New York State Energy Planning Board
New York State Energy Research and Development Authority (NYSERDA)
17 Columbia Circle
Albany, NY, 12203-6399

Re: American Biogas Council Comment on Draft 2025 State Energy Plan

Dear members of the Board,

On behalf of the American Biogas Council (ABC), thank you for the opportunity to submit comments on the draft 2025 State Energy Plan (Plan) being developed by the New York State Energy Planning Board (Board). ABC is the voice of the U.S. biogas industry, representing more than 400 companies involved in biogas, anaerobic digestion, and renewable natural gas (RNG) projects that provide clean energy solutions across the country. Our members build, own, and operate biogas systems that recycle organic materials such as manure, wastewater solids, food waste and food processing residues, and purpose-grown crops. In New York, ABC members—including dairy farmers, food waste recyclers, landfills, and wastewater treatment plants—are actively converting organic material into renewable energy for electricity, heat, and transportation fuel at 180 operational biogas systems.[1]

Biogas has a versatility unmatched by other energy sources, making it one of the most valuable tools to balance the many priorities within the State Energy Plan, including but not limited to providing 24/7 firm electric power, fuel to power hard-to-electrify heavy-duty vehicles, RNG to heat buildings that will use gas for decades to come – all in ways that can help improve the near-term affordability and reliability of New York's energy systems, compared with the current approach of relying on large-scale renewable projects and other long-term investments that will take many years to bear fruit. With the right programs, policies, incentive structures in place and the resulting private sector investments, ABC estimates that New York could become home to more than 650 new biogas systems, which would significantly contribute to helping the State meet its future clean energy needs and climate goals.

As will be discussed in more detail below, ABC strongly urges the Board to include the following recommendations in its final Plan:

- Recognize the value of biogas to the energy and climate goals of New York
- Add biogas-generated electric power to the list of zero-emission energy sources under the Clean Energy Standard
- Include the biogas-to-electricity pathway in the CLCPA
- Expand the eligibility of Tier 1 Renewable Energy Credits (RECs) to include biogas
- Add biogas to the list of eligible technologies that are eligible for financing through the NY Green Bank
- Establish Clean Fuel and Clean Heat Standards that are performance-based, technology-neutral, and inclusive of renewable natural gas and biogas
- Require lifecycle GHG accounting using models like Argonne's GREET to accurately reflect avoided methane and total carbon reductions
- Expand support for small and mid-sized biogas projects to deliver distributed, reliable clean energy across New York's agricultural and municipal sectors
- Strengthen food waste diversion enforcement and incentives to increase feedstock availability for anaerobic digestion and accelerate statewide methane emission reductions
- Adopt a Clean Peak credit to incentivize biogas and other clean energy production during peak demand and thereby disincentivize the use of dirty peaker plants

[1] American Biogas Council, Biogas State Profile: New York.

- Direct DPS and NYSERDA to include the full range of biogas resources, not just RNG, in their technoeconomic study of clean firm resources for peak shaving, grid balancing and to help meet the clean energy supply requirements in 2040 and beyond.
- Implement a book-and-claim accounting framework to track and verify environmental attributes for clean fuels and renewable gases
- Adopt policies that enable and incentivize New York City - and other municipalities across the State - to maximize their biogas production and their ability to create biogas-to-grid systems to provide electricity where needed

Introduction

New York's energy system is at a crossroads. The State is a leader in its statutory and regulatory commitments to transitioning its economy to clean electricity and renewable power. Yet, recent changes to federal energy and tax policies, high interest rates, increased construction costs, delays in deploying renewable energy in New York, and faster-than-anticipated demand growth are creating a perfect storm that has taken the State off course to meet its climate and clean energy commitments.

To meet New York's energy needs and climate goals, the State must make a renewed commitment to adopting policies and implementing programs that are technology-neutral, fuel-neutral, and performance-based so that innovators are able to invest in developing low-carbon fuels and energy sources that can provide the greatest lifecycle greenhouse gas (GHG) benefits in the most scalable and cost-effective manner**.** These policies should account for the full global warming potential (GWP) of all greenhouse gases, recognizing that short-lived climate pollutants such as methane have significantly higher near-term impacts than carbon dioxide. Rather than "picking winners," the State should encourage private sector innovation and investment by basing its own policies and public investment decisions on robust, lifecycle GHG analyses and other objective criteria.

