



October 6, 2025

By Electronic Submission (nysenergyplan@nyserda.ny.gov)

State Energy Plan Comments
NYSERDA
17 Columbia Circle
Albany, NY 12233

Re: 2025 Draft New York State Energy Plan Comments

Dear Members of the New York State Energy Planning Board (“Planning Board”):

The Pace Energy and Climate Center (“PECC”) appreciates the opportunity to provide comments on the 2025 Draft New York State Energy Plan (“Draft Plan”). Over nearly four decades, PECC has established itself as a national leader at the intersection of energy, environmental law, and climate policy. As a project of the Elisabeth Haub School of Law at Pace University, PECC combines legal scholarship with pragmatic policy expertise, serving as a trusted advisor to government decision-makers, regulators, and key stakeholders across New York State and beyond.

Since its founding, PECC¹ has worked to advance policies that improve energy system efficiency, accelerate renewable generation, reduce greenhouse gas (“GHG”) emissions, and strengthen community resilience to climate impacts. Initially focused on regulatory law and utility oversight, PECC’s mission has expanded over time to encompass broader climate change mitigation strategies and equitable clean energy deployment. Our work includes objective legal and policy analysis, targeted stakeholder engagement, and the development of innovative models for decarbonizing the built environment, particularly in partnership with municipalities, state agencies, and community organizations across New York.

This comment is submitted pursuant to New York State Energy Law § 6-104, which authorizes and governs the development of the State Energy Plan, and in furtherance of the State’s statutory obligations under the Climate Leadership and Community Protection Act (“CLCPA”), Chapter 106 of the Laws of 2019. These statutes collectively mandate that New York pursue deep decarbonization, achieve a 100% zero-emission electricity system by 2040, and reduce statewide GHG emissions 85% below 1990 levels by 2050. As the central policy roadmap guiding those efforts, the Final State Energy Plan (“Final Plan”) must reflect the urgency, scale, and ambition required to meet these legal mandates.

¹ Pace Energy & Climate Center, Elisabeth Haub School of Law at Pace University:
<https://www.pace.edu/law/centers-and-institutes/pace-energy-and-climate-center>.

The purpose of PECC's comments is to assist the Planning Board in strengthening the Draft Plan so that it fully aligns with these statutory objectives and positions New York as a continued national leader on climate action. Specifically, PECC's recommendations are designed to ensure that the Plan:

- Commits to a near-term phaseout of fossil fuels consistent with CLCPA targets and energy system reliability needs.
- Accelerates the deployment of clean and reliable resources, including distributed generation, flexible demand-side solutions, and ground-source and ambient thermal infrastructure, and integrates them into statewide planning.
- Tightens governance of alternative fuels by defining eligibility, requiring lifecycle GHG accounting, conditioning incentives on §7(3) compliance, and advancing a Clean Transportation Standard that prioritizes electrification.
- Advances environmental justice by prioritizing the retirement of polluting peaker plants, reducing disproportionate burdens in disadvantaged communities, and conditioning fuel and infrastructure incentives on co-pollutant impacts.
- Establishes a durable funding mechanism, such as a cap-and-invest program, to finance electrification, weatherization, bill credits, and community-scale decarbonization, and
- Expands low-income financing tools to safeguard long-term affordability, reduce barriers to electrification, and ensure equitable participation.

PECC respectfully submits these recommendations to support the development of a Final Plan that meets New York's statutory climate obligations, protects ratepayers, and delivers a decarbonized energy future that benefits all New Yorkers.

I. New York Must Continue to Phase Out Fossil Fuels

PECC recognizes the Draft Plan's acknowledgement that "external factors including supply chain disruptions, inflation, recent cuts to federal clean energy tax credits and incentives, and other changes in federal energy and tariff policy" create uncertainty around the pace of emissions reductions."² However, these challenges do not relieve New York of its statutorily mandated efforts to phase out fossil fuels and adopt policies consistent with achieving deep decarbonization. As a national leader in clean energy policy, New York must not admit defeat before the game has concluded and meet these challenges with accelerated action – not delay.

The Draft Plan's statement that "New York State ... will support the reliable provision of natural gas and petroleum fuels ... to provide meaningful volumes of energy throughout the planning period" is fundamentally inconsistent with the State's climate goals and the CLCPA.³ For the avoidance of doubt, the Draft Plan further states "that through the 2040 planning period, New York will continue supporting the safe and reliable provision of natural gas and petroleum fuels to electric, residential, commercial, industrial and transportation sectors," including through

² Draft 2025 New York State Energy Plan, Vol. I, Summary for Stakeholders, p. 25 (2025). Available at: <https://energyplan.ny.gov/-/media/Project/EnergyPlan/files/Draft-2025-Energy-Plan/Volume-I-Summary-Draft-Plan.pdf> (the "Draft Plan").

³ *Id.* at p. 29.

continued investment in gas infrastructure.⁴ By signaling to energy producers that New York will continue to support fossil fuel through 2040, the State is discouraging new renewable energy generation investment. New York cannot, in good faith, blame the federal government for creating barriers to GHG emissions reductions, while adopting the same policies in support of the fossil fuel *status quo*.

While PECC recognizes the complexity of New York’s current energy mix and the transmission constraints that shape near-term planning decisions, PECC does not support New York abdicating its role as a climate leader for *fifteen* more years. The continued prioritization of fossil fuel infrastructure through 2040 is neither necessary nor compatible with the State’s statutory obligations. The CLCPA requires a 100% zero-emission electricity system by 2040 and delaying the fossil fuel phaseout risks undermining the enforceability of that mandate.

The Draft Plan’s call for “accelerated action in the 2030s” is insufficient.⁵ The time for acceleration is now. The 2023-24 State Budget directed the New York Power Authority (“NYPA”) to cease fossil fuel generation at its small natural gas power plants by the end of 2030, contingent upon system reliability and environmental conditions.⁶ The Draft Plan should be amended to reflect that New York State will adopt a similar approach, committing to end support for the provision of natural gas and petroleum fuels by 2030, subject to narrowly defined system reliability exceptions. This amendment aligns with New York’s statutory climate obligations and reflects the urgency necessary to meet the CLCPA’s legally binding emissions targets; while affording the State flexibility should system reliability or public health considerations require temporary extensions.

