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Comments on New York Draft State Energy Plan

Dear Ms. Harris,

On behalf of the Electric Natural Gas Coalition (eNG Coalition), I am writing to provide comments on the New York State Energy Planning Board's (EPB) recently published Draft State Energy Plan (SEP).¹

eNG Coalition is a global platform dedicated to raising awareness of e-methane (electric natural gas or e-NG), promoting its tradability, fostering policy support, and driving harmonization of applicable regulations and standards. eNG Coalition's members include energy producers and end-users with substantial industrial expertise and investment capacity across energy technologies.

We believe that e-NG, as part of the broader energy economy, will play a critical role in decarbonization as a low-carbon alternative to fossil gas. This strategy aligns with the SEP's direction that "low-carbon alternative fuels are an important complement to electrification" and that "existing infrastructure should be leveraged for the transport and storage of pure or blended alternative fuels wherever it is safe, technologically, and economically feasible."²

At this stage, eNG Coalition's primary goal is to ensure that e-NG is properly considered within the State's energy planning processes. Our comments herewithin address essential background information regarding the production process and benefits of e-NG; the role of e-NG in New York's economy, including examples of supporting policies in other

¹ https://energyplan.ny.gov/

² Low-Carbon Alternative Fuels, pg. 2 (https://energyplan.ny.gov/-/media/Project/EnergyPlan/files/Draft-2025-Energy-Plan/Topic-Area-Chapters/Draft-New-York-State-Energy-Plan-05-Low-Carbon-Alternative-Fuels.pdf)

jurisdictions; and comments on the Draft SEP, including issues with New York's greenhouse gas (GHG) accounting methodology.

Producing e-NG and Environmental Benefits

e-NG is a synthetic form of natural gas produced using electricity, carbon dioxide (CO_2), and water. First, through a process called electrolysis, electricity is used to produce hydrogen by splitting a water molecule.³ This hydrogen is then combined with CO_2 in a chemical reaction—typically the Sabatier process—to produce methane (CH_4), which can be stored, transported, and used in existing natural gas infrastructure. The resulting e-NG has the same chemical properties as geologic natural gas, making it compatible with current energy systems and applications.

Importantly, the CO_2 component of e-NG is sourced from either (1) waste biogenic CO_2^4 emissions or (2) CO_2 captured from industrial processes. Both pathways transform waste CO_2 into a valuable commodity. Likely near-term sources of CO_2 feedstock in New York include the CO_2 stream produced during biogas upgrading (i.e., renewable natural gas (RNG) production facilities) and recycled CO_2 emissions. In utilizing the biogenic CO_2 stream from RNG upgrading, e-NG production could nearly double the supply of RNG available to New York. Furthermore, the case of emissions recycling is exemplified by Standard Carbon's partnership with City College of New York (CCNY) which utilizes CO_2 emissions from the boiler system as a feedstock to create e-NG. This project is expected to decarbonize CCNY's scope 1 emissions by more than 90% in support of Local Law 97, and will produce 200,000 MMBtu/year of e-NG.

Understanding the GHG Benefits of e-NG

e-NG plays a key role in reducing greenhouse gas (GHG) emissions as a replacement for fossil natural gas. When produced using zero-emission electricity, e-NG has the potential to be carbon neutral, as the CO₂ used in its creation can be obtained from biogenic sources, industrial sources that would otherwise be released into the environment, or captured from the atmosphere (i.e., via direct air capture (DAC)).

There are three primary ways in which e-NG (and e-fuels, broadly) reduce GHG emissions: (1) Displacing fossil gas and its CO₂ emissions; (2) when the CO₂ feedstock is biogenic or obtained via DAC, emissions at combustion are carbon neutral; when made with recycled CO₂, the avoidance of fossil emissions offsets emissions at combustion; (3) serving as a

³ While hydrogen production from electrolysis is the most common production pathway, e-NG Coalition supports the use of all clean hydrogen production pathways as a feedstock for creating e-NG.

⁴ See Fossil vs Biogenic CO2 Emissions, International Energy Agency (https://www.ieabioenergy.com/iea-publications/faq/woodybiomass/biogenic-co2/)

mechanism for storing clean electricity in existing energy infrastructure, enabling a greater decarbonization potential for clean electricity in economic activities that are better suited to fuels than direct electrification.