Doing so will provide strong and consistent market signals to all fuels and energy sources that meet these criteria, ensuring that investors have confidence that New York is the right place for their investments. In a global energy marketplace, investors choose to place their finite resources where the policy and market signals are strong, consistent, and long-term. With the right market and policy signals, New York should become a magnet for these investments.

Last but not least, ABC recognizes that New York's economy and geography are diverse, and that what works in one location may not be best for another location in the state. Thus, we support policies that will:

- Diversify the State's energy resources
- Increase system reliability and affordability
- Prioritize solutions that can be implemented quickly, at scale, and that can be models for other states and jurisdictions, and
- Benefit the State's rural communities, as well as its more densely populated cities and towns

Biogas and RNG can play a pivotal role in helping the State meet its energy needs and environmental goals, but current policy and market signals discourage investment in this critical climate solution, leaving the significant potential for biogas in New York State untapped.

Biogas offers a win-win for New York by transforming unavoidable food scraps and other organic wastes into clean energy that can be used in the electric, industrial, transportation, and building sectors. By capturing the methane produced by New York's organic waste and converting it into biogas, farmers and municipalities can convert methane emissions into 24/7 firm, dispatchable renewable energy.

Moreover, because biogas production is geographically distributed across the state, it provides the added benefit of leveraging both the electric and natural gas grids to serve the needs of electric generation, either producing electricity on site and delivering to the grid, or delivering RNG to the pipeline for use by energy customers downstream. This versatility means existing infrastructure can immediately facilitate the expansion of organic waste recycling and biogas capture and use. With locally produced biogas, it is more likely that peak demand can be met with cleaner, more affordable power than today's reliance on dirty peaker plants and long-distance transmission.

It is time for New York to tackle its methane emissions from organic waste and reap the benefits of its biogas potential. With its large population and strong agricultural economy, New York ranks 5th in the nation for biogas production potential. ABC estimates that biogas could provide up to 91.4 billion cubic feet (bcf) of RNG annually, the potential to produce 11.2 billion kWh annually, or enough to power over 1 million households under typical U.S. household consumption patterns.[2] The alternative is the continued climate impact of massive amounts of organic waste going to landfills and emitting methane into the atmosphere, and a continued reliance on fossil gas and other fossil fuels for many years to come.

Given the slowdown in the development and deployment of offshore wind and other new renewable energy resources, anticipated increases in future energy demand, and other delays in meeting the State's clean electricity goals, it is critical that the final Plan recognizes the potential value of biogas to New York by adopting the recommendations outlined above and detailed below.

Doing so will help:

- Create new economic development
- Allow farmers to build resilience by monetizing their wastes and byproducts
- Enable municipalities to recycle their food and other organic wastes instead of trucking them to distant landfills
- Enable and incentivize New York City - and other municipalities across the State - to maximize their biogas production and their ability to create biogas-to-grid systems to provide electricity where needed.
- Increase energy resource diversity and grid resilience, and
- Provide other benefits, including a reduced reliance on dirty peaker plants and out-of-state fossil gas to meet increased peak and baseload demand

The Plan Should Incentivize the Growth of Biogas-to-Electricity To Help Meet New York Electricity Needs

Last year, the Department of Public Service (DPS) reported that "Trends on the supply and demand sides of New York State power sector's make a gap that would require at least 10 to 20 GW of clean firm generating capacity to fill [sic]."[3] As the draft Plan outlines in detail, a combination of anticipated future demand increases and delayed renewable energy deployment creates a need to identify new sources of low-carbon electricity. As noted above, biogas can provide a significant contribution to meeting anticipated future demand by providing 24/7 firm power. In particular, biogas can play an important role in powering industrial energy users such as data centers, cement plants, and other large sources of demand.