A. The Draft Plan is Correct in Acknowledging the State’s Responsibility to Advance Clean and Reliable Resources

PECC commends the Draft Plan for reaffirming that New York has a fundamental responsibility to ensure that the clean energy transition is undertaken in a manner that maintains system reliability, delivers equitable benefits, and keeps energy affordable for all New Yorkers. This premise is consistent with both the CLCPA and Energy Law §6-104, which together require the State to plan for an energy system that is not only decarbonized but also reliable, resilient, cost-effective, and equitable. Achieving this balance is essential to sustaining public confidence in the clean energy transition and ensuring that the State meets its legally binding climate mandates.⁷

i. *The Need for a Stepped Electrification Transition*

As the 2022 CLCPA Scoping Plan recognized, decarbonizing New York’s electricity system requires a *phased and carefully sequenced electrification strategy* that aligns demand growth with clean resource deployment, ensures affordability, and supports infrastructure readiness. Statewide electricity demand is expected to roughly double by 2050 as buildings, vehicles, and industrial processes electrify, shifting peak load into winter and requiring significant investments in renewable generation, storage, distributed energy resources (“DERs”), and flexible demand-side

⁴ *Id.* at p. 31.

⁵ *Id.* at p. 38.

⁶ New York Power Authority, *Small Natural Gas Power Plants*. Available at: <https://nypa.gov/small-natural-gas-power-plants>.

⁷ Draft Plan at p. 40.

solutions.⁸ Meeting this demand will also require accelerated expansion of transmission and distribution infrastructure to ensure that new clean energy can reliably reach load centers.⁹

The Draft Plan appropriately acknowledges the need for strategic planning to ensure reliability during this transition.¹⁰ However, the Draft Plan should go further by explicitly committing to a resource development timeline that matches the scale of projected load growth and by clarifying how new generation, storage, and load flexibility will be synchronized with electrification milestones. Without such clarity, New York risk's significant reliability challenges and missing decarbonization targets as demand accelerates.

ii. *Alignment with the 2022 Scoping Plan*

The Draft Plan's commitment to "accelerate the deployment of clean energy resources" is broadly consistent with the Scoping Plan's recommendations.¹¹ However, key elements of the 2022 Scoping Plan, including clear interim benchmarks, detailed strategies for integrating firm zero-emission resources, and a moratorium on new fossil generation except where absolutely necessary for reliability, are diluted or absent in the Draft Plan. For example, the Scoping Plan recommended that the State establish a moratorium on new fossil-fired generation unless it was the *only* means of addressing a specific reliability need, and that such determinations be made through a transparent planning process tied to emissions reduction milestones and affordability metrics.¹² By contrast, the Draft Plan merely states that the State will "manage the pace of combustion unit retirements" without defining parameters or linking those decisions to statutory mandates.¹³ This shift risks undermining market signals for clean resource investment and could slow progress toward the 70x30 and 100x40 requirements.

Throughout this comment, specific instances where the Draft Plan fails to align with the 2022 Scoping Plan will be discussed in greater detail.

iii. *Environmental Justice and the Imperative to Retire Peaker Plants*

One of the most significant divergences between the Draft Plan and the Scoping Plan lies in the treatment of fossil peaker plants. The CLCPA mandates that state actions "shall not disproportionately burden disadvantaged communities ("DACs")" and must "prioritize reductions of co-pollutants" in those same areas.¹⁴ The Scoping Plan translated that legal mandate into a clear policy imperative: Rapidly retiring or repurposing peaker plants that disproportionately pollute environmental justice communities.¹⁵

While the Draft Plan references the need to "reduce local air pollution" and "deliver equitable clean energy benefits," it does not set specific targets, timelines, or retirement strategies for peaker

⁸ New York State Climate Action Council, Final Scoping Plan (2022), p. 221. Available at: <https://climate.ny.gov/-/media/Project/Climate/Files/NYS-Climate-Action-Council-Final-Scoping-Plan-2022.pdf> (the "Scoping Plan").

⁹ *Id.* at p. 222.

¹⁰ Draft Plan at p. 41.

¹¹ *Id.* at p. 40.

¹² Scoping Plan at p. 231.

¹³ Draft Plan at p. 44.

¹⁴ Climate Leadership and Community Protection Act ("CLCPA") §§ 7(2), (3), ch. 106, 2019 N.Y. Laws 467 (codified in scattered sections of N.Y. Env'tl. Conserv. Law and N.Y. Pub. Serv. Law).

¹⁵ Scoping Plan at p. 232.

units.¹⁶ This omission is more than a mere policy gap; it risks noncompliance with statutory environmental justice obligations and undermines public trust. The Final Plan should include a concrete peaker phaseout framework, with interim milestones and coordination with Public Service Commission (“PSC”) generation retirement proceedings.

iv. *Flexible Resources and Transmission Integration*

Finally, both the Scoping Plan and the Draft Plan acknowledge that achieving a reliable zero-emission grid will require significant investment in grid flexibility, including demand response, distributed generation, energy storage, and advanced transmission planning.¹⁷ However, the Draft Plan stops short of specifying how these resources will be prioritized or how planning processes will evolve to integrate them into resource adequacy and reliability planning on an equal footing with traditional supply-side solutions.

To ensure reliability during the clean energy transition, the Final Plan should set forth a clear framework for integrating flexible resources into system planning, including procurement targets, market reforms, and coordination between the New York Independent System Operator (“NYISO”), utilities, and state agencies. These measures are essential to maintaining reliability while rapidly decarbonizing the grid and avoiding overreliance on fossil “bridge” resources.

Recommendations: The Draft Plan is right to center the State’s responsibility to deliver a clean and reliable energy system but fulfilling that responsibility will require a boulder, more detailed strategy aligned with the CLCPA’s statutory requirements. Specifically, the Final Plan should: (1) Commit to a clearly defined, stepped electrification pathway; (2) Strengthen alignment with Scoping Plan commitments; (3) Set enforceable timelines for peaker retirement; and (4) Establish a robust framework for integrating flexible resources into system planning. Without these enhancements, New York risks undermining both its climate leadership and the legal mandates that underpin it.

B. The Draft Plan’s Support for the Use of Alternate Fuels is Warranted but Must Be Amended for Specificity

The Draft Plan is correct to emphasize that electrification remains the first and preferred decarbonization strategy. Alternative fuels are appropriately framed as a *complement* to electrification, to be deployed only in applications where direct electrification is impractical due to technological, safety, cost, or reliability constraints.¹⁸ PECC agrees alternative fuels should be reserved for hard-to-electrify sectors, rather than to substitute electrification in sectors where it is feasible. The Draft Plan also rightly prioritizes waste-based over crop-based biofuel feedstocks for biofuel production and acknowledges that alternative fuel use must achieve net reductions in co-pollutant emissions and avoid disproportionate impacts on DACs by explicitly warning against any alternative fuel project that would increase local air pollution in vulnerable communities.¹⁹

¹⁶ Draft Plan at p. 53.

