



Maryland
Department of
the Environment

Building Energy Performance Standards

Stakeholder Meeting
Fall 2022



Agenda

- Welcome
- Overview of Building Performance Standards
- Requirements for Maryland Building Energy Performance Standards
- Process and Timeline for Developing Regulations
- Listening Session



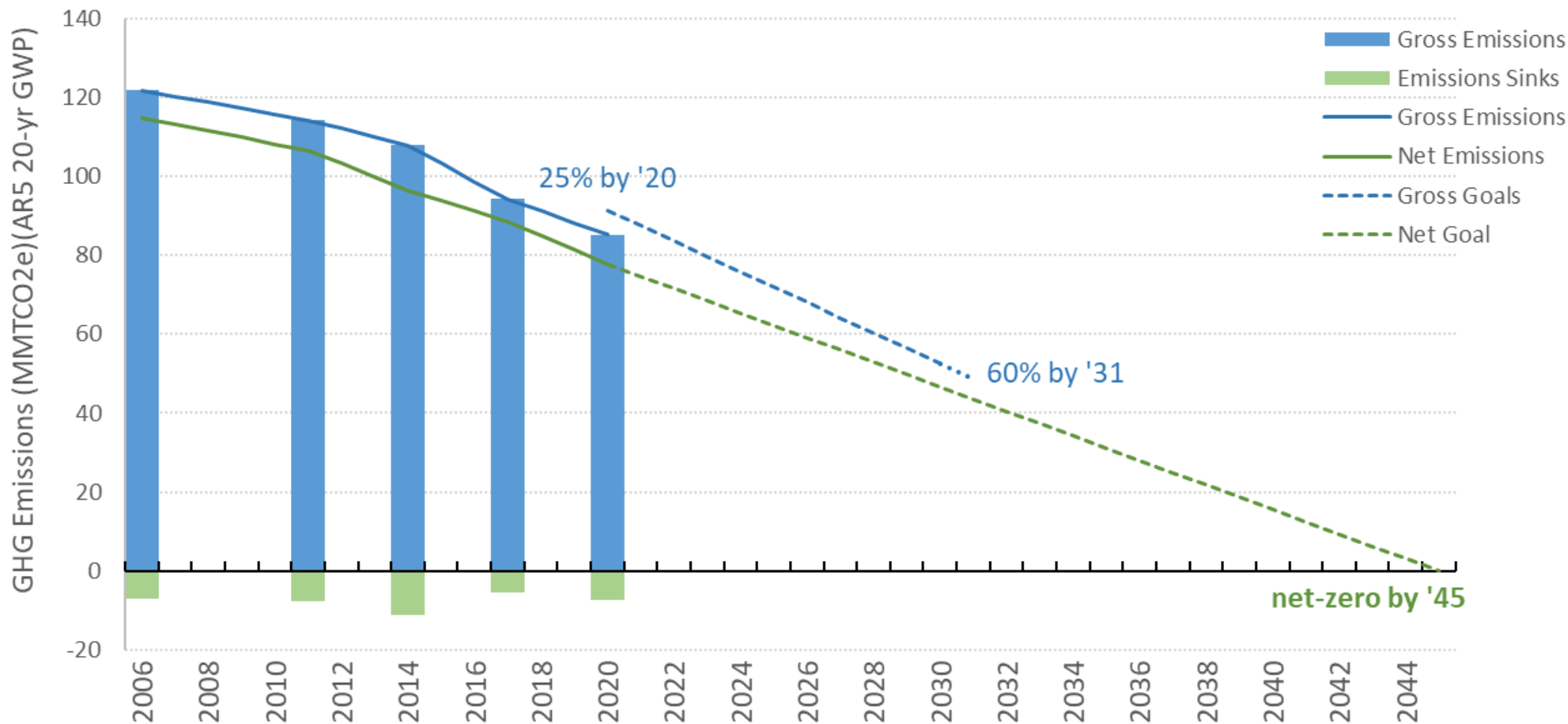
Background

- Building Energy Performance Standards (BEPS) and Building Performance Standards (BPS) are emerging in cities, counties, and states across the nation
- The typical goal of a BEPS/BPS is to guide large buildings to higher levels of energy efficiency and/or lower levels of greenhouse gas emissions
- The Climate Solutions Now Act of 2022 requires the Maryland Department of the Environment (MDE) to develop BEPS regulations that cover most large buildings in the state
- Decarbonizing large buildings is an important step toward achieving Maryland's greenhouse gas reduction goals



Maryland's Greenhouse Gas Reduction Goals

Maryland GHG Emissions & Goals





Covered Buildings

- A covered building is a building in Maryland that has a gross floor area of 35,000 square feet or more excluding the parking garage area
- Exempt buildings:
 - Buildings smaller than 35,000 square feet;
 - Historic buildings (designated as historic property under law);
 - Public or nonpublic elementary and secondary school buildings;
 - Manufacturing buildings; and
 - Agricultural buildings.