If all of New York's current biogas production was utilized to generate electricity (rather than spreading it across various sectors and uses), it could generate approximately 1.26 GW of clean, renewable power, offering a reliable and dispatchable solution to help meet the State's current needs. If New York maximized its biogas production and directed it solely to electricity generation, that biogas would yield an estimated total potential capacity of more than 2.2 GW, which is 11-22% of the possible gap identified by DPS in 2024. The Integration Analysis Supplement estimated that methane capture and reuse could generate between 25 and 32 TBtu of RNG (i.e., between 7.3 billion kWh and 9.4 billion kWh) from landfills, wastewater treatment, and manure that could be used for a variety of purposes, including industrial sector decarbonization.[4]

Increased power generation from existing digesters can enter the New York energy market faster than large-scale renewable or nuclear projects that are under consideration or development. Achieving this accelerated market development is possible using existing policy tools. For example, stepped up enforcement of the NYS Food Donation and Food Scraps Recycling law would quickly create a market that existing digesters can meet. New York's food waste law went into effect in 2022, but has not yet had a material impact on food waste availability to anaerobic digestion facilities in the state. Looking ahead, the market for food waste should expand considerably in 2027, when the requirement for large food waste generators to divert food waste if a recycling facility exists expands from 25 miles to 50 miles. In order to reap the potential of this expansion, increased outreach and enforcement will be needed. Adding better incentives for co-digestion of food waste with agricultural wastes could lead to even greater energy output from existing digesters.

[2]American Biogas Council, Biogas State Profile: New York.

[3]NYS Department of Public Service Staff Proposed Definitions of Key Terms in PSL §66-p page 32, filed in Case 15-E-0302, dated 11/4/24.
[4] Energy and Environmental Economics and Abt Associates, Integration Analysis Technical Supplement to New York State Climate Action Council Scoping Plan ("Integration Analysis Supplement"), December 2022, pages 134-138.

Additionally, NY's electrical grid relies on a large amount of fossil gas generation. RNG could help decarbonize existing natural gas-fired electric generation in the coming years while more renewable electricity generation assets are being developed. The existing natural gas generation facilities can leverage RNG with no equipment or process changes required. This allows existing assets to immediately decarbonize their fuel supply, reducing or even ending their reliance on fossil fuels, while providing dispatchable power to meet the State's growing energy needs. Achieving the State's climate goals in an affordable manner requires decarbonizing the gas that will be used, i.e., doing everything we can to increase the use of RNG in the State's pipelines and homes.

ABC agrees with Governor Hochul that achieving the State's GHG policy goals is crucially important, but that doing so at any cost is not acceptable because skewing the market to higher-cost solutions will ultimately drive residents and businesses away from New York. This summer, DPS estimated that consumer energy prices would be about 6.5% higher on average than last summer.[5] While there are many factors that play a role in the energy bills that New Yorkers pay, diversifying the mix of electricity sources by incentivizing the use of biogas can help reduce these summer costs for consumers across the state. For example, anaerobic digestion systems with gas storage can provide renewable electricity on demand in minutes during peak times, which would reduce the need to turn on higher-cost peaker plants, thereby reducing costs and peaker emissions, which would provide an air quality benefit in the low-income communities and communities of color that are home to many of the state's peaker plants.[6]

It is worth noting that Massachusetts has created a Clean Peak credit that biogas-to-electricity projects in that state can access.[7] This program compensates biogas projects for the actual kilowatt-hours produced during peak hours, creating a valuable incentive that promotes clean energy production during peak demand and thereby disincentivizes the use of dirty peaker plants to meet peak demand. We strongly urge that the final Plan include a recommendation that New York adopts a version of a Clean Peak credit that would meet New York's needs.

As noted in the Summary for Policymakers, DPS and the New York State Energy Research and Development Authority (NYSERDA) are conducting a "technoeconomic study of the various clean firm resources that could help reduce the potential gap between electricity demand and supply in 2040 and beyond."[8] While DPS and NYSERDA have stated that RNG will be included in this study, we recommend that this study include the full range of biogas resources that could be available to the electricity sector.