The Role of e-NG in New York's Economy

Transitioning the Gas System in New York State

eNG Coalition appreciates that the SEP presents a transition of New York's gas system in a way that is more comprehensive and complete than in previous strategy documents. We envision that e-NG will play a role in decarbonizing New York by adding renewable gas that is supplemental to biomethane, especially when produced from the biogenic CO₂ stream obtained via RNG upgrading, or when produced from captured industrial emissions. Although costs are currently high compared to fossil gas, the cost of e-NG is expected to decline, with modelers at the International Energy Agency (IEA) forecasting e-NG to play an important role in decarbonizing gas grids and adjacent technologies. With this in mind, the SEP should incorporate modeling of e-NG supply, such as that available from the IEA, in its final draft.

Overall, e-NG has the potential to serve multiple roles across New York's economy, providing a versatile solution in support of the climate goals outlined by EPB and the state's agencies, air and water quality goals where fossil fuel production and use is avoided, and energy security.

Examples of e-NG in Gas Transition Strategies

European Union

The European Union's strategy for transitioning its gas system to renewable gases focuses on integrating biomethane and e-NG to reduce dependency on fossil fuels and achieve climate neutrality by 2050. Key elements include scaling up domestic biomethane production—targeting 35 bcm annually by 20306—through incentives, investment in anaerobic digestion technology, and support for sustainable feedstocks. The EU also promotes the development of e-NG, aiming to leverage existing gas infrastructure for its transport and use, ensuring compatibility with current systems while reducing GHG emissions.

⁵ https://iea.blob.core.windows.net/assets/9b86ac2a-2055-4eac-9f93-6ab379554d6d/IEA_E-methaneanewgasforanet-zerofuture.pdf

⁶ https://energy.ec.europa.eu/topics/renewable-energy/bioenergy/biomethane_en

Several Fit for 55 legislative texts reinforce this framework. The EU Gas Package and the upcoming Decarbonised Gas and Hydrogen Market Package⁷ (COM/2021/803)⁸ aim to facilitate the integration of renewable gases, including e-NG, into the grid by addressing certification, guarantees of origin, and cross-border trade rules. Together, these measures ensure that Renewable Fuels of Non-Biological Origin (RFNBOs) used in the gas sector can count toward renewable energy targets if they meet strict sustainability and additionality criteria.

The ReFuelEU Aviation Regulation (EU 2023/2405) 9 and the FuelEU Maritime Regulation (EU 2023/1805) 10 both recognize RFNBOs, including e-NG when used as e-LNG, as compliance options for decarbonizing shipping and aviation. Similarly, the revised Alternative Fuels Infrastructure Regulation (AFIR, EU 2023/1804) 11 supports the roll-out of LNG and bio-LNG bunkering and refueling stations, providing infrastructure readiness for future e-NG. On the land transport side, the $\rm CO_2$ emission performance standards for cars and vans 12 allow the use of renewable fuels as part of the Union's pathway to zero-emission mobility, while discussions on a potential Carbon Correction Factor (CCF) mechanism may further recognize the contribution of RFNBOs.

Danish Gas Strategy

Denmark's gas strategy¹³ is centered on phasing out fossil natural gas and transforming the gas system to support a climate-neutral energy supply by 2050. A key pillar of this strategy is the large-scale deployment of biomethane, which already accounts for over 40% of gas consumption in Denmark¹⁴ and is expected to cover 100% by 2030.¹⁵

⁷ https://energy.ec.europa.eu/topics/markets-and-consumers/hydrogen-and-decarbonised-gas-market_en

https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021PC0803&qid=1640002501099

⁹ https://eur-lex.europa.eu/eli/reg/2023/2405/oj/eng

¹⁰ https://eur-lex.europa.eu/eli/reg/2023/1805/oj/eng

¹¹ https://eur-lex.europa.eu/eli/reg/2023/1804/oj/eng

¹² https://climate.ec.europa.eu/eu-action/transport-decarbonisation/road-transport/light-duty-vehicles_en#:~:text=Below%20are%20the%20EU%20fleet,corresponding%20to%20a%20100%25%20reduction

