



TO: Members, Senate Education, Energy, and the Environment Committee
FROM: Paul Pinsky Director, MEA
SUBJECT: SB 590 - Renewable Energy Portfolio Standard - Eligible Sources - Alterations (Reclaim Renewable Energy Act of 2023)
DATE: February 28, 2023

MEA Position: Letter of Information

Senate Bill 590 would eliminate several forestry-related products and certain feedstocks for anaerobic digestion as Tier 1 resources within the Renewable Portfolio Standard (RPS). Unfortunately, this may have the opposite impact as intended, producing detrimental effects for Maryland farms, businesses, and the environment.

Unintended Consequences:

This legislation may contribute to an increased release of methane to the atmosphere, undermining the state's climate goals. The Maryland Energy Administration (MEA) has worked in a cooperative manner with the Maryland Department of Agriculture (MDA) to incentivize the adoption of biomass systems and anaerobic digestion (AD) as a clean and renewable energy source, and to achieve efficiency from onsite generation.

Utilizing organic materials and keeping them out of landfills is beneficial for the environment. As biomass decays in landfills, methane is released into the air and contributes to climate change. This biomass is composed mainly of organic waste from agricultural operations such as manure and poultry litter. These wastes are rich in phosphorus and nitrogen nutrients, which are incredibly harmful to the health of the Chesapeake Bay when they runoff into streams and tributaries.

Loss of Other Environmental Benefits

Several technologies exist that can use the organic wastes affected by the bill to produce renewable energy and create nutrient-rich fertilizers and other soil amendments. These solutions, which are discussed in more detail in the success story below, reduce nutrient runoff and harmful emissions. Utilizing organic waste streams to create value-added solutions produces important socioeconomic benefits: technology and waste management innovation; the monetization of waste products into previously unrealized and stable revenue streams; and the creation of clean energy jobs, especially those in underserved and rural communities. This multifaceted outcome is good for farmers, other agricultural businesses, our environment, and our state's economy.

Success Story:

One such success story involves the Maryland Department of Agriculture (MDA) Animal Waste Technology Fund (AWTF). Through the AWTF, MDA traditionally looks for innovation processes to manage animal manure on three scales-on farm, community and regional. The AWTF, with the support of the Strategic Energy Investment Fund administered by MEA, issued a \$1.85 million grant to Kilby Farms in Cecil County to install a biomass-fueled AD at its 400-head dairy operation. The AD is fed by the cattle manure, and food scraps that nearby K-12 private school West Nottingham Academy diverts from traditional landfill waste streams. Utilization of both of these organic waste sources both prevents harmful nutrient runoff into the Chesapeake Bay watershed and the release of harmful emissions to the atmosphere. Additionally, it encourages direct student involvement in sustainable waste management and clean energy production, thereby creating substantial opportunities to spark local educational interest in these industries.

The AD process creates renewable natural gas (RNG) from these organic waste sources that is used to generate energy for the Kilby Farms operation. A combined heat and power (CHP) system installed onsite consumes the RNG to produce electricity for the farm and heat energy used to optimize operation of the AD. This maximizes efficiency and dramatically reduces Kilby's carbon footprint. The Kilby project also received a \$115,500 grant from MEA to help offset the costs of this CHP system.

Conclusion

The Maryland market for AD and onsite renewable generation is not yet mature, and requires the continued support of direct incentives from MEA and MDA as well as the financial benefits provided by the RPS. **Passage of this bill creates a new roadblock to development of this clean energy market.**

The Maryland Energy Administration requests that the Committee consider the forgoing prior to rendering its report.