An important step for the State to take, which should be included as a recommendation in the final Plan, is to add biogas-generated electric power to the list of zero-emission energy sources under the Clean Energy Standard, as is done in almost 30 other states that have either a CES or a comparable renewable portfolio standard. ABC provided detailed comments on the need to designate biogas-generated electric power as a zero-emission resource in a separate proceeding earlier this year.[9] Taking this step, along with expanding the Tier 1 REC program to include biogas and adding biogas to the list of eligible technologies that are eligible for financing through the NY Green Bank will be critical to project developers and investors. ABC's comments on the DPS Key Definitions proposal are provided here, as Exhibit 2.

To sum up, by diversifying the State's energy resources, by creating 24/7 firm power where it can be used on site or in nearby industrial sources, by creating a renewable resource that can be added to the State's gas pipeline system to provide clean heat and hot water to buildings that rely on gas, and by taking the other steps recommended herein, anaerobic digestion of NY's organic waste can also help improve the affordability and reliability of New York's energy consumption.

The Plan Should Call for Clean Fuel and Clean Heat Standards to Support New York's Energy and Climate Goals

New York should pursue performance-based, technology-neutral policies that reduce the lifecycle carbon intensity of both transportation and heating fuels specifically through the establishment of a Clean Fuel Standard

[5] NYS Department of Public Service "New York's Summer Energy Outlook" Summer 2025 Forecast, see Summer Pricing Outlook under Energy Pricing and Billing.
[6] Generate Upcycle, Making Organics Diversion and Recycling Policy in California Work: Recommendations from a Leading Investor/Operator, November 2023. Attached here as Exhibit 1.
[7] Massachusetts Department of Energy Resources, Clean Peak Energy Standard.
[8] See Draft 2025 Energy Plan Volume I: Summary for Policymakers section 5.1.5, pages 43-44.
[9] ABC's comments dated January 21, 2025 in response to NYS Department of Public Service Staff Proposed Definitions of Key Terms in PSL §66-p, case 15-E-0302. Public comments are published in the docket here.

(CFS) for transportation and a Clean Heat Standard (CHS) for the building and thermal energy sectors. Together, these complementary frameworks would provide clear, durable market signals to accelerate investment in low-carbon fuels such as renewable natural gas, renewable diesel, and other sustainable alternatives.

A Clean Fuel Standard would create a market-based program to reduce the lifecycle carbon intensity of transportation fuels sold or used in the State. Similar to programs implemented in California, Oregon, and Washington, a New York CFS would require gradual reductions in the CI of gasoline, diesel, and other fuels over time, allowing compliance through the generation and trade of credits from verified low-carbon alternatives. There is clear legislative support for this approach. New York's State Senate has passed CFS legislation multiple times, demonstrating sustained interest in developing a fuel-neutral policy to decarbonize transportation.

Given the rollback of federal funding for vehicle electrification and the proposed withdrawal of federal approval for the Advanced Clean Cars - II and Advanced Clean Truck rules, adopting a CFS is more urgently needed than ever. AJW, Inc., an ABC consultant, recently estimated that New York will lose more than $8.8 billion in federal support for vehicle electrification between now and 2034, thanks to the passage of H.R. 1 this year.[10] (The actual cost to New York is likely to be much higher, because the AJW research was limited to H.R. 1, and did not include other grants, rebates, and incentives that the Trump administration has cancelled or withdrawn administratively). Looking ahead, New York car buyers will lose their EV tax credits, the State's school districts will lose access to EPA Clean School Bus funding, and municipalities will lose critical funding for EV charging and related infrastructure. The CFS is the only policy that has been shown, in California and elsewhere, to generate the scale of incentives needed to accelerate vehicle electrification in both the light-, medium-, and heavy-duty vehicle markets. ABC believes that a CFS for highway vehicles could also be implemented via a Department of Environmental Conservation (DEC) rulemaking using its existing legislative authority under the Climate Leadership and Community Protection Act (CLCPA) and its Scoping Plan, and we strongly urge the Plan to include a call for this step.

A Clean Heat Standard would extend the same market-based approach to the heating sector, requiring reductions in the CI of thermal energy, while allowing utilities and other entities to earn credits for providing verified clean heat solutions. RNG derived from organic waste streams offers an immediately available, cost-effective means to decarbonize space and water heating in homes and businesses that will continue to rely on the gas system for decades. RNG deployment under a CHS would leverage existing infrastructure, reduce lifecycle GHG emissions, and support New York's agricultural and waste management sectors by monetizing methane reductions from farms, landfills, and wastewater systems.