¹³ Green Gas Strategy: The Role of Gas in the Green Transition (https://ens.dk/media/4246/download)

¹⁴ See "Share of Biomethane, here: https://en.energinet.dk/

¹⁵ Green Gas Strategy, pg.15

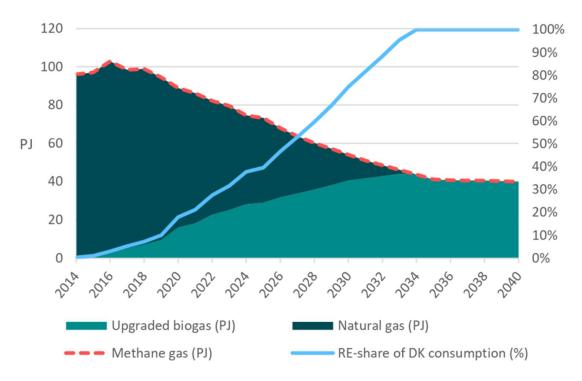


Figure 1: Projected Danish Gas Consumption by Sector¹⁶

The Danish government supports this transition through subsidies for renewable gas production and regulatory measures that ensure priority grid access for renewable gases. The strategy also emphasizes energy efficiency, electrification where possible, and reducing overall gas consumption, especially in buildings.

To future-proof the gas infrastructure, Denmark is investing in the conversion of the gas network to transport green gases, including e-NG and captured CO_2 for carbon capture and utilization (CCU) or storage (CCS). This involves upgrading pipelines and developing dedicated CO_2 transport systems to support emerging Power-to-X (PtX) projects.¹⁷

¹⁶ Green Gas Strategy, pg. 8

¹⁷ Green Gas Strategy, pg.12-13, sections regarding Power-to-X in Biogas Production and Scenarios for Biogas Production

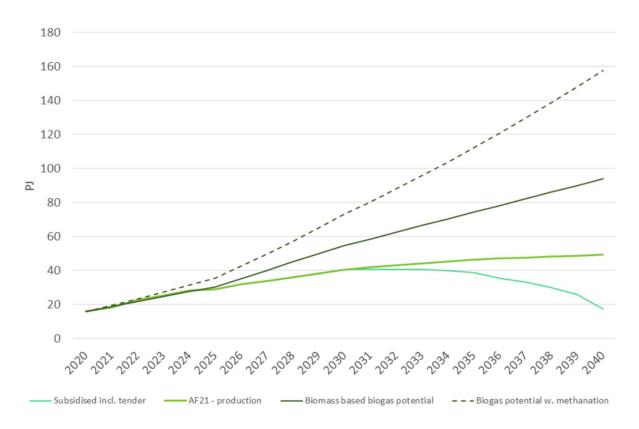


Figure 2: Danish Green Gas Potential (including e-NG)18

The national strategy aligns with broader EU goals and leverages Denmark's strong wind power sector to produce renewable hydrogen, which can then be combined with CO_2 to synthesize e-NG. By adapting the gas grid for these future fuels, Denmark aims to maintain energy security while supporting its industrial decarbonization and export ambitions.

Japanese Gas Strategy

Japan has developed a world-leading strategy to transition its gas sector away from fossil fuels, with a central focus on integrating e-NG into its existing gas infrastructure. 19 Recognizing its heavy dependence on imported fossil fuels and limited domestic renewable resources, Japan is pursuing a unique approach by promoting the production of e-NG both domestically and overseas, particularly in regions with abundant renewable energy. Through the Green Transformation (GX) initiative, 20 Japan aims to begin injecting e-NG into city gas networks by the late 2020s, with a target of replacing 90% of current city

¹⁸ Green Gas Strategy, pg. 13

¹⁹ https://www.worldenergynews.com/news/japan-gas-industry-allows-gas-with-carbon-761888

²⁰ https://www.csis.org/analysis/mobilizing-private-finance-clean-energy-transition-japans-green-transformation-and

gas with e-NG by 2050. This allows for decarbonization without overhauling the extensive gas infrastructure or end-use appliances.

