



Maryland Energy Administration

TO: Chair Feldman, Vice Chair Kagan, and Members of the Education, Energy, and the Environment Committee

FROM: MEA

SUBJECT: SB 384 - Maryland Energy Administration - Carbon Capture Opportunity Program - Establishment

DATE: February 13, 2024

MEA Position: Letter of Information

This bill would create a Carbon Capture Opportunity Program within the Maryland Energy Administration (MEA) to support businesses engaged in carbon capture projects or research.

Technologies for carbon capture, utilization, and storage (CCUS) are viable for broader deployment, but challenges still hinder their use. Carbon capture includes technologies that separate and purify carbon dioxide (CO₂) from an industrial facility or generation plant (point-source capture) or the atmosphere (direct air capture or DAC). DAC has been implemented *only* at a pilot scale, and point-source applications for power generation require greater demonstration for economic and operational feasibility. High costs are challenging to widespread deployment of both types of carbon capture in the near term. For instance, for point-source capture, the total costs of capturing one metric ton of CO₂ are estimated to be from \$40 to \$290.¹

Despite the challenges, MEA recognizes the necessity of CO₂ removal and plant retrofits to capture and store CO₂ to meet our long-term goals as a state and as a country. To that end, the federal government, through 45Q tax credits, provides significant financial support to projects. IIJA and IRA similarly provide a high level of funding for this technology. Overseas funding, particularly in Europe, is significant in the space as well, pointing to rapid advancement over the next decade. Further, DOE funded projects in the carbon management space are making significant progress.

The primary challenge concerning this legislation is one of scale. 45Q tax credits are available for projects of a certain size and DOE grants are typically for large-scale projects. Of the potential, viable projects in the state, they are large and capital intensive, far beyond the type of funding and expertise MEA can provide. Without dedicated funding, and a large-scale project for DOE application, MEA would be unlikely to even be able to provide technical assistance on a scale necessary for CCUS in the state.

¹ See www.gao.gov/products/gao-22-105274

Our sincere thanks for your consideration of this testimony. For questions or additional information, please contact Landon Fahrig, Legislative Liaison, directly (landon.fahrig@maryland.gov, 410.931.1537).