Members of the Climate Action Council,

My name is Noelle Connolly and I am writing today as a newly minted New Yorker and someone who works in the energy industry. Climate Change is the most existential threat my generation faces. Like all vast societal challenges, it is incredibly complicated and we have to find a way to get all aspects of society to work together to defeat it. This means institutions, business, activists, government, and all others. We must reach our state’s ambitious, but achievable climate goals. I am proud to live in a state that takes this issue so seriously, and I applaud New York’s clean energy goals and the hard work the Climate Action Council has done to prepare the Draft Scoping Plan.

I am very supportive of the plan’s emphasis on energy efficiency, supporting the development of a clean energy workforce, and a desire to create a consumer-centered energy transition. However, although the plan is open to incorporating new technologies along with proven renewables, the Plan does not do enough to protect at-risk New Yorkers from price increases, ensure a reliable energy supply, nor does it contain enough detail or analysis on costs to consumers and the impact on the economy overall.

Fortunately, we can address these problems. A hybrid approach that uses wind, solar, renewable natural gas (RNG), and green hydrogen will exceed New York’s clean energy goals without harming customers or eliminating jobs. Green hydrogen and renewable natural gas can be generated locally and pushed through the existing underground gas infrastructure network, which would allow homeowners or businesses to avoid drastic and expensive retrofits/changes to their existing heating systems – helping to keep costs low while reducing the use of traditional fossil fuels across New York State.

The benefits of utilizing both these technologies are practical. RNG processes prevent methane, and extremely potent greenhouse gas, from entering the atmosphere. Scientists from Stanford point out that removing methane from our atmosphere in the short term will do more than removing carbon for reducing temperatures: “Removing methane from the atmosphere could reduce temperatures even faster than carbon dioxide removal alone because methane is 81 times more potent in terms of warming the climate over the first 20 years after its release, and about 27 times more potent over a century.” (<https://earth.stanford.edu/news/removing-methane-atmosphere#gs.4kg7ip>)

In addition, many leaders recognize the benefits of Green Hydrogen. The federal government is providing funding for research and development of green hydrogen technology, and New York has applied to become part of a regional ‘hub’ for hydrogen development. Bill Gates recently called Green Hydrogen the ‘Swiss army knife’ of clean technologies because of its diverse applications. (<https://www.gatesnotes.com/Energy/Clean-Hydrogen>). Green Hydrogen has been touted as a useful energy source for intensive industrial processes, but there is still a need for an economy of scale to keep this clean technology affordable for manufacturers and hard-to-electrify systems like in restaurants and in many buildings in NYC. Therefore, Green Hydrogen should be used in home heating and hybrid heating scenarios as well, where both the gas system and electric systems are utilized depending on the most economical choice throughout the seasons.

Incorporating RNG and green hydrogen alongside renewable sources for electricity will also ensure we can meet New York’s energy needs during moments of crisis, like blizzards and hurricanes, and serve businesses who want to launch or grow in the state. This is critical to long-term economic growth and job creation across industries.

In the same way we have decarbonized the electric system, we can decarbonize the gas system. Let us use the assets that already work and exist throughout the State, but just push a cleaner fuel source through them.

By avoiding the need for costly renovations and new infrastructure, a hybrid approach will keep costs manageable for consumers who are already struggling to pay their heat and electric bills. It will also protect consumer freedom to choose the energy source that works best. Focusing on a one size fits all approach only using electrification will create an economic burden on our region and the cost and infrastructure needed means we would likely fall short of reaching all our climate goals. A hybrid approach of electrification combined with the increased usage of green hydrogen and renewable natural gas is the better option.

In addition, the plan needs to consider consumer behavior. How will the state incentivize homeowners, property owners, and businesses to make the necessary energy efficiency and weatherization upgrades, changeover of appliances, and the purchase and broad use of electric vehicles? No doubt consumer behavior must change, but financial incentives alone are often not enough. A hybrid approach also promotes consumer choice by allowing business owners and residents to select which systems works best for them, depending on their building, home, or financial situation.

Finally, with the adoption of renewables into the gas network, we can better ensure that existing jobs in this sector can continue to grow, develop, and evolve; we can help to further protect our residents during storms, natural disasters, and subsequent outages by having multiple clean, renewable fuel sources; and we can make significant strides in the fight against climate change, without leaving any member of our community behind.

In all scenarios, it is clear that a huge investment of both financial and human resources will be needed to deploy the technologies to make clean, renewable energy reliable and affordable for all. Utilizing existing infrastructure can help keep costs down. Though many paths are *technically* possible, they may not all be *practical*. Please consider a hybrid path that utilizes all the tools available to us and continue to invest in scaling up Hydrogen and Renewable Natural Gas technologies.

Thank you again for your hard work and dedication to addressing the threat of climate change. I hope you will take these recommendations to heart and revise the Draft Scoping Plan to allow for a hybrid approach that meets New York’s energy goals.