¹⁷ Scoping Pla at p. 233; Draft Plan at p. 41.

¹⁸ Draft 2025 New York State Energy Plan, Ch. 5, Low-Carbon Alternative Fuels, p. 1 (2025). Available at: <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> (the “Alt. Fuels Ch. Draft”).

¹⁹ *Id.* at pp. 1, 15.

However, the Draft Plan’s weakness around alternative fuels is its failure to adopt clear, coherent, implementable policy proposals. In many instances, the Draft Plan is vague, inconsistent with best practice and legal prescripts, and is overly conservative or insubstantial in its recommendations. These shortcomings are likely to result in New York failing to attain its CLCPA mandated climate goals.

i. *The Draft Plan Must Amend Key Definitions for Specificity*

The Draft Plan relies on such terms “low-carbon alternative fuels,” “hard-to-electrify sectors,” and “high-impact applications” without providing clear definitions. This vagueness creates risks of manipulation and weakens the Plan’s usefulness as a policy roadmap. For example:

- **“Low-carbon alternative fuels”** anchors the Draft Plan’s discussion of alternative fuels, yet there is no threshold or test for what qualifies as “low-carbon.” Without specifying whether this is based on lifecycle emissions, CLCPA accounting, or another standard, the term is open to manipulation and inconsistent application.
- **“Hard-to-electrify sectors”** is invoked repeatedly to justify where alternative fuels should be deployed but never sets out clear criteria for what counts as “hard-to-electrify.” In practice, this category should be limited to aviation, heavy trucking, and high-heat industry, not broadly applied to justify combustion where electrification is viable. The absence of a defined test leaves the category open-ended and contestable.
- **“High-impact applications”** is left undefined throughout the Draft Plan, leaving uncertainty about whether “impact” refers to emissions reductions, health benefits, system reliability, or cost-effectiveness.

This definitional vagueness is especially problematic given the long history of fuel and feedstock categories being stretched to include high-emitting or harmful practices and New York’s inability to adopt a clean fuel standard that is truly sustainable and economically viable.

Recommendations: The Draft Plan must be amended to provide precise definitions, tied to lifecycle-analysis carbon accounting GHG thresholds and CLCPA requirements, to ensure consistency, enforceability, and protection of DACs to ensure environmental justice.

ii. *The Final Plan Must Propose a Clear Feedstock Hierarchy to Prioritize Waste-Based Feedstocks and Utilize Lifecycle Analysis Carbon Accounting*

The Draft Plan correctly expresses a preference for waste- and residue-based feedstocks over purpose-grown crops,²⁰ but fails to explain how this preference will be implemented.²¹ Incentive programs should be structured to explicitly reward fuels with the highest lifecycle GHG benefits and lowest co-pollutant impacts while excluding or severely limiting support for crop-based biofuels. A clear statutory or regulatory hierarchy of feedstock eligibility is needed, coupled with rigorous lifecycle analysis carbon accounting requirements, to prevent loopholes and ensure that only genuinely low-carbon, waste-derived fuels receive support.

The Draft Plan also notes that “new policies – including mandates, market-based mechanisms, and incentives – will be needed” but offers few specifics beyond a \$24.5 million RGGI allocation

²⁰ *Id.*

²¹ Draft Plan at p. 68.

for pilots, which is “vanishingly small” compared to actual investment needs.²² The Draft Plan states that fuels should be “waste-based” and reserved for hard-to-electrify niches,²³ but it provides no feedstock hierarchy or program eligibility rule to operationalize this preference. Further, it references various tracking frameworks, but commits to none, leaving open risks of double counting and unverifiable claims.²⁴

Recommendations: The Final Plan must: (1) Establish a clear statutory or regulatory hierarchy of feedstock eligibility; (2) Explicitly adopt a rigorous lifecycle analysis carbon accounting requirements to prevent loopholes and ensure that only genuinely low-emitting, waste-derived fuels receive support; and (3) commit to a single verifiable tracking and accounting system.

iii. *The Draft Plan Must Be Amended to Strengthen its Environmental Justice Provisions and Address New York’s Support of Harmful Programs*

Chapter 5 of the Draft Plan invokes environmental justice but fails to comply with the requirements of CLCPA §7(3). That statute provides that when considering and issuing permits, licenses, or other approvals, state agencies “shall not disproportionately burden disadvantaged communities”²⁵ and “shall prioritize reductions of greenhouse gas emissions and co-pollutants in disadvantaged communities.”²⁶ Further, Chapter 5 states that “deployment of alternative fuels must avoid increasing co-pollutants in Disadvantaged Communities” and that “disadvantaged populations must equitably benefit from the transition to clean energy.”²⁷ Later, it acknowledges that fuels such as renewable natural gas (“RNG”) and hydrogen “must be carefully managed to ensure that their use does not result in adverse health or equity outcomes.”²⁸ These statements correctly recognize the risk but they stop short of providing a methodology for doing so. As such, Chapter 5 does not provide a framework for agencies to comply with §7(3)(c) and §7(3)(d).

Chapter 5 of the Draft Plan also fails to examine whether existing New York incentive structures are channeling support toward fuels with questionable climate or health values. Several state programs subsidize alternative fuels without lifecycle or equity safeguards, creating the risk of prolonging combustion, imposing disproportionate burdens in DACs, and diverting resources from electrification. One example is the Clean Heating Fuel Tax Credit, which provides a refundable credit of up to twenty cents per gallon of biodiesel blended into heating oil.²⁹ Similarly, the Low-Carbon Heating Fuel Law requires heating oil statewide to contain 20 percent biodiesel by 2030.³⁰ While intended as a transitional step, both policies embed continued combustion heating and risk slowing building electrification.

New York also supports RNG projects through the Clean Energy Fund, including anaerobic digesters on large dairy operations.³¹ These projects capture methane but can entrench

²² Alt. Fuels Ch. Draft at pp. 3, 26; and Draft Plan at p. 69.

²³ Alt. Fuels Ch. Draft at pp. 4, 8.

²⁴ *Id.* at p. 29, 32.

²⁵ CLCPA § 7(3)(c).

²⁶ CLCPA § 7(3)(d).

²⁷ Alt. Fuels Ch. Draft at p. 2.

²⁸ *Id.* at p. 2.

²⁹ New York State Department of Taxation and Finance, IT-241 Instructions (2023). Available at: <https://www.tax.ny.gov/pdf/2023/printable-pdfs/inc/it241i-2023.pdf>.

³⁰ N.Y. Energy Law §17-101.