Together, these two standards would create a unified framework for decarbonizing the State's fuel supply—driving investment in RNG and other low-carbon energy sources, reducing dependence on fossil fuels, and improving the affordability and reliability of New York's energy systems. Both programs should be designed to be technology-neutral, performance-based, and grounded in robust lifecycle GHG accounting methodologies, such as the Argonne National Laboratory GREET model, to ensure accurate recognition of avoided methane and total emissions benefits.

The Plan Should Call for a Book and Claim and Lifecycle Carbon Accounting System

To ensure that clean fuels and renewable gases are accurately valued for their climate benefits, New York must implement a transparent and consistent lifecycle carbon accounting framework supported by a book and claim system for environmental attributes.

A book and claim approach allows verified clean fuels (including but not limited to RNG produced from waste streams) to generate and transfer environmental credits independently from their physical delivery. This enables efficient, auditable tracking of GHG reductions and allows end users to claim those benefits, even when the fuel is consumed at a different location than where it was produced.

Establishing a statewide framework for Renewable Thermal Certificates (RTCs) or similar tracking instruments would promote flexibility and integrity in accounting, ensuring that emissions reductions from RNG and biogas are fully recognized under any clean energy or fuel standard program.

[10] For more information about this research, contact Rich Kassel at AJW, Inc., at rkassel@ajw-inc.com.

As with the CFS and CHS, lifecycle greenhouse gas emissions in a book and claim system should be calculated using robust, science-based models, such as the Argonne National Laboratory GREET model, which incorporates avoided methane emissions and upstream energy inputs and is widely used across federal and state programs. Using the most robust, science-based models ensures that all fuels are evaluated on a consistent, lifecycle basis and that the substantial climate benefits of waste-derived fuels are properly reflected in compliance programs.

Adopting this approach would align New York with other jurisdictions including California, Oregon, and Washington, and would give investors and project developers the certainty needed to expand clean fuel and renewable gas infrastructure across the state. A unified accounting framework will maximize the environmental and economic value of New York's clean energy transition while maintaining transparency, accountability, and market efficiency.

The Plan Should Enhance the Ability of New York's Farmers to Increase Their Biogas Production

While the Plan is centered on the State's energy planning, the Plan will touch every aspect of the State's economy. ABC strongly urges the Board to consider the potential benefits to the State's farmers as it considers the role of biogas in meeting New York's energy needs.

New York is home to more than 5,000 small and medium-sized farms – farms that form the bedrock of communities from the southern tier and the Finger Lakes to the east end of Long Island. The vast majority of New York's farms are still family farms operated by farmers who have been on the land for generations, hoping to keep their farms going year-to-year while under pressure from increased input costs, a labor shortage, climate impacts, trade war impacts on market access, pressure from Wall Street-backed corporate agricultural operations in other states, and other challenges.

These farms provide great opportunities to co-digest food waste and increase biogas production. Towards that end, the Department of Environmental Conservation (NYSDEC) adopted Rulemaking 6 NYCRR Part 350, which will implement the requirements outlined in the Food Donation and Food Scraps Recycling Law that was enacted in 2019.[11] Fully implementing and enforcing these rules will help maximize the potential of dairy farms to divert food waste and expand food waste diversion elsewhere in the State, thereby helping to meet NYSDEC's goals.

A Plan that enhances the ability of New York's farmers to earn steady, reliable income by recycling their waste and byproducts, while reducing their overall GHG footprint, is smart agricultural and economic development policy, as well as smart climate and clean energy policy. For example, CH4 Biogas, an ABC member, operates its Synergy Biogas facility in Wyoming, NY, which can take 400 tons/day of food waste. The company estimates that its operations at this facility provide a climate benefit that is equivalent to taking 3,000 cars off the road.

Currently, these small- and medium-sized farms sit outside New York's primary efforts to utilize its biogas. This results in methane emissions that should be beneficially used to create dispatchable electricity, instead going to waste and contributing to climate change, especially in parts of the state that do not have sufficient dispatchable zero-emission resources. Moreover, farms that cannot easily monetize their wastes and other byproducts cost farmers an important revenue stream that can be the difference between farms that are economically viable and those that ultimately fail.

