The primary objective of New Jersey’s Energy Master Plan (“EMP”) should be to provide a strategic vision for ensuring every resident and business has affordable access to reliable energy. As a part of that vision, all types of energy should be considered to ensure New Jersey’s energy portfolio has a diversity of sources, with a clear goal of moving towards increasing New Jersey’s reliance on renewable energy.

1. Energy Source Diversity and Reliability

Any new Energy Master Plan must ensure that existing infrastructure is both sufficiently maintained, improved, and, if necessary, grown to be resilient enough to deliver reliable power in even the most extreme conditions. As Superstorm Sandy exposed, much of our existing energy infrastructure is old, particularly relative to other states. In recent winters, the natural gas pipeline into New England could not address the needs of their region during the extreme winter events they experienced, and some utilities were required to import Russian natural gas as a way to continue to provide heat to their customers. Our efforts to transition to a reliance on cleaner fuel sources should not undermine the guarantee that our energy system is fundamentally robust enough to support us through whatever events we may face.

While some may want to end our reliance on natural gas as a fuel source to help reduce our carbon emissions, the reality today is that 75% of all consumers in New Jersey rely upon natural gas to heat their homes. As the EMP itself acknowledges, since the Oyster Creek nuclear facility was decommissioned, New Jersey has actually increased its reliance on natural gas for its generation needs.

A transition away from natural gas isn’t going to happen overnight, and it is likely that for reliability and redundancy purposes, New Jersey should continue to keep natural gas in its energy portfolio. The next EMP should not focus on precipitously eliminating, but instead on gradually right-sizing New Jersey’s reliance on natural gas. In order to implement a responsible and affordable energy transition, the State’s approach to natural gas should focus on minimizing its detrimental environmental impact by emphasizing energy efficiency and exploring carbon removal options, the latter alternative getting only a single mention in the current draft of the EMP.

More importantly, if the goal is to find ways to reduce New Jersey’s carbon footprint, then we must examine ways to fundamentally alter the transportation systems in New Jersey since they account for almost 50% of all of New Jersey’s emissions.

2. Incorporating Sustainable Solutions for Funding Infrastructure
The first overarching strategy guiding the draft Energy Master Plan is to “reduce energy consumption and emissions from the transportation sector.” The document sets the more specific goal that

The transportation sector should be almost entirely electrified by 2050 with an early focus on light-duty (passenger) vehicles and short-range medium- and heavy-duty vehicles, particularly in environmental justice communities. Further, there should be a concerted effort to reduce vehicle miles traveled and reduce port and airport emissions through electrification.

There is no disputing that the transportation sector accounts for the majority of New Jersey emissions, and that combining a reduction in vehicle miles traveled with the electrification of New Jersey’s transportation represents the lowest-hanging fruit in reducing New Jersey’s carbon emissions.

However, the fact remains that New Jersey’s gas tax is the primary revenue stream for the state’s capital investments in infrastructure. Revenues from that tax are already underperforming due to increased fuel efficiency and a growing reliance on electric and hybrid vehicles, and State transportation officials have acknowledged that in the long run, a surcharge based on vehicle miles traveled will eventually be necessary to supplement or replace gas tax revenues. Notably, vehicle miles traveled have remained steady or increased slightly in recent years, meaning that our transportation infrastructure is being used as much as ever. We are already facing the challenge of lacking a long-term sustainable funding source for our transportation infrastructure needs; further undermining existing funding sources without identifying what would replace them puts our vital transportation infrastructure more at risk.

According to Choose New Jersey, New Jersey’s transportation and distribution sector contributed more than $58.4 billion to the State’s Real Gross Domestic Product in 2016, the fourth highest dollar amount per state in the US. More than 382,200 workers were employed in the sector in 2016 – more than 11% of the State’s private sector workforce – and the number is growing. Since 2015 alone, New Jersey had a net gain of 21,600 jobs in the sector. That number is expected to continue to increase driven by the growth of e-commerce and international trade.

New Jersey’s long-term ability to access sustainable funding streams to fund robust investments in its infrastructure will continue to be vital to the state’s overall economic health. The State needs to be proactive in identifying and securing the revenue streams it will need to fund these investments before a widespread effort to electrify the transportation sector gets underway.

3. “Least-Cost” Does Not Mean Affordable

The draft EMP repeatedly mentions a goal of identifying the “least-cost” means and pathways to achieving 100% clean, carbon-neutral electricity by 2050. According to the Consumer Energy Alliance, each New Jersey resident spent $3,124 to meet their energy needs in 2016, more than residents in New York, Pennsylvania, and Maryland. That same year, New Jersey ranked 11th
nationwide for energy expenditures like home heating, fuel, and electricity bills, totaling over $28 billion in energy costs.

New Jersey is annually among the national leaders in the tax burden borne by its residents, and the comparatively high cost of energy already adds to the overall financial burden on its residents. So while the draft EMP’s goals of pursuing the “least-cost” alternatives to transitioning to clean energy sources, policymakers must bear in mind that “least-cost” is not synonymous with “affordable.” A transition to cleaner energy sources that relies on technologies that are not yet cost-competitive with our current energy sources runs the risk of hindering New Jersey’s economic growth by creating an economic climate that keeps desirable employers from relocating here due to exorbitant energy costs.

4. Ensuring Investments in Energy Are Investments in the Energy Workforce

As important as energy infrastructure is to New Jersey’s economy, we cannot lose sight of the fact that in our current energy landscape, investing in expanding and maintaining our energy infrastructure goes hand in hand with investments in ensuring that our energy workforce is of the highest caliber.

Aside from powering our economy, the energy sector also currently supports high-paying jobs that contribute to a healthy middle class. Incorporating exacting training requirements for the workers that will carry out New Jersey’s energy transition, whatever that looks like, will result in a highly-trained and well-compensated workforce. A continued commitment to setting high standards for our energy workforce will continue to support New Jersey’s middle class while ensuring that our energy infrastructure is built and maintained according to the most rigorous industry safety standards.