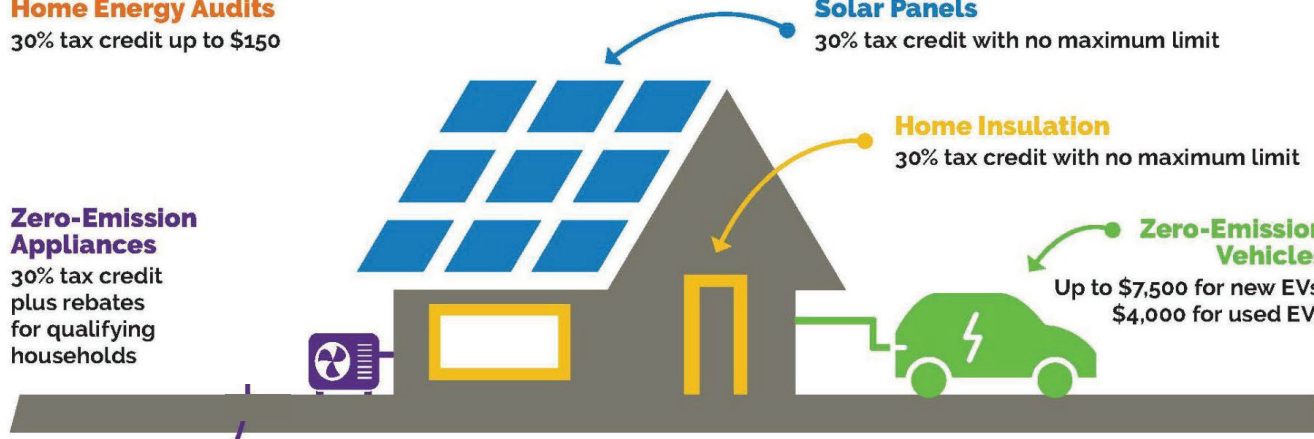
Home Energy Audits
30% tax credit up to \$150

Solar Panels
30% tax credit with no maximum limit

Home Insulation
30% tax credit with no maximum limit

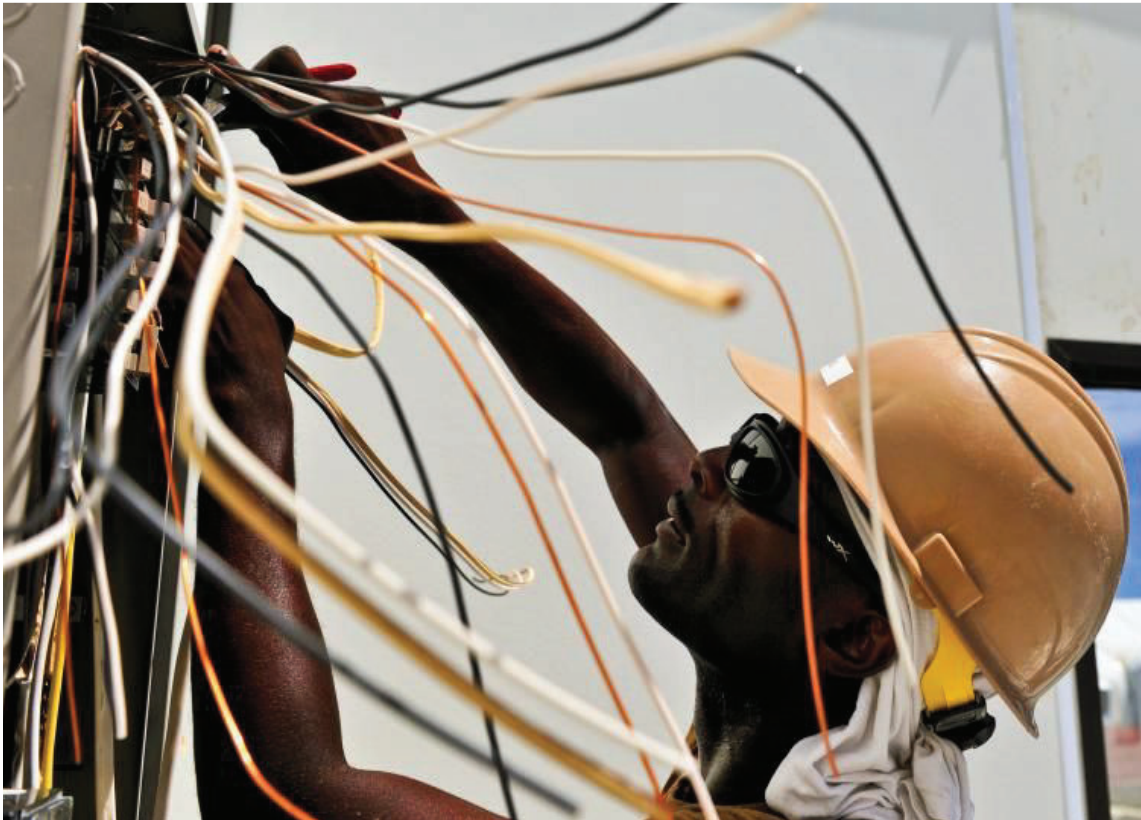
Zero-Emission Appliances
30% tax credit plus rebates for qualifying households