³¹ NYSEDA, *Clean Energy Fund*. Available at: <https://www.nyserda.ny.gov/About/Funding/Clean-Energy-Fund>.

concentrated animal feeding operations and generate new combustion emissions downstream. The California Environmental Justice Alliance, Sierra Club, and others note that such projects may exacerbate co-pollutant impacts in rural disadvantaged communities.³² Further, RNG projects in New York’s dairy industry have already provoked community opposition due to air quality and traffic impacts.³³

Hydrogen incentives are another area of concern. The New York State Energy Research and Development Agency (“NYSERDA”) has committed over \$22 million for hydrogen demonstration projects across transportation, heating, and industrial sectors.³⁴ In early 2025, NYSERDA announced an additional \$3.7 million for hydrogen fuel cell demonstrations to support grid reliability and industrial decarbonization.³⁵ The state also provides a 50% tax credit for alternative fueling infrastructure.³⁶ The 2025 Hydrogen Assessment stresses the importance of electrolytic hydrogen produced with renewable energy, indicating that policy should gate incentives accordingly.³⁷ Yet current incentives are not clearly limited to this pathway. As the Scoping Plan warns, hydrogen blending into gas networks raises safety and local air quality concerns.³⁸

Continuing to subsidize crop-based biodiesel, dairy RNG, and fossil-derived hydrogen without reform risks undermining CLCPA §§7(3)(c)-(d), which prohibit disproportionate burdens in DACs and require prioritization of GHG emission reductions in those communities. By conditioning incentives on lifecycle GHG emissions and §7(3) compliance, New York can prevent lock-in and ensure that public funds accelerate, rather than delay, the transition to a zero-emission future.

Recommendations: The Final Plan should include commitments to: (1) Establish baselines of existing co-pollutant levels in DACs; (2) Promote decision making criteria that prohibits support for any alternative fuel program that increases pollution burdens in DACs; (3) Revise RNG and dairy digester subsidies by requiring full lifecycle GHG accounting and demonstration of no disproportionate co-pollutant impacts; (4) Limit hydrogen incentives to “green hydrogen” produced from renewable electricity, prohibiting support for fossil-derived hydrogen or blending into gas pipelines; and (5) Require §7(3) screening for all fuel subsidies, including disclosure of emissions and local impacts as a condition of funding.

³² See, e.g., Clean Energy Justice Alliance, Natural Gas Mythbusters; Energy Sustainability Directory; Rural Climate Network, Rural Emissions Report (2024). Available at: <https://ceja.org/what-we-do/regenerate-california/fact-sheet/natural-gas-mythbusters/>; Energy Sustainability Directory, “What Impacts Does RNG Policy Have on Communities?” (2024). Available at: <https://energy.sustainability-directory.com/question/what-impacts-does-rng-policy-have-on-communities/>; and Rural Climate Network, *Rural Emissions Report 2024*. Available at: <https://ruralclimate.org/rural-emissions-report-2024/>.

³³ RTO Insider, “Enviros, NY RNG Developer Argue Over Emissions” (2025). Available at: <https://www.rtoinsider.com/30239-enviros-ny-rng-developer-argue-over-emissions/>.

³⁴ NYSERDA, Hydrogen Innovation Projects (2025). Available at: <https://www.nyserda.ny.gov/All-Programs/Hydrogen/Hydrogen-Innovation-Projects>.

³⁵ NYSERDA Press Release, “NYSERDA Announces \$3 Million to Support Clean Hydrogen Resources” (June 9, 2025). Available at: <https://www.nyserda.ny.gov/About/Newsroom/2025-Announcements/2025-06-09-NYSERDA-Announces-3-Million-Available-To-Support-Clean-Hydrogen-Resources>.

³⁶ N.Y. Tax Law §187-b; Alternative Fuels Data Center, Hydrogen Laws and Incentives – New York (2025). Available at: <https://afdc.energy.gov/fuels/laws/HY?state=ny>.

³⁷ NYSERDA, Hydrogen Assessment (2025), pp. 1–5. Available at: <https://www.nyserda.ny.gov/-/media/Project/Nyserda/Files/Programs/Hydrogen/Hydrogen-Assessment-2025.pdf>.

³⁸ Scoping Plan at p. 355.

iv. *The Draft Plan Must Be Amended to Explicitly Support a Clean Transportation Standard*

A clean fuel standard (“CFS”) model, exemplified by the U.S. Renewable Fuel Standard (“RFS”) and California’s Low Carbon Fuel Standard (“LCFS”), carries significant structural risks. Under the RFS, blending mandates guarantee a market for biofuels (especially corn ethanol, biodiesel, and advanced biofuels), regardless of whether they yield net environmental benefits, thereby encouraging land use change, food price increases, and indirect emissions leakage. It is estimated that around 40 percent of U.S.-grown corn is used for ethanol production.³⁹

California’s LCFS, while more technically sophisticated, has also drawn criticism for skewing incentives toward biofuel or biogas pathways: over 80 percent of cumulative LCFS credits issued to date have flowed to combustion-based biofuel producers rather than electrification, undermining alignment with zero-emission vehicle goals.⁴⁰ Its market is vulnerable to speculative credit pricing, variable lifecycle modeling assumptions, and credit gaming (e.g. over-crediting methane capture), which can reduce transparency, weaken accountability, and distort the technology transitions the policy intends to drive.⁴¹

Further, fuel standards were designed to displace petroleum with renewable fuels but can have unintended, oppositional effects and exacerbate the very problems they are introduced to fix. For example, under the RFS, an obligated party’s Renewable Volume Obligation (“RVO”), essentially how much alternative fuel the party is responsible for producing or blending, is calculated as a percentage of gasoline and diesel sales. The more petroleum sold, the larger the RVO. Because demand and supply of petroleum products are inelastic, this design does not reduce fossil fuel consumption. Studies estimate demand elasticity at approximately -0.18 and supply elasticity near zero, meaning that higher prices have little effect on demand or supply.⁴² As a result, programs like the RFS and LCFS often result in biofuels being added to, rather than substituting for, petroleum, thereby increasing total fuel use and emissions.

The Draft Plan’s acknowledgement that “NYSERDA and NYSDEC have initiated a study to evaluate how a Clean Transportation Standard (“CTS”) may contribute to clean energy deployment, emissions reductions, health, and equity in New York State” is a step in the right direction. The current draft bill in New York (S1343 / A472) also shows some promise but does not yet fully align with CTS principles. It would require DEC to adopt a CFS targeting a 20 percent GHG intensity reduction in on-road fuels by 2032 and to promulgate further five-year reductions. It mandates full lifecycle accounting including indirect emissions, and it includes a requirement

³⁹ R Street Institute, “The Consumer Costs and Climate Impacts of the RFS.” Available at: <https://www.rstreet.org/research/the-consumer-costs-and-climate-impacts-of-the-rfs/>.

