



December 20, 2024

Governor Wes Moore
State of Maryland
100 State Circle
Annapolis, Maryland 21401-1925

Re: Proposed Building Energy Performance Standards for new Regulations

Governor Moore,

The Combined Heat & Power Alliance (CHPA) commends your actions on behalf of the State of Maryland in seeking to reduce emissions from buildings throughout the State through the proposed Building Energy Performance Standards (BEPS) that were required via passage of the Climate Solutions Now Act of 2022. Our comments today focus on the proposed regulations of BEPS, and specifically, how to ensure that these regulations are written in a manner that puts the State in the best position possible to reduce emissions while avoiding the unintended consequences that could come from the proposed regulations as currently drafted.

We are concerned the proposed rule threatens Combined Heat and Power (CHP) systems across the state which are delivering or could deliver clean, reliable power, heating, and cooling to Maryland's critical infrastructure, including hospitals, data centers, military bases, colleges and universities, nursing homes, hotels, wastewater treatment plants, and airports. We urge you to amend the rule to ensure CHP can continue to deliver those benefits to the public, especially at a time when the state is facing rising power demand and increasing disruptions to the electricity grid because of climate change.

About the Combined Heat & Power Alliance

The Combined Heat and Power Alliance (CHP Alliance) is the leading national voice for the deployment of combined heat and power (CHP) and waste heat to power (WHP). We are a coalition of businesses, labor, contractors, non-profit organizations, and educational institutions with the common purpose to educate all Americans about CHP and WHP, and how CHP and WHP can make America's manufacturers and other businesses more competitive, reduce energy costs, enhance grid reliability, and reduce emissions.

Value of CHP in Reducing Emissions and Ensuring Reliability



The Building Performance Energy Standards risk leading to an increase in emissions by ignoring the grid emissions that onsite generation displaces. CHP systems reduce emissions through their high levels of efficiency and high-capacity factors. A properly designed CHP system typically operates with an overall efficiency of 65 to 85 percent, with some systems approaching 90 percent efficiency. Comparatively, fossil fuel power plants operate at 39 percent and reach only 50 percent when they generate electricity and thermal energy separately.

CHP systems installed through 2035 and operating through 2050 are expected to produce a net reduction in GHG emissions by reducing demand for marginal grid resources (see Figure 1). Recent evaluations with the latest marginal emissions forecast modeling indicate that low-emission CHP can help decarbonize all regions into the 2040's and many regions of the US well beyond 2050.

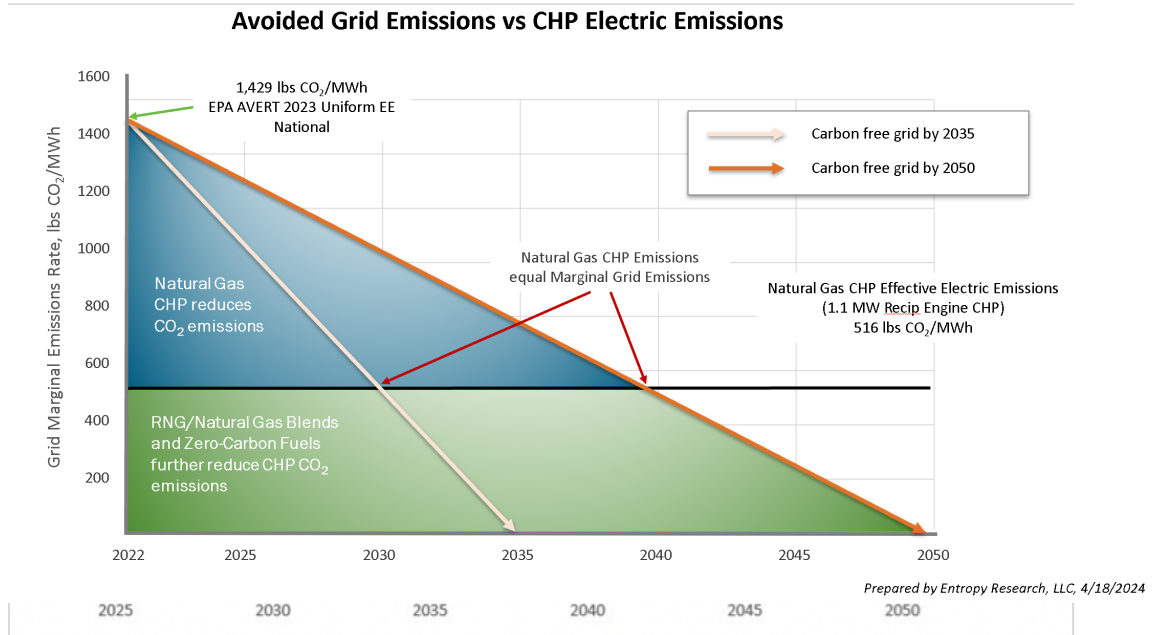


Figure 1: The emissions of CHP-generated electricity compared to the grid.