Small- to mid-sized dairy farms can also support food waste diversion from landfills. (Co-digestion of manure and food also allows enhanced biogas production and increases the availability of food waste nutrients to the farms, enabling these farms to reduce their purchases of non-organic fertilizer.) Small- to mid-size co-digestion facilities can produce 100 to 500 scfm of biogas, which can produce 2 to 10 million kWh/year. As an example, Ag-Grid Energy, an ABC member, operates co-digestion facilities in New York, Connecticut, and Massachusetts that produce in this range. Their facilities - and others that may follow with the right policies, programs, and incentives in place - can also provide heat and create energy independence for the host farms in rural parts of the State.

[11] New York State Department of Environmental Conservation, Adopted 6 NYCRR Part 350, Food Donation and Food Scraps Recycling.

Having distributed generation across the State's rural communities would reduce the energy burden on the grid and allow New York to divert energy to data centers and other growth sectors, while simultaneously reducing the GHG of the entire state. For example, Ag-Grid Energy's project at the Lent Hill Dairy in Cohocton, takes in 200 tons of food waste daily and produces 400 scfm of biogas, which is equivalent to 12,000 mWh of clean electricity.

By expanding biogas generation at small- and mid-sized dairies, New York can add localized, reliable clean energy capacity that strengthens overall grid resilience. These systems operate year-round and produce dispatchable power that complements intermittent renewables like wind and solar, helping to stabilize regional energy supply. Their distributed nature also reduces transmission losses and congestion, providing renewable electricity or pipeline quality RNG close to where it is used. Integrating these smaller digesters into the State's clean energy planning would accelerate GHG reductions, help balance rural load demand, and deliver measurable progress toward clean firm power targets making small dairies a critical, underutilized component of New York's energy transition strategy.

Energy Vision, an environmental think tank that is also an ABC member, has outlined a strategy to utilize New York's organic waste, including adding anaerobic digesters to many of New York's small- and medium-sized farms, which they estimate would reduce New York's methane emissions from dairy manure by 56.5% and reduce statewide methane emissions by 3 percent.[12] These farms represent an untapped opportunity to produce zero-emission energy while supporting agricultural viability and reducing greenhouse gas emissions. Energy Vision's report is attached here as Exhibit 3.

The Plan Should Encourage Municipalities to Convert Their Organic Waste Streams to Biogas

The State's CLCPA Scoping Plan explicitly calls on the State to establish markets for recovered resources and biogas utilization. As the plan states, "Solid waste management facilities and water resource recovery facilities should follow the strategies in this Scoping Plan to achieve the maximum reduction, reuse, and recycling of waste, recognizing that some wastes (including biosolids) are unavoidable. Additionally, the organic fraction of waste already in landfills will produce methane in place for many years. Capturing these unavoidable gases for strategic and local use as the State transitions to electrification will help meet the requirements and goals of the Climate Act while avoiding future reliance on fossil fuels."[13]

At ABC, we could not agree more.

New York City's approach to its organic waste stream is instructive here. The New York City Department of Environmental Protection (DEP) converts a significant amount of wastewater solids (sludge) and some food waste into biogas to the City's gas pipelines from its Newtown Creek Wastewater Resource Recovery Facility (WRRF). (DEP also has roughly 75 digesters located at 14 different locations throughout the City).[14]

While the exact daily/annual waste input varies, some key figures regarding the volume of material processed at Newtown Creek illustrate the current status of biogas production in the City and the potential for growth of the City's biogas-to-grid potential if the program is enlarged:

- **Wastewater Sludge:** The eight digesters at Newtown Creek process the solid component of wastewater. As of 2024, the facility processed nearly 798,000 wet tons of sludge from July 2024 to June 2025.
- **Food Waste:** The facility co-digests pre-processed food scraps alongside the sludge. From July 2024 to June 2025, it processed more than 62,000 wet tons of food scraps. Since the start of the co-digestion program, the facility has managed nearly 390,000 wet tons of food scraps. The plant has a potential co-digestion capacity of up to 500 tons per day of food waste.
- **Biogas Production:** The entire system at Newtown Creek has the potential to produce over 500 million cubic feet of biogas per year. This biogas is used partially to heat the facility and digesters, and the excess is purified into RNG and injected into the utility pipeline. From July 2024 to June 2025, the biogas-to-pipeline system produced more than 285,000 MMBtu of RNG.