⁴⁰ Kleinman Center for Energy Policy, “California’s Low Carbon Fuel Standard.” Available at: <https://kleinmanenergy.upenn.edu/research/publications/californias-low-carbon-fuel-standard/>.

⁴¹ See, e.g. CalMatters, *Overhaul Low Carbon Fuel Standard* (2024). Available at: <https://calmatters.org/commentary/2024/10/overhaul-low-carbon-fuel-standard/>; and International Council on Clean Transportation, *Delays in CA LCFS Revisions Are an Opportunity to Improve* (2024). Available at: <https://theicct.org/delays-in-ca-lcfs-revisions-are-an-opportunity-to-improve-june24/>.

⁴² Lutz Kilian, *Journal of Economic Literature* (2020), p. 1048.

for utilities, agencies, and authorities to allocate (to the extent practicable) 40% of their earned credit value toward electrified transportation benefiting disadvantaged communities.⁴³

The Draft Plan does not provide clear policy imperatives or strategic guidance regarding the development of a CTS and or its role in New York’s broader decarbonization framework. PECC offers the following recommendations for the Planning Board’s consideration to ensure the Final Plan establishes policies that address the weaknesses in the current bill and provide more specific direction to NYSERDA and NYSDEC as they advance their CTS study.

Recommendation: The Final Plan should provide a clear, non-partisan policy direction supporting a CTS that: (1) Excludes first-generation biofuels; (2) Requires obligated petroleum suppliers, utilities, and agencies to finance transport electrification, prioritizing DAC areas; (3) Applies a co-pollutant screen so only fuels with demonstrably lower local air-pollution burdens earn credits; (4) Ensures that any effective tax or other burdens do not affect DACs; (5) Explicitly rewards public-transport users, providers, and non-road electrification; and (6) Sets a medium-term trajectory phasing out crediting for combustion fuels (i.e., a built-in sunset), in line with CLCPA mandates.⁴⁴

C. The Draft Plan Underestimates Thermal Energy’s Ability to Decarbonize Communities and Reduce Transmission Expansion in the Near Term

i. *Need for Market Pluralism and Community-Led Models*

The Draft Plan’s limited treatment of thermal technologies, particularly ground-source and ambient Thermal Energy Networks (“TENs”), represents a significant missed opportunity. TENs are mentioned only in the context of natural gas system planning and utility-led strategies, despite their demonstrated potential to serve as cornerstone infrastructure for near-term decarbonization and cost-effective system transformation.⁴⁵ This omission risks perpetuating a model in which investor-owned utilities (“IOUs”) dominate deployment and planning decisions, limiting the market’s ability to innovate and excluding municipalities, cooperatives, non-profits, and public-private partnerships (“PPPs”) from fully participating in and shaping the clean energy transition.

The State’s current implementation of the Utility Thermal Energy Network and Jobs Act (UTENJA) further illustrates this utility-centered approach, as the PSC proceeding established in Case 22-M-0429 focuses primarily on utility-led pilots and planning frameworks without yet offering a clear pathway for non-IOU entities to participate.⁴⁶ New York cannot meet its CLCPA mandates or its statutory equity requirements if the deployment of TENs is constrained by legacy utility structures. While utilities have an important role to play, they should not be prioritized over community-led initiatives, PPPs, and third-party ownership models. State policy must instead facilitate a pluralistic market, one in which non-IOU entities have equitable access to capital and

⁴³ City of New York, “Support Memo for Clean Fuel Standard 2025 Bill S1343A/A472A.” Available at: <https://www.nyc.gov/assets/dcas/downloads/pdf/fleet/2025/nyc-support-memo-for-clean-fuel-standard-2025-bill-s1343a-and-a472a.pdf>.

⁴⁴ Columbia Law School, Sabin Center, *Clean Transportation Standard*. Available at: <https://climate.law.columbia.edu/content/clean-transportation-standard>.

⁴⁵ Draft Plan at p. 47.

⁴⁶ Pace Energy & Climate Center, *Municipal Options for TENs* (2025), p. 15. Available at: <https://bpb-us-w2.wpmucdn.com/blogs.pace.edu/dist/5/235/files/2025/05/PECC-MV-Report-FINAL-w-Logo-2025-5-13.pdf> (“*Municipal Options for TENs*”); and Proceeding on Motion of the Commission to Implement the Utility Thermal Energy Network and Jobs Act, Case 22-M-0429, *Order Initiating Proceeding* (N.Y. Pub. Serv. Comm’n Dec. 15, 2022).

clear regulatory pathways to develop, own, and operate TEN-infrastructure. This includes developing public financing mechanisms and grant programs to support municipal, cooperative, and other novel ownership models, which are particularly well-suited to serve DACs and reduce monopoly power over critical utility infrastructure.⁴⁷

ii. *Unlocking Grid Benefits Through Integrated Modeling of Ground-Source and Ambient Thermal Networks*

Moreover, the Draft Plan underestimates the ability of ground-source and ambient thermal systems to deliver rapid emissions reductions, defer expensive transmission and distribution (“T&D”) upgrades, and enhance grid reliability. The Scoping Plan emphasized that “non-wire and non-pipe alternatives, including ambient loop and district-scale thermal systems, should be prioritized in integrated planning”.⁴⁸ By contrast, the Draft Plan’s emphasis on expanding electric infrastructure and combustion backup resources ignores the potential for TENs to reduce peak electricity demand, thereby lowering the scale and cost of necessary grid expansion.

The role of ground-source and ambient thermal technologies in reducing peak demand and system costs must be fully recognized in statewide planning. As New York transitions to a 100% clean electric system by 2040, it is imperative that the State integrate demand-side thermal solutions – including ground-source heat pumps (“GSHPs”), district-scale TENs, and ambient or waste heat recovery systems – into transmission and distribution planning models. These technologies displace fossil fuel heating and cooling loads, reduce winter and summer peaks, and moderate long-term infrastructure needs while maintaining system reliability even during extreme events.⁴⁹

The Brattle Group’s *Grid Flexibility Potential* study (“GFP Study”), prepared for NYSERDA and the Department of Public Service (“DPS”) within the *Grid of the Future* proceeding, estimates that New York could unlock more than 8.5 GW of cost-effective grid flexibility by 2040 (roughly 21% of projected winter peak demand) through targeted demand-side strategies.⁵⁰ If realized, this potential could avoid nearly \$3 billion annually in system costs by reducing the need for new generation capacity and deferring distribution infrastructure investments.⁵¹ The GFP Study did model heat pump load control (including space and water heating) as part of its flexibility portfolio, finding that “Heat pump flexibility could play an important role in addressing winter resource adequacy concerns.”⁵² However, the GFP Study also notes that several important technologies, including ground-sourced TENs, thermal energy storage, and other ambient-source thermal solutions, were not modeled due to insufficient empirical data and will be addressed in a future volume (Volume III) of the study series.⁵³

⁴⁷ *Municipal Options for TENs* at p. 6–7.

