

**To: The Honorable Brian Feldman
Education, Energy & Environment Committee**

From: Bioenergy Devco

**Subject: Senate Bill 808, Anaerobic Digestion Technology - Coordination and
Guidance**

Date: March 5, 2024

Position: Favorable

Bioenergy Devco supports Senate Bill 808, Anaerobic Digestion Technology - Coordination and Guidance.

This testimony is offered on behalf of Bioenergy Devco (BDC), an international leader in anaerobic digestion solutions with over 24 years of experience. BDC's exceptional team of engineers, microbial experts, biologists, chemists, agronomists, construction designers and facility managers are dedicated to delivering an environmentally sound solution that creates a true source of renewable, carbon-negative energy as well as a high nutrient soil amendment.

Bill Summary: Senate Bill 808 requires the Department of Agriculture, in coordination, with the Maryland Energy Administration, the Department of the Environment, the Department of Commerce, the University of Maryland College of Agriculture and Natural Resources, electric companies, farmers, and industry to ensure anaerobic digestion technology projects are not unduly delayed. This coalition will establish guidance for farmers regarding the development and implementation of anaerobic digestion technology. The guidance established must include information on obtaining required permits and electric interconnection, available tax incentives and energy rebates and relevant regulations for waste systems, including for systems that incorporate animal waste and other resources, such as food waste.

Anaerobic Digestion: Anaerobic digestion (AD) is a natural, completely enclosed process in which bacteria break down organic waste (e.g. food waste, manures, etc.) in the absence of oxygen. The purpose of AD is three-fold:

- Divert organic waste from our municipal solid waste stream and prevent environmental and social impacts such as GHG emissions associated with landfills and incinerators,

- Produce biogas, which can be used locally to generate heat and / or electricity in a combined heat and power plant or processed into renewable natural gas and integrated into our energy grid.
- Produce digestate, an organic soil amendment that increases soil fertility and crop yields by returning carbon and nutrients back to soil

Locally, BDC has commissioned its first North American Anaerobic Digestion facility in Jessup, Maryland. This AD captures 115,000 tons per year of organic food waste materials that would otherwise be headed to landfills and incineration. The resulting 26,000 tons of carbon dioxide saved from the atmosphere each year has the same environmental impact that a forest area 56 times the size of Central Park provides. This facility will produce an estimated 20,000 tons of rich, fertile soil amendment for agricultural and other land use and more than 275,000 MMBTU's per year of renewable energy. This translates to approximately 30,000 equivalent tons of CO₂ removed from the atmosphere. Energy produced by this facility translates to:

- Annual electricity consumption of 6,635 US households
- 1,978,417 gallons of diesel fuel
- 11 million miles of tractor trailer fuel

Senate Bill 808 is consistent with the recommendation from the recently released report on Maryland's- Animal Waste Technology Fund Assessment Report and Strategy Planning-University of Maryland school of Agriculture. The report makes clear that the Department of Agriculture should work more closely with other government agencies, such as Maryland Department of Energy and Maryland Energy Administration, to create unity in the process of permitting, energy rebates, and tax credits, and creating a regional approach to funding waste technologies that includes out-of-state impacts.

BDC respectfully requests a favorable report on Senate Bill 808.

Please contact Aaron J. Greenfield at 410.446.1992, if you have any questions.