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March 1, 2024

The Honorable Chairman Brian J. Feldman
The Honorable Vice Chair Cheryl C. Kagan
Maryland General Assembly
Senate Education, Energy, and Environment Committee
Miller Senate Office Building
11 Bladen Street, Suite 2 West
Annapolis, MD 21401

Re: Senate Bill 935 – Renewable Natural Gas Pilot Program

Dear Chairman Feldman and Vice Chair Kagan:

I am writing in favor of Senate Bill 935. This bill would establish a 3-year pilot program to demonstrate the greenhouse gas (GHG) reduction benefits that could result if a portion of the state's fossil fuel use was replaced with renewable natural gas (RNG). CleanBay Renewables enthusiastically supports this mission, and we see it as a viable tool to help decarbonize the state's energy portfolio.

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 all three GHG emissions: carbon dioxide, methane, and nitrous oxide at a significant scale.

Marylanders will realize the benefits of this pilot program to reduce the state's use of fossil fuels across multiple sectors and replace fossil gas with RNG. This initiative can be an important part of the state's carbon and GHG reduction goals set by the Maryland Department of the Environment's Climate Pollution Reduction Plan. The purpose of that Plan is to implement the goals set forth in the Climate Solutions Now Act of 2022 (CSNA) which requires Maryland to reduce statewide GHG emissions 60% from 2006 levels by 2031 and achieve net-zero emissions by 2045. This pilot program is one way to evaluate the GHG emissions reductions from state procurement of RNG in replacement of and as compared to fossil natural gas.

Keeping all options on the table will be crucial in meeting the climate goals set in the CSNA. RNG is a particularly advantageous renewable source of energy because it is compatible with existing natural gas pipeline infrastructure and can be an immediate baseload source of energy. While wind and solar power will remain important sources of renewable energy, there are distinct benefits to RNG. **RNG produced from agricultural byproducts can often provide deeply carbon-negative energy through the reduction of fossil fuel emissions and land emissions** whereas solar and wind are carbon-neutral. Solar can be great on rooftops and





unproductive agricultural land, but there is not enough land area for Maryland to install what is required to meet the state's current energy needs, so this kind of energy is often imported from out-of-state. For all its benefits, wind energy drawbacks include lengthy permitting processes and exorbitant capital expenses. RNG is an additional form of renewable energy available from Maryland's food and agricultural sectors that can provide immediate decarbonization within existing infrastructure.

The fact that renewable energy is more expensive than other forms of energy warrants this type of pilot program, so that the environmental benefits can also be calculated alongside the pricing of thermal energy. One reason renewable energy is more expensive than conventional sources of energy is because of its carbon reduction attributes, known as environmental attributes. Solar electricity costs more than electricity sourced from fossil gas because renewable energy credits (RECs) assigned to solar electricity have a carbon value. In this way, decarbonization does come with a cost, but Maryland has mandated decarbonization policies that it must and should meet. The conversation and analysis, therefore, needs to shift to the cost of reducing carbon and carbon equivalent emissions, as opposed to comparing renewable energy pricing to the fossil fuel equivalent. On a cost per metric ton of carbon dioxide equivalent (CO_{2e}) emission reduction, solar, wind, and carbon-negative RNG are equivalent, with carbon-negative RNG being slightly cheaper on a carbon reduction basis. Therefore, **Maryland could offset fossil gas use with RNG as part of the state's carbon and GHG reduction goals with significant CO_{2e} emission reductions per year.**

Senate Bill 935 (House Bill 1379) creates a 3-year RNG pilot program that will bring necessary attention to RNG as a near-term and substantial decarbonization tool. This bill establishes a path to offset a portion of our state's current natural gas consumption with RNG, and to quantify the carbon emission reduction benefits of doing so. The pilot works to source limited quantities of RNG, offsetting some existing procurement of fossil-fuel natural gas. There is precedent for the state to intentionally procure energy from renewable sources. The Department of General Services already has a successful program Generating Clean Horizons to procure wind and solar electricity, dating back to 2011.

The pilot requires eligible RNG generators to have an independent, third-party carbon lifecycle analysis completed to participate. Throughout the pilot, GHG emission reduction data would be collected to quantify the amount of GHG reduction that RNG can achieve in the building and transportation sectors. A goal of this pilot program is to demonstrate that RNG is economically competitive on a dollars per metric ton of CO_{2e} reduced compared to other emission reduction pathways including solar, wind, and geothermal. This RNG pilot program takes Maryland one step in the right direction toward meeting quantified decarbonization goals. We suggest this pilot quantify the carbon reduction economics and benefits through the procurement and monitoring of at least 200,000 MMBtu per year of RNG; roughly 5% of statewide annual natural gas usage. We applaud your leadership to shepherd this program through the legislature.

Sincerely,

Thomas Spangler, Executive Chairman and Managing Director
CleanBay Renewables, Inc.

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