⁴⁸ Scoping Plan at 261.

⁴⁹ Maryland Energy Administration, *Electrical Grid Impact of Ground Source Heat Pump Technologies* (2025). Available at:

<https://energy.maryland.gov/Reports/Electrical%20Grid%20Impact%20of%20Ground%20Source%20Heat%20Pump%20Technologies.pdf> (the “Maryland GSHP Study”).

⁵⁰ The Brattle Group, *New York’s Grid Flexibility Potential, Vol. I* (2025), pp. 44–45. Available at: <https://www.brattle.com/wp-content/uploads/2025/02/New-Yorks-Grid-Flexibility-Potential-Volume-I-Summary-Report.pdf> (the “GFP Study”).

⁵¹ *Id.*

⁵² *Id.* at p. 9.

⁵³ *Id.* at p. 36.

Recent experience in Maryland underscores the transformative potential of such an approach. A 2023 statewide study found that widespread deployment of GSHP systems could reduce winter peak demand by roughly 20% below current levels and by up to 45% compared to a scenario dominated by air-source heat pumps.⁵⁴ These reductions have profound system-wide implications: lower coincident peaks directly reduce the amount of new generation transmission; and distribution capacity required to serve electrified buildings, while simultaneously improving reliability and lowering long-term costs for ratepayers.⁵⁵

The potential scale of TEN deployment in New York is similarly substantial. As raised in their comments, analysis by the New York Geothermal Organization (“NY Geo”) shows that tens of thousands of buildings could be connected to district-scale geothermal networks within this decade if regulatory and market barriers were addressed. These systems can deliver immediate decarbonization benefits while simultaneously supporting electrification by smoothing load profiles and reducing the need for new peaking generation. Additionally, TENs are uniquely capable of capturing non-traditional thermal resources such as wastewater heat, data center waste heat, and industrial process heat, improving system efficiency and reducing lifecycle emissions.⁵⁶

As such, the potential contribution of ground-sourced and ambient thermal technologies to peak demand reduction and system reliability remains unquantified in New York, highlighting the urgent need for further analysis and field research. The Final Plan must direct the State to rigorously evaluate these technologies as part of its grid flexibility framework by modeling deployment at multiple scales, from individual buildings to district-scale networks, quantifying their cumulative impact on seasonal peaks, and assessing avoided investments in generation, transmission, and distribution infrastructure. This analysis should also account for geographic and system variability to optimize deployment and evaluate the role of ambient and waste heat sources, such as wastewater, data centers, and industrial processes, as inputs to district-scale systems.⁵⁷

iii. *Time-Sensitive Federal Incentives and Policy Direction*

The urgency of aligning statewide policy to recognize ground-sourced and ambient thermal technologies as core demand-side solutions is heightened by the limited window to leverage enhanced federal tax incentives maintained under the One Big Beautiful Bill Act, particularly the Section 48 Investment Tax Credit.⁵⁸ These incentives, offering up to a 50% credit for qualifying geothermal projects, can dramatically improve project economics for public, nonprofit, and cooperative entities when paired with ownership models that enable direct pay or credit transferability.⁵⁹ Absent clear policy guidance supporting diverse ownership and financing structures, New York risks forfeiting substantial federal investment that could accelerate equitable decarbonization.

Recommendations: The Planning Board must ensure that the Final Plan: (1) Explicitly recognizes ground-source and ambient thermal infrastructure, including TENs, as core demand-side resources on par with storage, demand response, and distributed generation in statewide energy and infrastructure planning; (2) Integrates the peak-reduction and cost-deferral value of ground-

⁵⁴ *Maryland GSHP Study* at p. 3.

⁵⁵ *Maryland GSHP Study* at p. 4.

⁵⁶ *Municipal Options for TENs* at p. 12.

⁵⁷ *GFP Study* at pp. 27, 30, 36.

⁵⁸ 26 U.S.C. § 48.

⁵⁹ *Id.*

sourced and ambient thermal systems into transmission and distribution system modeling; (3) Supports a comprehensive statewide analysis of the peak demand reduction and infrastructure impacts of thermal systems, ideally as part of Volume III of the *Grid Flexibility Study*, or through a companion initiative; and (4) Direct state agencies to: (i) Develop a strategic deployment framework for TENS, ensuring that (a) planning is inclusive of community-led, campus-scale, and public-private partnership models, (b) deployment in DACs is prioritized, and (c) grid flexibility and thermal infrastructure are jointly optimized in long-term capital planning; (ii) Establish clear pathways for diverse ownership models to participate immediately in TEN deployment to reduce overreliance on IOUs and enable broader innovation and local control, including through modifications to the UTENJA implementation process to allow for community-led and non-utility participation in pilot projects and planning; and (iii) Leverage enhanced federal tax incentives under Section 48 of the IRC, as amended by the Inflation Reduction Act, by supporting ownership structures that enable elective payment (direct pay) and transferability.

II. The Draft Plan Must Prioritize Long Term Energy Affordability

New York’s energy transition must center affordability as a core policy goal, not a secondary benefit. The CLCPA explicitly requires that climate action “mitigate the impacts on disadvantaged communities and low- and moderate-income (“LMI”) households,” and affordability must therefore inform every major policy and programmatic decision.⁶⁰ While the Draft Plan acknowledges the need to “prioritize energy affordability for consumers” and reduce long-term system costs through demand-side solutions and flexible resources,⁶¹ it falls short of presenting a comprehensive strategy to achieve these outcomes, particularly as federal energy efficiency incentives expire and new affordability challenges emerge.

