



HB0261– Public Projects - Global Warming Potential of Materials (Buy Clean Maryland Act)

Testimony before the Health and Government Operations Committee

February 22, 2023

Position: Favorable

Chair Pena-Melnyk, Vice Chair Kelly, and members of the committee, my name is Michael Loll, and I represent the 700+ members of Indivisible Howard County. We are providing written testimony today in **strong support of HB0261**. This bill would require the state of Maryland to set maximum acceptable green house gas emission standards for cement and concrete used in state construction projects.

As of 2018, cement was responsible for 8% of the world's CO₂ emissions (<https://www.chathamhouse.org/2018/06/making-concrete-change-innovation-low-carbon-cement-and-concrete>). The cement industry is the third largest emitter of carbon dioxide, behind the *nations* of China and the United States (<https://www.bbc.com/news/science-environment-46455844>). Clearly, reducing the carbon footprint of cement and concrete would go a long way in our fight against the climate crisis.

While the concrete and cement industries have been slowly reducing their emissions through increased energy efficiency, these gains have not been enough to significantly reduce their overall green house gas output. Fundamental changes in cement and concrete manufacture – bio-concrete (<https://www.giatecscientific.com/education/bio-concrete/>), substituting new materials for components presently in use, producing cement using lower temperature processes (<https://theconstructor.org/concrete/green-cement-types-applications/5568/>), and other methods (<https://www.thomasnet.com/articles/plant-facility-equipment/what-is-green-concrete/>) – are needed to make these industries carbon neutral. Unfortunately, many of these newer procedures and technologies are either undeveloped or not currently scalable.

This is where the role of government comes in. By requiring the use of lower carbon emitting building materials in its own projects, the state can help create a demand for them. Demand creates markets, and markets innovate to bring products and services into being. We have seen similar stories take place in the development of GIS, space flight, remote sensing, and other new technologies by the federal government. The same thing happens at the state level. Colorado recently passed a law that mandates the use of lower carbon building materials in state projects (<https://rmi.org/colorado-passes-embodied-carbon-legislation/>).

Thank you for your time and attention.

We encourage a favorable report.

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