[12]Energy Vision, Putting New York's Organic Waste to Work, page 1, published 11/7/2023. Attached as Exhibit 3.
[13] New York State Climate Action Council, Scoping Plan - Full Report, December 2022, page 17.
[14] Data on the Newton Creek WRRF from the NYC Environmental Protection, Biogas-to-Grid Data Reporting, last updated 8/19/2025.

Looking beyond Newtown Creek, DEP operates 14 WRRFs citywide, which collectively treat nearly 1.3 billion gallons of wastewater daily. All 14 facilities use anaerobic digesters to produce biogas (but, as noted above, the Newtown Creek facility is currently the only one fully utilizing a biogas-to-pipeline system and accepting food waste for co-digestion, though other facilities are planned for future upgrades).

ABC strongly urges the Board to include provisions in the final Plan that enable and incentivize the City - and other municipalities across the State - to maximize their biogas production and their ability to create biogas-to-grid systems to provide electricity where needed. Doing so will reduce the burden on the landfills that the State's municipalities use, reduce the cost of waste management, reduce atmospheric methane emissions that contribute to global warming, and create new revenue streams for municipalities that need them to offset federal funding cuts and fund their infrastructure and other needs.

The Plan Should Encourage Biogas Production and Use to Reduce Methane Emissions and Help Meet the State's Climate Goals

While this Plan is focused on meeting the State's future energy needs, it stands adjacent to the State's climate commitments. By encouraging greater use of biogas in this Plan, the Board would be helping to reduce methane, and will therefore help New York State achieve its climate goals for 2040 and beyond.

In brief, the decay of all organic matter produces a combination of methane and carbon dioxide. When this methane is emitted directly into the atmosphere (e.g., from farms, landfills, etc.), it is a greenhouse gas with a far more potent global warming potential (GWP) than carbon dioxide. According to the U.S. Environmental Protection Agency ("EPA"), the global warming potential of methane is 27 to 30 times higher than that of carbon dioxide over a 100-year period and 81 to 83 times higher over a 20-year period.[15]

As further detailed in New York City's February 20, 2024 comments in the DPS Key Terms proceeding, even when methane is produced from the controlled decay of a WRRF, it is often flared into the atmosphere to convert it into carbon dioxide and lower its GHG emissions potential.[16] However, when that methane is instead captured and productively used, the net effect on the environment is either zero or beneficial. For example, using methane already captured from a WRRF to generate electricity has a zero net effect because the captured methane would otherwise have been flared. As a result, the total amount of carbon dioxide and co-pollutant emissions has not changed, and in contrast to flaring, the methane/biogas has been put to a productive use and potentially displaced the use of fossil natural gas.

Moreover, many sources, such as landfills, do not capture and flare newly formed methane. Capturing and using it to generate electricity has a net beneficial effect because the process both converts the methane to carbon dioxide, which has a much lower GWP, and puts the energy produced by that conversion to a productive use. The methane otherwise would have been directly released to the atmosphere.

Reducing methane must be an important component of the State's climate strategy. Thirty-nine percent of the State's GHG emissions are methane, and roughly one-third of those emissions are from organic waste. Maximizing the State's use of anaerobic digesters (i.e. adding about 652 units to the current 180) could create 33,682 new construction jobs, 1,878 new long-term jobs, and deploy $18.1 billion in new capital investment.[17] According to Energy Vision, just adding 300 new units could reduce New York's methane emissions by 15 percent.[18]

ABC recognizes that comparing the climate benefits of various greenhouse gases is complex. Further, we recognize that, for purposes of measuring progress towards the CLCPA goals, the legislature has directed the State to use a specific approach to carbon accounting. However, for purposes of fully understanding all of the inputs into New York's GHG emissions across the full range of GHGs and relevant timeframes, the State should take advantage of the most robust lifecycle GHG accounting systems (e.g., GREET) to determine the benefits of all of its programs and across the full range of GHGs and relevant timeframes. (Indeed, it is worth nothing that California also uses multiple approaches to measuring its GHG emissions to ensure a full picture across multiple GHGs and timeframes).

