

Good afternoon,

I would like to thank the Board of Public Utilities for the opportunity to provide comments today.

My name is Dr. James Seaba. I am the Senior Director, Technology Development at the Gas Technology Institute (GTI), a non-profit organization with nearly eight decades of experience in developing clean energy technologies.

I have spent the last 30 years of my career working directly on clean, carbon-free technologies, including part of my career as the chief engineer of Honda's fuel-cell program.

My focus on economical and sustainable clean-energy solutions led me to GTI, which is focused on solving today's energy challenges facing society and policymakers, including how to meet the demand for abundant, affordable energy in a manner that addresses environmental goals for future generations.

I believe that everyone here agrees that carbon management is a key environmental concern and priority.

With that in mind, GTI fully supports Governor Murphy's Clean Energy reduction goals.

However, it has come to our attention that the Integrated Energy Plan being developed by the BPU has already selected the preferred pathway to achieve these goals, that being widespread electrification.

Of further concern is that an approach that favors electrification would no longer capitalize on the current natural gas infrastructure, which is part of the integrated energy system in New Jersey. This has two important pitfalls:

- One, the multi-billion dollar natural gas and electric integrated energy system is a key asset that provides the economic pull to enable carbon recycling technologies to deliver clean energy to consumers.
- Second, this integrated energy system will allow a smooth transition to a clean energy future by providing the resiliency and a seamless integration of using recycled and renewable energy in a form compatible with our current end-use products.

GTI works extensively on GHG issues with other stakeholders across business, academia, non-profits and researchers. The difficulty of electrifying all processes is well documented. I am confident that an electric-only approach is not only premature, but will make it nearly-impossible to achieve the state's climate goals in a cost-effective and reliable way. The electric sector itself recognizes these challenges, which is why we at GTI are actively partnering with them to research and develop solutions to these challenges through inclusion of hydrogen and other low-carbon fuels in the future integrated energy system.

Blending renewable fuels with fossil fuels or substituting them altogether is a proven path for creating low-carbon fuels. I know this because GTI is active in a range of biomass and carbon reuse conversion processes to produce gaseous and liquid clean energy fuels suitable for a wide range of applications.

Allowing all technologies to develop and compete at a local level will have the least impact to the end consumer as we transition to a clean energy infrastructure. In addition, new processes and technologies will energize local communities creating more jobs – renewable and synthetic natural gas, hydrogen production and operation of these systems, by their very nature, will be new, local industries with permanent jobs. This is a real, achievable view of the coming green economy that can take shape in New Jersey, with jobs worked by New Jerseyans, benefitting New Jersey communities.

The clean energy future is upon us as recognized by forward thinking leaders, like Governor Murphy. However, it is imperative that all technologies are allowed to address the entire integrated energy system as we move toward a low carbon, clean energy future. This includes carbon neutral and carbon negative fuels that leverage our current infrastructure providing the lowest priced clean fuels for industry, transportation and most importantly the individual consumer.

Thank you for the opportunity to present today.