Committee:Education, Energy and the EnvironmentTestimony on:HB990 – Environment – Greenhouse Gas Emissions Reductions - ManufacturersSubmitting:Deborah A. CohnPosition:FavorableHearing Date:March 26, 2024

Chair Feldman and Committee Members:

Thank you for allowing my testimony today in support of HB990.

Maryland has committed to reducing greenhouse gas emissions (GHGs) to 60% of 2006 levels by 2031 and transitioning to a net-zero economy by 2045. Doing so will require not only the building and transportation sectors, but also the manufacturing sector, to reduce GHG emissions.

Problem: In 2009, the Greenhouse Gas Reduction Act (GGRA) authorized the Maryland Department of the Environment (MDE) to regulate GHG emissions from all sectors of Maryland's economy *other than manufacturing*. In 2016, when GGRA was renewed, the manufacturing sector remained exempt. Even in 2022, when the General Assembly passed the Climate Solutions Now Act, the manufacturing sector remained exempt.

According to the National Caucus of Environmental Legislators, *Maryland is the only state with GHG reduction goals that exempts manufacturing.* The reasons are clear. States cannot adequately reduce GHG emissions without significant reductions in the manufacturing sector. Maryland is no exception. In 2020, the manufacturing sector accounted for *nearly 10%* of Maryland's GHG emissions.

The two highest emitting manufacturing facilities were cement production plants.

Solution: HB990 would *authorize* (not direct) the Department of the Environment to require GHG emissions reductions from the state's manufacturing sector. This action was recommended in the Climate Pollution Reduction Plan. HB990 would do three things:

- Set a new pollution baseline for existing manufacturers to be regulated at their 2023 emissions levels.
- Allow MDE to consider requiring GHG emissions reductions from the manufacturers that come to Maryland after 2023.
- Require the Maryland Department of the Environment (MDE) to work with cement manufacturers and others to consider several factors that would incentivize this industry to reduce GHG emissions in the production of cement.

Given significant worldwide research and development of various technological advances in the manufacturing of concrete, requiring MDE to work with Maryland industry to take advantage of these technologies, as they mature and are demonstrated to be economically viable is reasonable. Several advances in materials science and new technologies have developed in recent years to reduce the GHG emissions of cement production and reduce the amount of cement needed to product concrete. These include switching from ordinary Portland cement to cement combined with limestone or cement that incorporates CO_2 . But newer technologies may even permit zero-carbon cement that can be used in lieu

of traditional cement. Several technologies, such as adding pozzolans to cement or <u>recycling concrete</u> can also be used to reduce GHG emissions in the manufacturing sector. New <u>technologies</u> that allow the production and long term storage of extremely high heat thermal energy produced from wind and solar energy, with the ability to release that heat on demand, are also being developed.

In other words, some GHG reductions in the manufacturing sector are commercially available now, and others may prove economically feasible and commercially available in the next several years, soon enough to make a significant difference in GHG emissions from the manufacturing sector.

Accordingly, I urge a **FAVORABLE** report for HB990 in committee.