Zero-Emission Vehicles
Up to \$7,500 for new EVs,
\$4,000 for used EVs





Economic Benefits



Creates jobs and lowers household energy costs

Increases total personal income by **\$2.5 billion**

Grows Maryland's gross domestic product by **\$5.3 billion** between now and 2031



Health Benefits

This Plan delivers between **\$142 million and \$321 million** in additional health benefits in 2031 compared to current policies

Most of the health benefits occur in **historically disadvantaged** communities



Just Transition Working Group

Main Objectives:

- Will support clean energy technology while considering equitable economic development at the community level.
- Advise the Maryland Commission on Climate Change on equitable workforce development that also supports the transition to clean energy.

Join the Conversation:

- Upcoming Meeting Dates: 08/30, 09/27, 10/25, and 11/22
- MDE Staff: cindy.osorto1@maryland.gov, UMD Staff: stvo@umd.edu

6 Guiding Principles for Just Transition

1

QUALITY CLEAN JOB CREATION



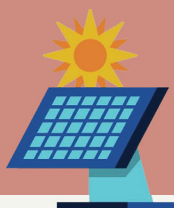
2

OCCUPATIONAL TRAINING & EDUCATION



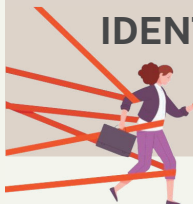
3

PROMOTING INVESTMENT IN CLEAN JOBS & IMPACTED COMMUNITIES



4

IDENTIFYING & ELIMINATING STRUCTURAL BARRIERS TO EMPLOYMENT



5

HIRING & RETAINING UNDERREPRESENTED WORKERS



6

COLLABORATING WITH STAKEHOLDERS, ESPECIALLY EMPHASIZING WORKERS



Leaving No One Behind: Maryland Clean Buildings Hub

Rebecca Price, Manager, Maryland Clean Buildings Hub
August 22, 2024



Maryland Energy Administration | Baltimore, MD



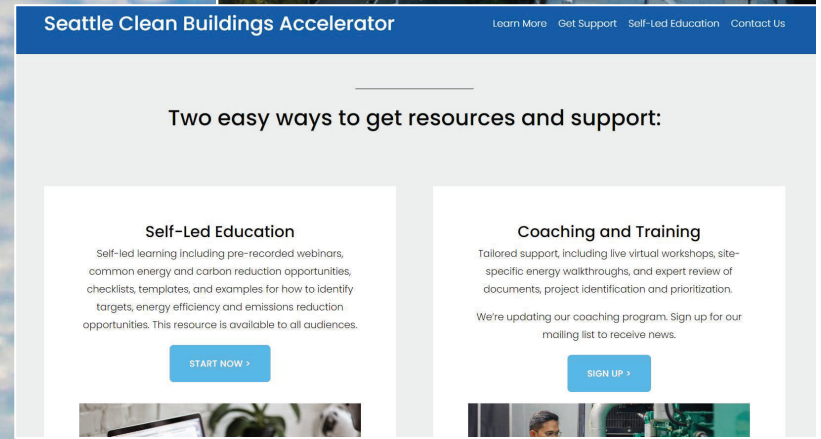
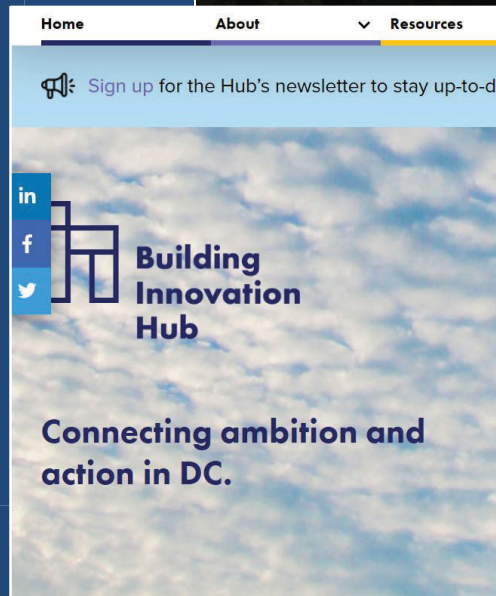
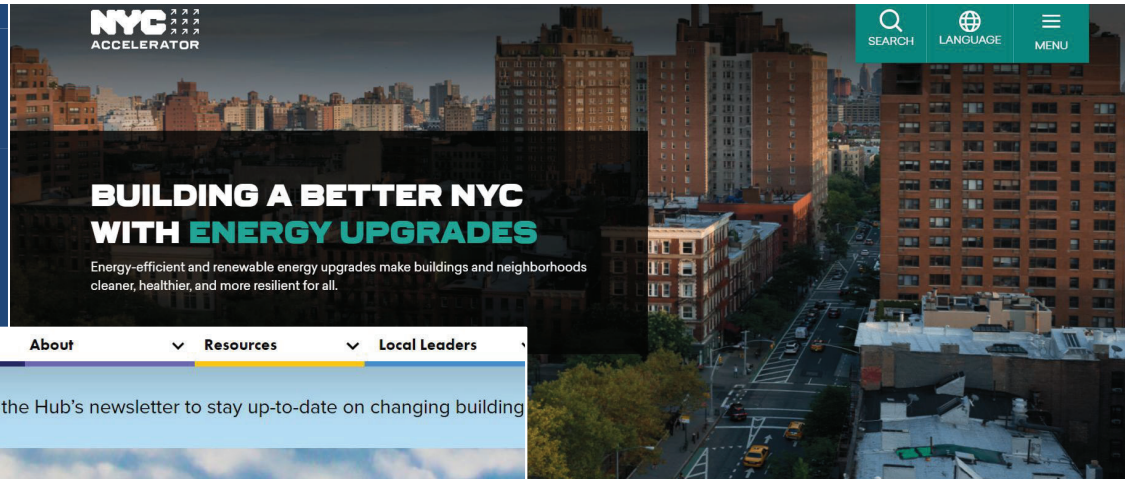
Vision

The Hub envisions a state where every building owner has access to the information, resources, and funding/financing it needs to become highly energy efficient and to eliminate onsite fossil fuel usage in a cost-effective manner.



The 'Hub' model

- Educator
 - Resource development & curation
