



Maryland
Department of
the Environment

Implementation Status of the MCCC's Recommendations on Decarbonizing Buildings

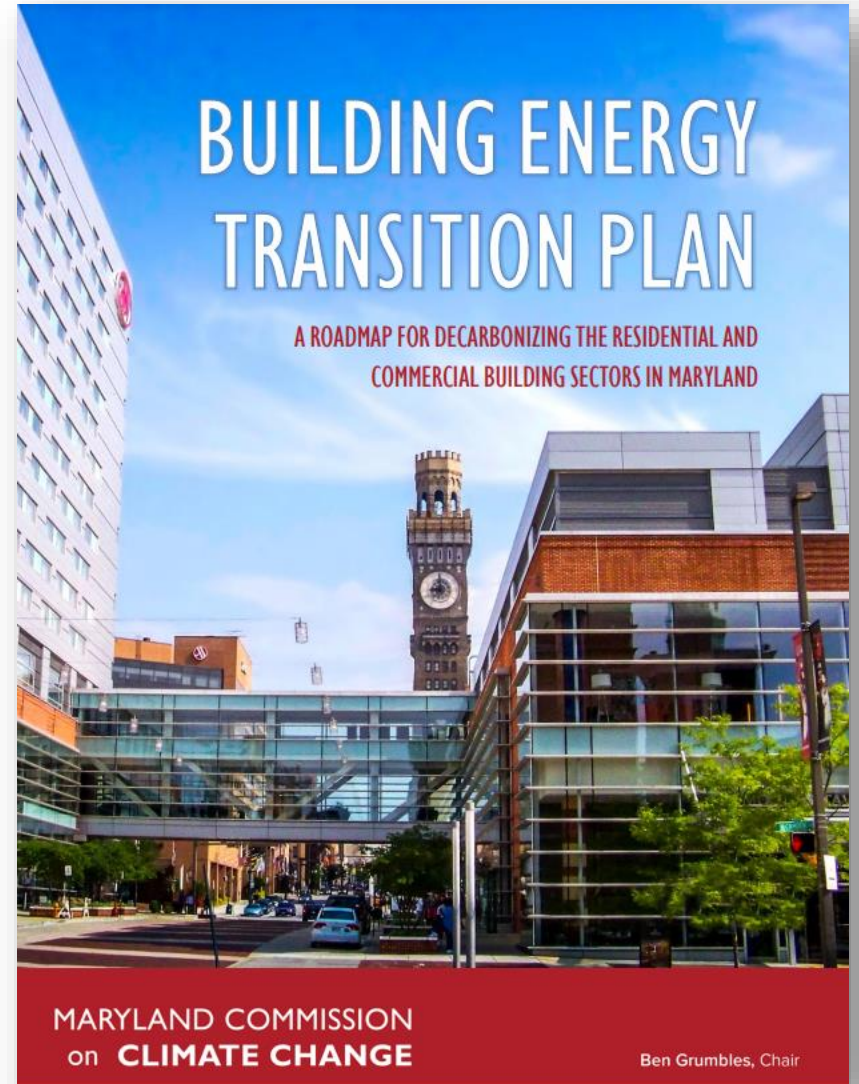
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Presentation to the Mitigation Working Group – July 19, 2022



Building Energy Transition Plan

- Approved by the MCCC in Nov 2021
- Includes recommendations for decarbonizing Maryland's residential and commercial buildings based on E3's Maryland Building Decarbonization Study and a 2-year subgroup process
- Several recommendations were addressed by the Climate Solutions Now Act (CSNA) of 2022 but no immediate policies put into place





Implementation Status of Building Recommendations

Established /
Implementing

- **Create a Building Emissions Standard:** CSNA requires MDE to adopt Building Energy Performance Standards (BEPS) regulations for buildings 35,000 square feet and larger by June 2023

Further Study /
Process

- **Adopt an All-Electric Construction Code:** CSNA requires Building Codes Admin study & recommendations in 2023.
- **Clean Heat Retrofit Program:** CSNA broadened EmPOWER starting in 2025 & directed Buildings Task Force to develop relevant recommendations in 2023.
- **Develop Utility Transition Plans:** CSNA requires a system-wide PSC study, and annual reports from electric utilities, but not gas utilities.

