



726 Second Street, Suite 3B  
Annapolis, MD 21403  
info@cleanbayrenewables.com  
410.514.6488

January 24, 2024

The Honorable Chairman Brian J. Feldman  
The Honorable Vice Chair Cheryl C. Kagan  
The Honorable Karen Lewis Young  
Maryland General Assembly, Senate Education, Energy, and the Environment Committee  
2 West Miller Senate Office Building  
Annapolis, MD 21401

Re: SB 146 – Renewable Energy Portfolio Standard – Eligible Sources – Alterations  
(Reclaim Renewable Energy Act of 2024)

Dear Chairman Feldman, Vice Chair Kagan and Senator Lewis Young:

CleanBay Renewables is an enviro-tech company at the forefront of sustainability and innovation. We use proven technology to process agricultural byproducts and harness their energy potential in the form of renewable natural gas (RNG), while also generating carbon-zero, natural, controlled-release fertilizer. The clean energy and fertilizer we produce reduces greenhouse gas (GHG) emissions including carbon dioxide and nitrous oxide at a significant scale.

Third party carbon lifecycle analysis shows that each MMBtu of RNG sourced from CleanBay offsets approximately 0.5 tons of carbon dioxide equivalent (CO<sub>2</sub>e). At full capacity, each of our facilities can reduce GHG emissions by up to 122,000 metric tons of CO<sub>2</sub>e annually, which is comparable to taking about 25,000 passenger vehicles off the road each year.

RNG can play a pivotal role in Maryland's clean energy transition whether it be to offset the use of fossil natural gas or serve as an input to the production of renewable hydrogen or renewable electricity. It will be critical to scale production of alternative fuels like RNG during the energy transition as we work toward the net-zero emissions goal that was set for 2045. Maryland needs to embrace many types of renewable energy sources to meet net-zero targets.

The electric power sector is Maryland's top natural gas-consuming sector according to the U.S. Department of Energy's Energy Information Administration. In October 2023 alone, electricity from natural gas accounted for more than 1 million Megawatt Hours (MWh) or 48% of Maryland's electricity consumption. Renewables, on the other hand, supplied only about 12% of Maryland's annual electricity consumption.





The newly released Climate Pollution Reduction Plan published by the Maryland Department of the Environment has called for the state's Renewable Portfolio Standard (RPS) to require 50% of electricity consumed in the state to be generated by renewable sources by 2030. Maryland is behind on reaching this target, and it will be critical to keep all options on the table to bridge the gap. RNG is a near-term renewable energy solution that can replace a portion of our state's fossil gas consumption and provide more baseload clean energy.

RNG sourced from the agricultural sector has a particularly favorable Carbon Intensity (CI) profile due to avoided methane and nitrous oxide emissions. Agricultural byproducts can be repurposed into RNG, which is especially advantageous because it has the added benefit of reducing on-farm GHG emissions. This approach presents an opportunity to recycle the byproducts of making our food into a clean source of energy.

There are significant economic benefits for area farmers who can sell their on-farm byproducts to RNG producers for use as feedstock as input to the process of making RNG. This opens up a revenue stream and allows farmers to more sustainably operate their facilities. It also provides an incentive for farmers to sustainably monetize their "leftovers" and adopt climate-smart best management practices.

Utilities across the state are looking for ways to offset fossil natural gas with clean energy, and RNG can play a meaningful role in decarbonizing the power sector. In 2022, Maryland as a whole consumed 103 million MMBtu of natural gas to create electricity, similar to the amount of nuclear energy used to create electricity for the state. Replacing a portion of that natural gas with low- or negative-carbon RNG would reduce emissions from the power sector with little to no equipment upgrades required.

In closing, RNG sourced from agriculture and food waste is a necessary energy transition approach in the near-term. Maryland currently consumes 5x more energy than it produces, and we have set aggressive goals for clean electricity in the coming years. Recycling agricultural byproducts into RNG helps create the baseload, homegrown energy that we need while reducing carbon emissions from the agricultural sector. Let's start considering science-based carbon lifecycle analysis of each energy source. Thank you.

Sincerely,

Thomas Spangler  
Executive Chairman, CleanBay Renewables  
[www.cleanbayrenewables.com](http://www.cleanbayrenewables.com)