To accelerate this transition, the Japanese government is providing robust policy and financial support, including subsidies, regulatory reforms, and partnerships with industry. ²¹ Major Japanese energy companies are already investing in international e-NG projects in countries such as Australia, the U.S., and the Middle East, with plans to import the fuel via existing LNG infrastructure. The government is also establishing standards and certification schemes to ensure the climate integrity of imported e-NG. Japan's strategy exemplifies a pragmatic, infrastructure-compatible pathway to gas decarbonization, combining domestic innovation with global supply chain development to secure a stable and low-carbon energy future.

Oregon Renewable Gas Policy

Oregon's renewable gas strategy, anchored by Senate Bill 98 (SB 98)²² passed in 2019, supports the transition from fossil gas to low-carbon alternatives by allowing natural gas utilities to voluntarily procure renewable gas—including e-NG, which is explicitly included by definition in the legislation.²³ SB 98 sets voluntary targets for renewable gas procurement, aiming for up to 30% renewable gas by 2050, with interim milestones in 2020, 2025, and 2030. Importantly, the law also permits utilities to invest in renewable gas infrastructure and enter long-term contracts, helping to stabilize and grow the market. Oregon's broader strategy includes developing RNG from sources like landfills and agricultural waste, integrating it into the existing gas grid, and aligning these efforts with statewide climate goals for deep emissions reductions by mid-century.

California Renewable Gas Policy

California's renewable gas transition strategy is driven by its broader climate goals, including achieving carbon neutrality by 2045, as outlined in the California Air Resources Board (CARB) most recent 2022 Scoping Plan which projects the use of renewable gas in various sectors. ²⁴ The state is working to replace fossil natural gas with alternatives such as renewable gas with a focus on decarbonizing hard-to-electrify sectors. California supports renewable gas deployment through incentive programs including utility procurement

²¹ https://iea.blob.core.windows.net/assets/9b86ac2a-2055-4eac-9f93-6ab379554d6d/IEA_Webinar_on_e-methane_JGA_R.Kuzuki_20240905.pdf

²² https://olis.oregonlegislature.gov/liz/2019R1/Downloads/MeasureDocument/SB98/A-Engrossed

²³ "Renewable natural gas" in SB 98 is defined as inclusive of "Methane gas derived from any combination of... hydrogen gas and carbon oxides derived from renewable energy sources".

²⁴ https://www.globalelr.com/2022/05/california-air-resources-board-releases-draft-scoping-plan-update/?utm_source=chatgpt.com

targets (e.g., resulting from SB 1440),²⁵ and the Low Carbon Fuel Standard (LCFS), which provides credits for low-carbon fuels. Notably, California has approved a pathway for efuels under the LCFS,²⁶ recognizing synthetic fuels as eligible for credit generation. These efforts are integrated into infrastructure planning and environmental justice initiatives to ensure an equitable and sustainable energy transition.

US Federal Tax Incentives

Both the Inflation Reduction Act and the One Big Beautiful Bill Act established significant support for clean fuels technologies like e-NG through tax credits that enable key components of the e-NG production process. These include the clean fuels tax credit (45Z), the clean hydrogen tax credit (45V), and the carbon sequestration tax credit (45Q). It remains critical for New York to utilize remaining clean energy tax credits in support of the state's decarbonization goals, and this ongoing federal support creates ongoing opportunities for e-NG and broader clean fuels technologies.

Relationship Between e-NG and Broader e-fuels Production

Encouraging Innovation and Investment

It is also important for the EPB to consider how designing a policy framework that is supportive of e-NG will enable broader e-fuel production in New York State. The critical components of e-NG production—electrolyzers for hydrogen production and CO₂ capture infrastructure—are common with e-fuels production more generally.

The development of e-NG supports innovation across several key areas in energy production, storage, and infrastructure. This includes through the advancement of e-fuels production technologies, improving hydrogen production efficiency, and enhancing CCU methods. It also fosters the adaptation of existing natural gas infrastructure to handle renewable-based synthetic fuels, creating new technical and business opportunities. Additionally, e-NG encourages collaboration across the clean energy value chain, between producers and consumers of clean electricity and clean molecules.

The near-term development of a strategy that considers e-NG and other e-fuels for sectors that are expected to utilize fuels in the long-term will help position New York as a leading producer of these technologies. In this context it is additionally important to consider the role of methane as a crucial platform molecule for other fuels and chemicals, especially given the Plan's projection that large amounts of fossil gas will continue to be used in 2040 and beyond.