[15] US EPA, Understanding Global Warming Potentials. The Global Methane Hub estimates that methane is 86 times more potent than CO2 and is responsible for about 45% of recent net global warming.
[16] Comments filed in NYS DEC Case 15-E-0302**.** Attached as Exhibit 2.
[17]American Biogas Council, Biogas State Profile: New York.
[18] Energy Vision, Putting New York's Organic Waste to Work, published 11/7/2023. Attached as Exhibit 3.

By incentivizing and maximizing biogas production and integrating it into the state's clean energy strategy, New York can fill critical gaps in its clean energy and other decarbonization efforts, reduce reliance on fossil fuels, improve the State's grid resilience, and provide a cost-effective, equitable pathway to achieving its 2040 climate goals.

Conclusion

ABC believes that biogas offers a win-win for New York by transforming the unavoidable byproducts from the State's food, municipal waste, and agricultural sector into a valuable renewable energy resource that can help the State meet its anticipated future energy demand and its climate and related clean energy goals. Adding biogas-generated electric power to the list of zero-emission energy sources under the Clean Energy Standard, including the biogas-to-electricity pathway in the CLCPA, qualifying biogas projects for Tier 1 Renewable Energy Credits (RECs), and adding biogas to the list of eligible technologies that are eligible for financing through the NY Green Bank are all steps that would dramatically change the attractiveness and feasibility of agricultural and municipal biogas projects. By converting methane emissions from New York's food, wastewater, manure, and other organic waste that would otherwise be emitted into the atmosphere into clean, renewable energy that is dispatchable 24/7, biogas can play a vital role in helping New York achieve its CLCPA goals by reducing GHG emissions, increasing grid reliability, and supporting the transition to renewable energy, while fostering economic growth, improving energy affordability, and helping the State's agricultural communities.

As noted in the introduction, ABC urges the Board to adopt a final Plan that includes the following recommendations:

- Recognize the value of biogas to the energy and climate goals of New York
- Add biogas-generated electric power to the list of zero-emission energy sources under the Clean Energy Standard
- Include the biogas-to-electricity pathway in the CLCPA
- Expand the eligibility of Tier 1 Renewable Energy Credits (RECs) to include biogas
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- Require lifecycle GHG accounting using models like Argonne's GREET to accurately reflect avoided methane and total carbon reductions
- Expand support for small and mid-sized biogas projects to deliver distributed, reliable clean energy across New York's agricultural and municipal sectors
- Strengthen food waste diversion enforcement and incentives to increase feedstock availability for anaerobic digestion and accelerate statewide methane emission reductions
- Adopt a Clean Peak credit to incentivize biogas and other clean energy production during peak demand and thereby disincentivize the use of dirty peaker plants
- Direct DPS and NYSERDA to include the full range of biogas resources, not just RNG, in their technoeconomic study of clean firm resources for peak shaving, grid balancing and to help meet the clean energy supply requirements in 2040 and beyond.
- Implement a book-and-claim accounting framework to track and verify environmental attributes for clean fuels and renewable gases
- Adopt policies that enable and incentivize New York City - and other municipalities across the State - to maximize their biogas production and their ability to create biogas-to-grid systems to provide electricity where needed

Thank you for considering our comments. We would be happy to discuss them in greater detail or provide additional information at your convenience.

Sincerely,

Patrick Serfass, Executive Director

About the American Biogas Council The American Biogas Council is the voice of the US biogas industry dedicated to maximizing carbon reduction and economic growth using biogas systems. We represent more than 400 companies in all parts of the biogas supply chain who are leading the way to a better future by maximizing all the positive environmental and economic impacts biogas systems offer when they recycle organic material into renewable energy and soil products. Learn more online at www.AmericanBiogasCouncil.org, Twitter @ambiogascouncil, and LinkedIn.