A. Renewable Energy and Cap-and-Invest are Cornerstones of Long-Term Cost Stability and Price Resilience

Decades of empirical data demonstrate that renewable energy resources, including wind, solar, and geothermal, provide long-term price stability and significantly lower lifecycle system costs. Continued reliance on fossil fuels, even for short-term price relief, exposes ratepayers to fuel price volatility and geopolitical risks.⁶² As the Draft Plan itself acknowledges, natural gas price spikes in 2022 and 2023, driven by global supply constraints, significantly increased wholesale electricity costs and highlighted the vulnerability of fossil-based systems.⁶³

The Draft Plan further acknowledges that wholesale and retail electricity prices remain tied to natural gas markets,⁶⁴ yet does not go far enough in prioritizing renewable deployment as a hedge against future price shocks. Scaling renewables, paired with storage and demand-side resources, will deliver predictable, low-cost power over decades and minimize exposure to volatile

⁶⁰ N.Y. Env’tl. Conserv. Law § 75-0103(11).

⁶¹ Draft 2025 Energy Plan, Ch. 1, Electricity, p. 1. Available at: <https://energyplan.ny.gov/-/media/Project/EnergyPlan/files/Draft-2025-Energy-Plan/Topic-Area-Chapters/Draft-New-York-State-Energy-Plan-01-Electricity.pdf> (the “Electricity Ch. Draft”).

⁶² See Navia Simon & Laura Diaz Anadón, “Power Price Stability and the Insurance Value of Renewable Technologies,” Nat. Energy 10, 329–341 (2025). Available at: <https://doi.org/10.1038/s41560-025-01704-0>; and see Roosevelt Institute, *Energy Price Stability: The Peril of Fossil Fuels and the Promise of Renewables* (2022). Available at: https://rooseveltinstitute.org/wp-content/uploads/2022/05/RI_EnergyPriceStability_IssueBrief_202205.pdf.

⁶³ Electricity Ch. Draft at pp. 17–19.

⁶⁴ *Id.* at p. 17.

commodity markets, a critical affordability strategy for households and businesses alike. At the same time, the state must identify ways to bridge the investment gap created by the reduction or expiration of key IRA incentives. Strategic use of remaining tax credits, green bank financing, state bonding authority, and PPPs can help sustain the pace of renewable buildout even as federal support wanes.

Critically, the Draft Plan also fails to identify a durable, long-term funding mechanism for the clean energy transition. Despite its central role in the 2022 Scoping Plan,⁶⁵ the Draft Plan is silent on a cap-and-invest program, which the Legislature has authorized and for which DEC has already drafted regulatory proposals. A well-designed cap-and-invest program would create a stable, predictable revenue stream to fund decarbonization investments and offset ratepayer costs. Auction revenues could be recycled into bill credits for LMI customers, weatherization and electrification incentives, and community solar deployment, ensuring that emissions reductions and affordability progress advance in tandem.⁶⁶ Absent such a mechanism, the State's affordability approach risks remaining piecemeal, fragmented, and overly dependent on federal funding cycles.

B. Addressing Energy Burden and Ensuring Equitable Access to Clean Energy Programs

Since at least 2016, the PSC has recognized that energy bills for LMI households should not exceed 6% of household income.⁶⁷ Achieving this benchmark, widely accepted by national experts as the affordability threshold, should be a guiding principle of the Final Plan.⁶⁸

New York's energy affordability challenges are most acute for low-income households. The Draft Plan acknowledges that 20% of the state's lowest earners face an energy burden of 10% of their income, four times the statewide average.⁶⁹ To combat this burden, many New Yorkers (almost 2 million in 2024) rely on the federal Low Income Home Energy Assistance Program ("LIHEAP"), administered regionally in New York through utility Energy Assistance Programs, or EAPs.⁷⁰ While LIHEAP has strong bipartisan support in Congress, federal support cannot be assumed to remain constant. New York must proactively strengthen its own assistance programs and build durable state-level solutions to address high energy burdens, especially if LIHEAP is cut or restricted in future years.

Existing state programs demonstrate how targeted support can reduce costs while accelerating decarbonization. The Regional Clean Energy Hub initiative connects residents to local partners who help them navigate home energy assessments, understand available incentives, enroll in community solar, and access weatherization and efficiency upgrades.⁷¹ Similarly, EmPower+

⁶⁵ Scoping Plan at pp. 21-23, 339-347.

⁶⁶ Acadia Center & WE ACT for Environmental Justice, *New York's Household Energy Burden: Imperative, Challenges, and Solutions* (2025), pp. 20–22. Available at: https://acadiacenter.wpenginepowered.com/wp-content/uploads/2025/03/AC_WeAct_EnergyBurden_R5.pdf.

⁶⁷ Proceeding on Motion of the Commission to Examine Programs to Address Energy Affordability for Low Income Utility Customers, Case 14-M-0565, *Order Adopting Low Income Program Modifications* (N.Y. Pub. Serv. Comm'n May 18, 2023), at 7–8.

⁶⁸ ACEEE, "How High Are Household Energy Burdens?" (2020), p. 4. Available at: <https://www.aceee.org/research-report/u2006>.

⁶⁹ Draft Plan at p. 16.

⁷⁰ New York State Comptroller, "Low Income Home Energy Assistance Program" (2025). Available at: <https://www.osc.ny.gov/reports/budget/fed-funding-ny/low-income-home-energy-assistance-program>.

⁷¹ NYSEDA, Regional Clean Energy Hubs (2025). Available at: <https://www.nyserda.ny.gov/All-Programs/Regional-Clean-Energy-Hubs>.

offers free home energy assessments and direct installation of efficiency measures, and provides up to \$10,000 in funding for deeper upgrades such as air sealing, insulation, and heat pump installation.⁷² Complementary initiatives like NYSERDA’s Comfort Home⁷³ and Clean Heat⁷⁴ programs further support electrification and weatherization, while income-eligible programs such as the Affordable Multifamily Energy Efficiency Program (“AMEEP”),⁷⁵ Climate Friendly Homes Fund,⁷⁶ and the Clean Green Schools Initiative⁷⁷ expand access for renters, multifamily properties, and public institutions. These interventions are proven to lower bills, improve comfort, and cut emissions, but they require sustained and increased funding to reach more households and cover larger portions of upgrade costs. Streamlining eligibility across these programs, coordinating outreach through Clean Energy Hubs, and increasing incentive levels, particularly for LMI households and rental housing, will be essential to meeting the 6% energy burden target and ensuring equitable participation statewide.

