

To: Education, Energy and Environment Committee
From: Bioenergy Devco
Subject: Senate Bill 447, Anaerobic Digestion Workgroup
Date: February 15, 2023
Position: Favorable

Bioenergy Devco supports Senate Bill 447, Anaerobic Digestion Workgroup.

This testimony is offered on behalf of Bioenergy Development Company (BDC), the foremost providers of anaerobic digester solutions and is a pioneer in this sector. The core expertise of our company lies in planning, producing and constructing the plants. For over 20 years and more than 250 biogas plants, our qualified team of engineers, biologists, chemists, agronomists, designers and marketing experts has significant experience in the design, construction and operation of anaerobic digester power plants and thus offers expertise in service, consultation and biological support.

Anaerobic digestion is an important tool in meeting Maryland's admirable goal to recycle organic waste and reach our climate mitigation objectives. Not all these facilities are the same. But they all are multi-faceted: produce renewable natural gas and a digestate.

To educate and ensure that anaerobic digesters remain effective and environmentally sustainable, Maryland has an opportunity to develop with this emerging industry. Senate Bill 447 appropriately establishes an anaerobic digester workgroup to:

- review current processes and regulations
- identify infrastructure needs
- recommend regulations and requirements appropriate for these facilities
- identify categories of digestate and appropriate uses in recycling the material
- Incentivize the use of digestate for use as agricultural fertilizer and manufactured topsoil

Anaerobic digesters are beneficial in processing a variety of organic materials such as food waste, food processing residuals such as cooking oil, animal manure, and solid municipal waste. These materials can be processed to capture the methane gas emissions and produce a remaining digestate that is free from foul odors and harmful bacteria. The composition and makeup of the digestate is largely dependent on the organic material that is fed into the digester. While most digestate can be effectively used as an organic soil amendment, some may contain materials that limit its use to specific applications. Classifying these types of digestate will help in identifying and assigning appropriate uses.

Forward thinking farmers promoted early development of small-scale anaerobic digesters. Custom-made digesters allowed them to capture the methane gas for a beneficial reuse as fuel for equipment or to generate electricity around the farm. These first-generation custom-made systems are generally inefficient in capturing gas emissions and use earthen lagoons as containment vessels that are prone to environmental issues. As we look to expand the use of anaerobic digestion, we should develop standards for new and proposed anaerobic digestion systems that will maximize their efficiency and environmental sustainability.

Bioenergy Devco is confident that passage of this bill will address current and future needs of this important industry.

For these reasons, Bioenergy Devco respectfully requests a favorable report on Senate Bill 447.

For additional information, please contact Aaron J. Greenfield at 410.446.1992