

To: The Honorable Brian Feldman

Education, Energy and Environment Committee

From: Bioenergy Devco

Subject: Senate Bill 146, Renewable Energy Portfolio Standard - Eligible

Sources - Alterations (Reclaim Renewable Energy Act of 2024)

Date: January 25, 2024

Position: Favorable with Amendment

Bioenergy Devco supports with amendment Senate Bill 146, Renewable Energy Portfolio Standard - Eligible Sources - Alterations (Reclaim Renewable Energy Act of 2024).

This testimony is offered on behalf of Bioenergy Development Company (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.

<u>Bill Summary</u>: Senate Bill 146 excludes energy derived from waste and refuse from the definition of "Tier 1 renewable source." As a result, this use will be ineligible for inclusion in the renewable energy portfolio standard.

While BDC supports the intent of Senate Bill 146, BDC requests that the bill is amended to allow for comprehensive collection of methane through all available technologies as well as the development of future collection technology. Under current law, a Tier 1 renewable source includes methane from the anaerobic digestion of organic materials <u>only</u> in a landfill or wastewater treatment plant. BDC seeks to allow all forms including anaerobic digestion – not just in a landfill or wastewater treatment plant – for inclusion as a Tier 1 renewable source.

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

Amendment No. 1

On page 2, line 7, before "methane" insert "ALL FORMS OF"; on page 2, line 7 following "methane" insert "COLLECTION"; on page 2 lines 7-8, strike "in a landfill or wastewater treatment plant"

BDC respectfully requests a <u>favorable report with amendment</u> on Senate Bill 146.

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