Not
Implemented

- **Retrofit 100% of low-income households by 2030; achieve 50% heat pump sales share by 2025 & 95% by 2030; offer incentives for all-electric new buildings:** Topics included in broad mandate for Buildings Task Force
- **Sunset financial subsidies for fossil fuel appliances within EmPOWER** and other recommendations approved by the MCCC



Building Energy Performance Standards

Status:
Implementing

- CSNA requires MDE to develop regulations to guide commercial and multifamily buildings that are 35,000 square feet or larger to:
 - Reduce direct GHG emissions 20% by 2030
 - Achieve net-zero direct GHG emissions by 2040
- Not covered: K-12 schools, manufacturing buildings, agricultural buildings, historic buildings, commercial kitchens within covered buildings, and any commercial or residential buildings that are smaller than 35,000 square feet
- MDE is starting the rulemaking process and intends to hold stakeholder meetings starting this fall



All-Electric Construction Code

Status:
In Progress

- MCCC recommended that the State adopt an all-electric code no later than 2024
- CSNA says it is the intent of the General Assembly to move toward broader electrification of both existing and new buildings
- CSNA requires the Building Code Administration to conduct a study and develop recommendations for adopting an all-electric building code
 - Interim report due in January 2023
 - Final report due in December 2023



Low-Income Housing Retrofits

Status:
In Progress

- MCCC recommends providing funding to enable MEA, DHCD, and local governments and organizations to offer little-to-no upfront cost comprehensive retrofits to 100 percent of low-income households by 2030
- CSNA provides \$5M/year in FY24-26 to DHCD for projects that reduce direct GHG emissions from multifamily buildings that house primarily low- to moderate-income households
- CSNA requires a Building Energy Transition Implementation Task Force to recommend targets and funding to retrofit housing for low-income households



Fuel-Switching through EmPOWER

Status:
Some Progress

- MCCC recommends directing the PSC to require the electric utilities to offer incentives and proactively encourage customers with gas, oil, or propane heating systems to replace or supplement those systems with electric heat pumps
- CSNA requires EmPOWER to be based on a portfolio of mutually reinforcing goals including GHG emissions reduction, energy savings, net customer benefits, and reaching underserved customers
- PSC's EmPOWER Future Programming Work Group was divided on the topic of fuel-switching



Heat Pump Sales Targets

Status:
Some Progress

- MCCC recommends requiring that incentives (for consumers, contractors, and manufacturers) through EmPOWER and other programs are sufficient to meet a target of 50 percent of HVAC and water heater sales to be heat pumps by 2025 and 95 percent by 2030.
- CSNA requires a Building Energy Transition Implementation Task Force to recommend targets and funding to retrofit housing for low-income households



Utility Transition Plans

Status:
Some Progress

- MCCC recommends requiring the PSC to oversee a process whereby the electric and gas utility companies develop plans for achieving a structured and just transition to a near-zero emissions buildings sector in Maryland
 - Gas transition plans should include appropriate gas system investments and divestments for a shrinking customer base and reductions in gas throughput in the range of 50 to 100 percent by 2045
- CSNA requires the PSC to require the electric utility companies to report on electric distribution system planning but there is no requirement for the gas utility companies to submit plans that address the MCCC's recommendations



Live Recommendations

- Adopt an all-electric construction code no later than 2024
- Retrofit 100 percent of low-income households by 2030
- Encourage fuel-switching through EmPOWER beginning in 2024
- Target 50 percent of residential HVAC and water heater sales to be heat pumps by 2025, 95 percent by 2030
- Align energy plans, approvals, and funding with the objectives of the Building Energy Transition Plan
- Develop (gas?) utility transition plans
- Also recommendations 5-16 in the Building Energy Transition Plan



Building Energy Transition Implementation Task Force

- The Task Force shall recommend programs, policies, and incentives aimed at reducing GHG emissions from the building sector including:
 - A plan for funding the retrofit of covered buildings to comply with the BEPS
 - Incentives for electrification projects
 - Commercial tax credits or direct subsidy payments for decarbonization projects
 - Incentives through EmPOWER and other state programs for electrification
 - Low-income household holistic retrofit targets
 - Heat pump sales targets
 - On-bill, low-interest financing
- Is there anything else the MWG would like to see the Task Force address?



Task Force Members

26 voting members but open to other participants

- MDE Secretary*
- DHCD Secretary*
- DGS Secretary*
- MEA Director*
- PSC Chair*
- The People's Counsel*
- MCEC Executive Director*
- MD Green Building Council Chair*
- A member of the House of Delegates
- A member of the Senate
- A rep from an organization that advocates for energy-efficient buildings or a low-carbon-built environment**
- A rep from a business that provides energy efficiency or renewable energy services to large buildings or affordable housing in MD**
- An architect with experience planning modifications to existing buildings to achieve GHG reductions**
- An engineer or commissioning agent with experience modifying or replacing systems in order to achieve GHG reductions**
- Multifamily housing industry rep**
- Affordable housing developer**
- Facility or property manager for an apartment building**
- Facility or property manager for a commercial building**
- Financial institution rep**
- Private equity firm rep**
- District energy industry rep**
- Statewide commercial or industrial building association rep**
- Organized labor rep who represents the building trades**
- Tenant of an apartment building or advocate for the rights of tenants of apartment buildings**
- Municipal electric utility rep***
- Investor-owned utility rep***

* or designee

** appointed by the Governor

*** selected by the PSC



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