²⁵ https://www.cpuc.ca.gov/news-and-updates/all-news/cpuc-sets-biomethane-targets-for-utilities

²⁶ https://www.offshore-energy.biz/hif-global-wins-first-us-approval-for-e-fuels-pathway/

Comments on the Draft SEP

Low-Carbon Alternative Fuels

e-NG Coalition generally supports the direction of the Low-Carbon Alternative Fuels section of the SEP as it begins to outline a strategy to increase the production and use of clean fuels technologies in New York. A number of the key concepts outlined in this section are in alignment with leading jurisdictions' climate strategies, including the complementarity of low-carbon fuels and electrification; the benefits of leveraging existing fuel transportation and distribution infrastructure; and the need to develop new policies, including the use of market-based mechanisms. However, while the general direction of this section will support reaching New York's GHG reduction goals, there remain glaring omissions related to the use of synthetic fuels, and contradictions in the language and strategy itself.

At a base level, the plan does not adequately consider the role of synthetic renewable fuels, particularly e-methane and other e-fuels, as part of the state's long-term decarbonization strategy. While the draft discusses RNG from organic waste sources, it overlooks the potential for e-methane—which is chemically identical. This omission risks narrowing the scope of viable low-carbon options available to decarbonize sectors that are challenging to electrify.

In considering the overall trajectory for sustainable fuels it is important to note that the Plan projects an increase in low-carbon alternative fuels from current 1% to a mere 5% by 2040.²⁷ In this scenario, fossil natural gas usage only decreases by 1%. This modeling does not reflect the full potential of e-methane and other renewable gases in New York, and therefore over-relies significantly on the use of fossil gas.

Furthermore, language in in this section at times downplays and/or contradicts itself regarding the role of renewable gases. For example, the SEP notes that "wastewater treatment facilities could be designed to lower methane generation and instead optimize conditions for producing liquid fuel or hydrogen rather than RNG" and implies that the use of renewable methane is not aligned with "a long-term holistic, system-wide vision". The SEP should not downplay the importance of renewable methane given that the Plan also projects fossil gas as expected to deliver a whopping 31% of final energy demand in 2040.

eNG Coalition's members are undertaking the commercialization of green hydrogen-based technologies at significant scale, and include some of the largest green hydrogen producers globally. We appreciate the SEP's support for hydrogen as a key alternative fuel,

²⁷ Low-Carbon Alternative Fuels, pg.8, Figure 2

²⁸ Low-Carbon Alternative Fuels, pg. 10

however, the hydrogen section of this report does not mention the use of e-fuels or e-NG specifically. Utilizing green hydrogen as a feedstock for e-NG aligns with the SEP's broader direction of using existing infrastructure, will enable a higher portion of alternative fuels vs. fossil gas use in 2024, and solves the problem that "New York's existing natural gas pipeline system is incompatible with hydrogen", ²⁹ among other benefits. The use of hydrogen to produce e-fuels in other sectors like sustainable aviation fuel (SAF) and maritime should also be heavily considered in this section.

Lifecycle Carbon Intensity is the Best Metric for Assessing Alternative Fuels

eNG Coalition fully supports the use of lifecycle carbon intensity (CI) as the primary metric for evaluating the impact and eligibility of alternative fuels. Doing so is the most neutral way of ensuring that higher-emitting fuel production pathways are not inadvertently incentivized by GHG reduction policies. This approach is widely endorsed by the alternative fuels industry as a means of self-transparency, and has been employed in a variety of leading decarbonization policies globally.³⁰

Furthermore, eNG Coalition supports the inclusion in CI scoring of upstream benefits that are associated with alternative fuel production. These may include but is not limited to avoided methane emissions, soil carbon sequestration, and carbon capture and storage. In the case of some e-fuels pathways, lifecycle CI must consider the impact of recycled carbon where fossil CO₂ emissions are avoided.