Because they operate so efficiently, CHP requires less fuel inputs for the same energy outputs. This reduces greenhouse gas emissions as well as criteria pollutants and hazardous air pollutants, which can cause negative health effects, particularly when they are generated in the buildings space.

CHP systems also ensure reliability by generating onsite electricity and heat simultaneously at the point of consumption. The electric grid is increasingly facing disruptions from extreme weather events, which science indicates is driven by human-induced climate change. Critical infrastructure facilities must have access to reliable electricity and heating. CHP allows hospitals, military bases, colleges and universities, nursing homes, hotels, airports and other buildings to remain operational and serve as emergency shelters and place of sanctuary for local communities as Maryland faces these climate change impacts..



Grid outages can last for days, weeks, or even months on end—as was the case for Hurricane Maria in Puerto Rico—and climate change is increasing the frequency of these disruptions. Solutions such as on-site battery storage cannot feasibly provide power at those lengths and would be compounded by a likely lack of renewables production leading up to and during the extreme weather event. Additionally, the reliability of CHP systems avoids the need for diesel backup generators during power outages, further reducing emissions as CHP systems are much cleaner alternatives than diesel generators.

There are currently [60 CHP systems deployed throughout Maryland](#), and this rule would jeopardize those low-carbon energy systems, many of which serve critical infrastructure. Closure of these CHP projects will lead to a net-increase in greenhouse gas emissions through greater reliance on dirtier natural gas combined cycle plants. These power generation systems are important to maintain because they also reduce the load on the electric grid and are an important resource as power demand is projected to grow dramatically across the Mid-Atlantic region.

Ensuring CHP Systems Are Not Penalized

CHP can help critical facilities such as hospitals, data centers, public safety facilities, etc. provide reliable power, heating, and cooling, while simultaneously reducing emissions. As currently drafted BEPS unfairly penalizes emissions reducing CHP systems while ignoring emissions from grid purchased electricity – incentivizing grid purchased electricity despite higher emissions, reliability issues and concerns about the increasing burden on the grid. The U.S. Environmental Protection Agency recommends using [SOURCE EUI](#) as the methodology to compare buildings' efficiencies. This methodology is more equitable as it accounts for both onsite and offsite generation.

We encourage your office to work with Maryland Department of Environment to modify language in the proposed Building Energy Performance Standards regulations to ensure that CHP systems are treated fairly and accurately convey their role in the electric grid.

Adding the following language to the definition of building within the proposed BEPS regulations would accomplish this:

(11) “Building” has the meaning set forth in the International Building Code, which is incorporated by reference under COMAR 09.12.51.04A and as modified in COMAR 09.12.51.04B. “Building” only includes systems located within the building envelope and does not include generation from Distributed Energy Resources (DERs)



Additionally, Maryland should expand the proposed rule’s exclusion from reporting for facilities that are using combustible fuels due a federal or state regulation¹ to include any critical infrastructure facility, such as hospitals, data centers, military bases, colleges and universities, nursing homes, hotels, wastewater treatment plants, and airports, that chooses to produce electricity and thermal energy onsite for reliability purposes, and not just because they are required to do so because of federal or state regulations.

Taking these steps will ensure lower emissions from buildings in Maryland, reliable energy systems at critical infrastructure facilities that protect the health and safety of the state’s residents, and continued power supply as the state faces rises electricity demand.

Please don’t hesitate to reach out with any questions.

Sincerely yours,

David Gardiner
Executive Director
Combined Heat and Power Alliance

CC: Maryland Department of Environment

¹ The proposed rule excludes from emissions reporting “(d) Emissions from required combustion equipment under the following conditions:

(i) Emissions from generators shall be excluded from the net direct emissions requirements if a federal or State regulation requires a covered building including a health care facility, laboratory, assisted living and nursing facility, military building, critical infrastructure, and a building used in life sciences to use a backup generator or other equipment that shall run on combustible fuels.”