Finally, The Draft Plan correctly acknowledges need for coordinated action between relevant state agencies on expanding weatherization programs, pairing electrification with solar deployment, and incorporating non-energy housing upgrades, to help ensure affordability and equity goals are met in both owner-occupied and rental housing.⁷⁸ The Final Plan much include specific provisions to address the needs of renters, who make up nearly half of New York households and often face cost-shifting and split-incentive barriers in electrification projects.⁷⁹

C. Financing Electrification and Reforming Rate Design to Advance Affordability

Achieving long-term affordability is inseparable from enabling low-income households to participate fully in electrification and efficiency programs. The Draft Plan notes the importance of “advancing demand-side solutions,” but does not include concrete mechanisms to ensure these solutions are accessible to those who need them most.⁸⁰

New York should establish a comprehensive suite of low-income financing tools, including on-bill repayment, zero-interest loans, and public credit enhancements, to support electrification of homes and small businesses. Automatic eligibility based on income, energy burden, or participation in assistance programs would reduce administrative barriers and maximize participation. These mechanisms should be paired with deeper subsidies for disadvantaged communities, leveraging state resources and remaining federal credits to reduce upfront costs.

⁷² NYSERDA, “What to Expect: EmPower+” (2025). Available at: <https://www.nyserdera.ny.gov/All-Programs/EmPower-New-York-Program/What-to-Expect>.

⁷³ NYSERDA, Comfort Home Program. Available at: <https://www.nyserdera.ny.gov/All-Programs/Comfort-Home-Program>.

⁷⁴ NYSERDA, Clean Heat Program. Available at: <https://www.nyserdera.ny.gov/All-Programs/Heat-Pump-Program>.

⁷⁵ NYSERDA, Income-Eligible Programs. Available at: <https://www.nyserdera.ny.gov/All-Programs/Residential-and-Property-Owner-Income-Eligible-Programs>.

⁷⁶ NYS Homes and Community Renewal, Climate Friendly Homes Fund. Available at: <https://hcr.ny.gov/climate-friendly-homes-fund>.

⁷⁷ NYSERDA, P-12 Initiative. Available at: <https://www.nyserdera.ny.gov/All-Programs/P-12-Initiative>.

⁷⁸ Draft Plan at p. 84–85

⁷⁹ See NYSERDA, *Carbon Neutral Buildings Roadmap* (2022), p. 33. Available at: <https://www.nyserdera.ny.gov/-/media/Project/Nyserda/Files/Programs/Carbon-Neutral-Buildings/carbon-neutral-buildings-roadmap.pdf>.

⁸⁰ Draft Plan Electricity at p. 65.

Equally important, the Plan must address utility rate design as a driver of affordability. Current volumetric and demand-based charges often penalize customers who electrify or invest in efficiency by increasing fixed charges or shifting costs. As noted in the Draft Plan, the PSC's ongoing work on three-part standby and as-used daily demand rates should be accelerated and paired with progressive, income-sensitive rate structures.⁸¹ Well-designed rates can encourage load flexibility, reduce peak demand, and ensure cost recovery occurs equitably while lowering bills for those who can least afford them.

Further, demand-side and thermal strategies that reduce peak demand, such as GSHPs, TENS, and load flexibility, should be explicitly integrated into affordability planning.⁸² Lower peak demand reduces the need for expensive capacity and infrastructure investments, and those avoided costs should translate into direct customer savings. Aligning affordability programs with grid planning will ensure that households benefit directly from the system-wide savings these strategies create.

Recommendations: The Planning Board must ensure that the Final Plan: (1) Embeds affordability as a core planning objective by explicitly adopting the PSC's 6% energy burden standard and requiring agencies to report progress toward that target; (2) Establishes a durable funding mechanism (such as a cap-and-invest program) to generate predictable revenues for bill credits, electrification incentives, weatherization, and community solar deployment, ensuring affordability and decarbonization advance together; (3) Expands and streamlines state assistance and retrofit programs, including EmPower+, Comfort Home, and Clean Heat, while prioritizing renters, multifamily properties, and disadvantaged communities, particularly in the event of reduced federal LIHEAP funding; (4) Creates a comprehensive suite of low-income financing tools, including on-bill repayment, zero-interest loans, and public credit enhancements, with automatic eligibility based on income or participation in assistance programs to maximize participation and reduce barriers; (5) Directs the PSC to accelerate utility rate design reform by implementing progressive, income-sensitive rates that reward load flexibility, reduce peak demand, and eliminate cost-shifting that penalizes electrification and efficiency investments; and (6) Requires the integration of demand-side and thermal solutions, including GSHPs and TENS, into affordability planning and grid modeling to capture peak-reduction and infrastructure cost savings, ensuring that those savings translate directly into lower household energy bills.

III. Conclusion & Final Recommendations

New York stands at a critical juncture in its climate and energy future. The CLCPA and Energy Law §6-104 set forth legally binding mandates that require not only deep decarbonization but also an equitable, affordable, and reliable energy transition. The 2025 State Energy Plan must therefore serve as more than a roadmap: It must function as an enforceable strategy for meeting those mandates while protecting communities, strengthening resilience, and fostering long-term economic opportunity.

⁸¹ Draft Plan Electricity at p. 73; see also PSC Case 15-E-0751, available at: <https://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=15-E-0751&submit=Search>.

⁸² *GFP Study* at pp. 27, 30, 36.

PECC's recommendations are designed to ensure that the Final Plan meets these objectives by advancing a more comprehensive, detailed, and actionable policy framework. Specifically, the Planning Board should:

1. **Commit to a near-term phaseout of fossil fuels** consistent with the CLCPA's 2040 zero-emissions mandate, including a clear 2030 target for ending state support for natural gas and petroleum fuels except where narrowly required for reliability.
2. **Accelerate renewable deployment and system planning** by adopting a stepped electrification strategy, aligning resource development with load growth, setting enforceable peaker retirement timelines, and integrating distributed generation, storage, demand response, and flexible resources into reliability planning.
3. **Establish clear, enforceable standards for alternative fuels** by defining eligibility based on lifecycle GHG accounting, prioritizing waste-based feedstocks, conditioning incentives on §7(3) compliance, and supporting a Clean Transportation Standard that accelerates electrification while protecting disadvantaged communities.
4. **Recognize and scale thermal energy networks as critical infrastructure** by incorporating ground-source and ambient systems into grid modeling, expanding ownership models beyond utilities, and leveraging federal incentives to accelerate deployment in disadvantaged and environmental justice communities.
5. **Center affordability and equity in all aspects of planning** by adopting the PSC's 6% energy-burden benchmark, creating a durable funding mechanism such as cap-and-invest to support bill relief and clean-energy deployment, expanding and streamlining retrofit and incentive programs, reforming utility rate design, and ensuring that avoided system costs are returned directly to households.

By incorporating these recommendations, the Planning Board can transform the Final State Energy Plan into a comprehensive, durable framework that aligns with New York's statutory mandates, strengthens public confidence, and delivers a decarbonized, equitable, and affordable energy future for all New Yorkers.

Respectfully,

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