- Convener
 - Peer-to-peer learning opportunities
 - Events
- Building 'Czar'
 - Helping shape state programs based on market feedback



Bigger than
the sum of its
parts



Types of assistance: Financing & Funding



Maryland
Energy
Administration



U.S. DEPARTMENT OF
ENERGY



Montgomery County
GreenBank
Your partner for clean energy

Funding spotlight: Maryland Energy Administration

- Commercial, Industrial, and Agricultural (CI&A) grant program
- Jane E. Lawton Conservation Loan
- Maryland Smart Energy Communities grant program
- Governor's electrification carve-out (forthcoming!)
- IRA rebates (forthcoming!)
 - Home Efficiency Rebates
 - Home Electrification and Appliance Rebates

Electrification Rebates

Rebates from the Maryland Energy Administration will be available starting in 2025 for low, moderate and middle-income households.

Climate plan proposes to keep electrification rebates flowing when federal funding runs out.

Receive up to:



\$8,000 rebate
Heat pump HVAC



\$4,000 rebate
Electric panel upgrade



\$2,500 rebate
Electric wiring



\$1,750 rebate
Heat pump water heater



\$840 rebate
Electric stove or cooktop



\$840 rebate
Heat pump clothes dryer

Types of assistance: Decarbonization pathways

How do I make sense of my audit?

What technology combinations should I pursue?

How do I create a plan for my entire portfolio of buildings?

How do I design my leases?

What certifications should I be looking for in a contractor?

What's the difference between ASHRAE Level 1, 2, and 3 audits?

I've benchmarked. Now what?

Dimensions

- Newsletter
- Website
 - How-to guides/primers
 - Funding/financing matrix
 - Templates
 - Case studies
- Workshops/webinars/trainings/cohorts

Call for input

- ❖ Ongoing stakeholder needs assessment
 - <https://tinyurl.com/mvdearzw>
- ❖ Poll: What resources would be most helpful to you?



Connect



building.decarbonization@maryland.gov



<https://tinyurl.com/ywjt7pf5>



energy.maryland.gov/Pages/MDCleanBuildingsHub



Questions?

