Response to Draft 2019 New Jersey Energy Master Plan (EMP)

This EMP is generally a forward-looking plan. It addresses the important factors of New Jersey's (and national) energy use and areas to reduce greenhouse gas emissions and overall energy usage. Its successful implementation as well as its commitment to environmental justice will position New Jersey as a national leader in the energy future.

My comment addresses the goal of "100% clean energy" by 2050. It is important to set lofty goals that are clearly defined. The 100% clean energy-goal is not, especially in terms of energy generation. As defined on page 22, it means 100% carbon neutral. As explained in the footnote on page 23, this allows for carbon capture and carbon offsets.

The proper goal for energy generation is 100% renewable by 2050.

- Carbon capture technologies or carbon dioxide removal (CDR) technologies have not been demonstrated at scale. Reliance on their maturation and success poses a moral hazard in that it could be seen to allow continued use and expansion of fossil fuel sources, thus delaying a transition to fully renewable energy generation. (For a discussion, see the blog from the Union of Concerned Scientists "Can Trees, Oceans and Giant Carbon Sucking Machines Save Us from Climate Catastrophe?"--https://blog.ucsusa.org/angela-anderson/can-trees-oceans-and-giant-carbon-sucking-machines-save-us-from-climate-catastrophe .) It may never approach the scale needed to halt rising greenhouse gas emissions, thus exacerbating the levels of future greenhouse gas emissions and delaying proper implementation of fully renewable energy sources. CDR technologies may have a role in the transition to a 100% renewable future, but should not be relied upon to mitigate emissions from future fossil fuel energy generation. As a corollary, we should not be building new fossil fuel plants and infrastructure that have lives that will extend to 2050.
- Carbon offsets as a means to the 2050 goal, which are permitted according to the footnote on page 23, are also problematic. If greenhouse gas emissions created by energy generation in New Jersey are balanced by renewable energy generation elsewhere, the greenhouse gases have still been created and released to the atmosphere.
- The EMP is also ambiguous about what energy generation is considered. The goals must be for all energy produced and/or used in New Jersey. If energy generated in a different state is used in New Jersey, it must also derive from renewable energy. Moreover, if energy is generated in New Jersey but sent to other states for use, that energy must meet New Jersey's 100% renewable standard. This latter consideration affects construction of new fossil fuel energy production facilities in New Jersey.

New Jersey's EMP should set and reach lofty goals. 100% renewable energy generation in New Jersey, and the use of energy generated by 100% renewable technologies for use in New Jersey, by 2050, are achievable, lofty goals.

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