General Requirements for Covered Buildings

- Report data to MDE annually beginning in 2025
 - MDE is leaning toward using EPA Energy Star Portfolio Manager for reporting
- Achieve a 20% reduction in net direct greenhouse gas emissions by January 1, 2030, as compared with 2025 levels for average buildings of similar construction
- **Achieve net-zero direct greenhouse gas emissions by January 1, 2040**
- Buildings must also meet to-be-determined energy use intensity (EUI) targets, which MDE will set in the regulations
 - MDE is leaning toward setting Site EUI targets



Net Direct Greenhouse Gas Emissions

- Direct greenhouse gas emissions are emissions produced on-site by covered buildings, typically from appliances/equipment that combust fuel for space heating, water heating, and cooking
- “Net direct” greenhouse gas emissions is not defined in the statute, so MDE will define it in the regulations
- One factor for defining “net direct” is that greenhouse gas emissions from commercial tenants in covered buildings that are food service facilities and engage in commercial cooking and water heating must be excluded or “netted out” of net direct emissions



Alternative Compliance Pathway

- If a covered building does not meet its emissions reduction targets, then the owner can come into compliance by paying a fee for any emissions that are above target levels
- The Alternative Compliance Fee may not be less than the Social Cost of Greenhouse Gases (SC-GHG) adopted by MDE or the federal government
- Revised federal figures for the SC-GHG were released on November 11, 2022, and are currently open for public comments



Social Cost of Greenhouse Gases

- U.S. EPA is currently accepting public comments on its “Report on the Social Cost of Greenhouse Gases: Estimates Incorporating Recent Scientific Advances”

Table ES.1: Estimates of the Social Cost of Greenhouse Gases (SC-GHG), 2020-2080 (2020 dollars)

Emission Year	SC-GHG and Near-term Ramsey Discount Rate								
	SC-CO ₂ (2020 dollars per metric ton of CO ₂)			SC-CH ₄ (2020 dollars per metric ton of CH ₄)			SC-N ₂ O (2020 dollars per metric ton of N ₂ O)		
	2.5%	2.0%	1.5%	2.5%	2.0%	1.5%	2.5%	2.0%	1.5%
2020	120	190	340	1,300	1,600	2,300	35,000	54,000	87,000
2030	140	230	380	1,900	2,400	3,200	45,000	66,000	100,000
2040	170	270	430	2,700	3,300	4,200	55,000	79,000	120,000
2050	200	310	480	3,500	4,200	5,300	66,000	93,000	140,000
2060	230	350	530	4,300	5,100	6,300	76,000	110,000	150,000
2070	260	380	570	5,000	5,900	7,200	85,000	120,000	170,000
2080	280	410	600	5,800	6,800	8,200	95,000	130,000	180,000

Values of SC-CO₂, SC-CH₄, and SC-N₂O are rounded to two significant figures. The annual unrounded estimates are available in Appendix A.4 and at: www.epa.gov/environmental-economics/scghg.



Financial Incentives

- There are many federal, state, local, and utility-sponsored incentives to help pay for energy efficiency and electrification projects
- In addition to government and ratepayer funded grants, rebates, and tax credits, low-interest financing with technical assistance is offered through green banks such as the Maryland Clean Energy Center
- Energy service companies also offer low-interest loans, energy-as-a-service, and other creative financing solutions
- MDE will launch a Building Energy Transition Implementation Task Force in 2023 to recommend additional state incentives



Regulatory Development Timeline

- Summer 2022 – Secure technical assistance and initiate the rulemaking process (complete)
- Fall 2022 – Begin drafting regulations and initiate a stakeholder engagement process
- Winter 2023 – Circulate draft regulations for public comment while continuing stakeholder engagement
- Spring 2023 – Circulate proposed regulations for public comment
- Summer 2023 – Adopt final regulations



Regulatory Development Partners

- Technical assistance:
 - U.S. Department of Energy (U.S. DOE)
 - U.S. Environmental Protection Agency (U.S. EPA)
 - Lawrence Berkeley National Laboratory (LBNL)
 - Pacific Northwest National Laboratory (PNNL)
 - Institute for Market Transformation (IMT)
 - Northeast Energy Efficiency Partnerships (NEEP)
- Community/stakeholder engagement:
 - Institute for Market Transformation (IMT)
 - Interfaith Power and Light (IPL)
 - CASA de Maryland (CASA)
 - Action in Montgomery (AIM)



Stakeholder Meetings

- Nov 14 (3-4:30pm) - Colleges/Universities, State-Owned Buildings, and District Energy Providers
- Nov 15 (3-4:30pm) - Utilities and Fuel Distributors
- Nov 17 (9-10:30am) - Environmental NGOs
- Nov 17 (10:30a-12p) - Hospitals
- Nov 28 (3:30-5pm) - Office, Retail, and Hospitality
- Nov 29 (1-2:30pm) - Multifamily Buildings
- Nov 30 (1-2:30pm) - Affordable Housing Providers
- Dec 1 (1-2:30pm) - Light Industrial/Warehouses
- Dec 5 (2-3:30pm) - Laboratories and Life Sciences
- Dec 6 (1-2:30pm) - Assisted Living and Nursing Facilities
- Dec 7 (9-10:30am) - Restaurants/Food Service Facilities
- Dec 8 (9-10:30am) - Local Governments
- TBD - Community Meeting: Tenants of Affordable Housing (hosted in Langley Park by CASA de Maryland)
- TBD - Community Meeting: Tenants of Affordable Housing (hosted in Gaithersburg by Action in Montgomery)



Contact

MDE BEPS website: <https://mde.maryland.gov/programs/air/ClimateChange/Pages/BEPS.aspx>

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