New York State Climate Act Accounting Methodology Remains Fundamentally at Odds with Credible Net-Zero Pathways, Including the Draft SEP

We are encouraged that New York is developing a vision for increasing alternative fuels use, and that lifecycle CI will be used as a primary assessment tool in forthcoming relevant incentive programs. Indeed, we also agree that the "LCA" methodology will result in accurate measurements and is consistent with other US jurisdictions and global accounting standards.

However, the "Climate Act Accounting" methodology remains at odds with global best practice and is likely to penalize alternative fuels in New York. Indeed, while it is standard practice to split a fuel's lifecycle emissions into corresponding sectors within a state GHG inventory, the inconsistencies between these frameworks in New York will be difficult for

²⁹ Low-Carbon Alternative Fuels, pg. 12

³⁰ Examples of successful programs that utilize lifecycle CI scoring include but are not limited to California's LCFS and the European Union's Renewable Energy Directive.

alternative fuel users to reconcile. If New York aims to create fair and consistent standards for alternative fuels, the following changes should be made:

- 1. Biogenic CO₂ emissions should be consistently treated as carbon neutral across all sectors. End-users should report biogenic emissions separately from their inventory, in line with GHG reporting standards of the U.S. Environmental Protection Agency (EPA)³¹ and Intergovernmental Panel on Climate Change (IPCC).³²
- 2. In market-based programs, upstream emissions from fossil fuels and biofuels should incorporate the same system boundaries and regardless of whether they are produced in-state or imported. Note that if this change were made, fuels produced out-of-state and imported would automatically and rightfully be assessed higher emissions under LCA due to transport. Similarly, out-of-state upstream emissions would rightfully not be included in the state-level energy sector inventory.
- In market-based programs, upstream benefits such as avoided methane should be treated consistently regardless of whether the fuel is produced within or outside of New York. These benefits will not be incorporated into the state inventory if they occur out-of-state.

One critical implementation question, for example, would be how the currently proposed competing methodologies are employed under a cap-and-invest program. Entities that use biogenic fuels may on one hand be credited favorable using LCA under the program, but on the other hand may be penalized where biogenic CO_2 emissions are treated as equivalent to fossil CO_2 within the state-level inventory. At minimum, this risks confusion and market distortion; at worst it is likely to disincentivize use of alternative fuels.

Market-Based Policy Mechanisms and Attribute Tracking

eNG Coalition is encouraged by support for market-based policies and discussion of attribute tracking within the SEP. These policy frameworks have been the most successful in enabling deployment of renewable gases in the US and other jurisdictions leading on climate policy, such as the EU.

The most effective market-based policies for increasing the use of renewable gas in New York would be technology-neutral, sector-specific portfolio standards such as a clean fuel standard or clean heat standard. If New York aims to implement a cap-and-invest program,

³¹ EPA's Greenhouse Gas Reporting Program requires that biogenic CO_2 emissions are reported separately from fossil CO_2 emissions (https://www.ecfr.gov/current/title-40/part-98#p-98.3(c)(4)).

 $^{^{32}}$ IPCC's GHG reporting guidelines state that "CO $_2$ emissions from biomass combustion for energy are reported in the energy sector as memo item and estimated and reported in the Agriculture, Forestry and Other Land Use (AFOLU) Sector as part of net changes in carbon stocks" (https://www.ipcc-nggip.iges.or.jp/public/2019rf/pdf/1_Volume1/19R_V1_Ch08_Reporting_Guidance.pdf).

then it must reconcile its fractured carbon accounting methodologies that will otherwise disincentivize alternative fuels.

Attribute tracking will remain important for book-and-claim or mass balance transactions. With this in mind, eNG Coalition challenges the notion that book-and-claim is inherently riskier from the standpoint of double-counting. The use of registries combined with third-party audits can prevent double-counting regardless of the type of market-based transaction employed.

Natural Gas

eNG Coalition generally supports SEP's direction in the Natural Gas section regarding an increase in the production and use of renewable gases. We recognize that the details of this strategy are articulated in more detail within the Low-Carbon Alternative Fuels section.

Indeed, this section appropriately recognizes the need to transition away from fossil natural gas in line with the Climate Leadership and Community Protection Act (CLCPA). However, again, the plan does not adequately consider the role of synthetic renewable fuels, particularly e-methane and other e-fuels, as part of the state's long-term decarbonization strategy. While the draft discusses RNG from organic waste sources, it overlooks the potential for e-NG—which is chemically identical. This omission risks narrowing the scope of viable low-carbon options available to decarbonize sectors that are challenging to electrify.

To align with New York's ambitious climate goals while maintaining flexibility and reliability in the energy system, the final plan should explicitly include e-NG and e-fuels in its portfolio of considered clean energy solutions. As discussed, other jurisdictions, including California, Japan, and the European Union, have already recognized e-fuels as critical components of their decarbonization pathways—often integrating them into policy frameworks, incentive programs, and emissions accounting systems. Including e-NG in New York's strategy would support innovation, encourage investment, and ensure that the state remains open to scalable, infrastructure-compatible solutions that can complement electrification and support a resilient energy transition.

Electricity

The EPB should also consider in the SEP's Electricity section how e-NG can serve as an energy storage solution which improves the flexibility and reliability of both New York's electricity and natural gas grids. In combining biogenic, recycled, or atmospheric CO₂ with hydrogen produced using excess renewable electricity, e-NG serves as a clean electricity-derived, storable substitute for natural gas. These molecules can be kept in existing

infrastructure like pipelines or underground storage, making it scalable and dispatchable, as both a fuel and power source.

The opportunity of e-NG in New York's power sector is critically important given the state's ambitious goals of 70% renewable electricity by 2030 and 100% zero-carbon electricity by 2040. Indeed, the conversation regarding projected intermittency issues in New York is long-standing, with the Electricity section stating that "The state will need to be strategic in identifying and integrating clean firm technologies that have the attributes necessary to support a zero-emissions electric grid by 2020"³³ as a key takeaway. Given that the state's technoeconomic study includes renewable natural gas and renewable diesel, ³⁴ it should also include e-NG.

Draft Pathways Analysis

The Draft Pathways Analysis section likewise largely fails to address e-fuels and e-NG as part of its modeled decarbonization scenarios. While the analysis explores multiple energy transition pathways—such as strategic electrification, energy efficiency, and the use of RNG—it does not meaningfully incorporate synthetic fuels like e-NG, despite their relevance to hard-to-electrify sectors. This omission again limits the scope of solutions for decarbonizing where full electrification may be cost-prohibitive or technologically challenging.

By excluding or minimally referencing e-fuels, the Draft Pathways Analysis misses an opportunity to evaluate the role of infrastructure-compatible, dispatchable, and storable clean fuels that are already gaining policy support in other jurisdictions. This narrow framing could lead to underinvestment in promising technologies and infrastructure that may be essential for long-term reliability and emissions reductions, especially in winter peaking scenarios. To provide a more complete and future-resilient analysis, the final SEP should explicitly assess the technical and economic potential of e-NG across the modeled pathways.

Conclusion

This is a critical moment for New York to advance the use of emerging clean fuel technologies such as e-NG, particularly through developing an explicit strategy within the SEP. Similar strategies and policies developed by other states and global leaders in decarbonization demonstrate strong alignment with this goal, and are creating favorable

³⁴ Electricity, pg. 26

³³ Electricity, pg. 1

policy environments which signal that the time is right for commercial deployment and production of advanced fuels like e-NG.

In conclusion, e-NG Coalition strongly supports the objectives of New York, the SEP, and its potential to accelerate the development of new energy resources. We look forward to collaborating with the EPB and other stakeholders to ensure that the clean fuels sector contributes meaningfully to decarbonization, and that New York remains at the forefront of innovating and developing energy technology. With this in mind, the EPB should take the following actions if it wishes to continue to support the development of new clean fuels technologies like e-NG:

- Develop language in the final SEP that outlines a role and, at minimum, a high-level strategy for the deployment of e-NG. This strategy should reflect trends and conclusions from jurisdictions that are leading in decarbonization efforts.
- Fix New York's fractured carbon accounting methodologies which are inconsistent with global precedent and are likely to disincentivize alternative fuels.
- Implement a clean fuel standard and/or clean heat standard as the preferred market-based policy for incentivizing alternative fuels.

Thank you for your consideration of these comments. We are happy to provide further information or engage in discussions on these important matters.

Sincerely,

/s/

Rafik Ammar Policy Director e-NG Coalition

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