



New Jersey's Energy Master Plan

Clean and Reliable Power

Food & Water Watch Written Public Comments

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Food & Water Watch is a national advocacy organization that champions healthy food, clean water, and a liveable planet. We advocate for a democracy that protects the environment and improves peoples' lives. We are also the founding organization of the New Jersey OFF Fossil Fuels Coalition - a coalition that includes over 50 faith, labor, environmental, community, business, and political organizations committed to addressing the urgency of climate change by moving off fossil fuels and on to a 100% clean renewable energy future. These comments are primarily focused on the following areas:

- The urgent need to address climate change in New Jersey's energy master plan timeline
- Definitions of clean energy sources
- Eliminating Dirty Energy
- Technology
- A just transition and environmental justice

The urgent need to address climate change in New Jersey's Energy Master Plan

We need a rapid development of clean, renewable power in order to avert the worst impacts of climate change. The goals set forth to achieve 100% renewable electricity generation by the year 2050 is far short of what is needed to stop irreversible climate change.

In 2014, the Intergovernmental Panel on Climate Change (IPCC) reported that "recent climate changes have had widespread impacts on human and natural systems," including increasingly frequent violent storms, droughts, floods, acidifying and rapidly warming oceans, and altered growing seasons. Climate change has already strengthened storms like Superstorm Sandy.

At the 2015 Paris Climate talks, the nations of the world agreed that preventing the planet from warming 1.5°C above pre-industrial levels "would significantly reduce the risks and impacts of climate change." In order to have a two out of three chance of avoiding a catastrophic 1.5°C rise in temperature, the IPCC found we could only emit 400 gigatonnes of CO₂ (GtCO₂) after 2011. Between 2011 and 2017 the global economy released 295 GtCO₂ into the atmosphere from burning fossil fuels.



Reductions of burning fossil fuels in the next 10 years are critical to avoiding the worst impacts of climate change, and we encourage the BPU to develop an energy master plan that frontloads most of the energy development in that first decade, charting a pathway for 80% clean renewable energy by the year 2028 and 100% clean renewable energy by the year 2035.

Definitions of clean energy sources

We recommend that New Jersey build a clean energy economy on solar, wind and tidal sources.

Solar: Utility and distributed solar can meet a significant share of New Jersey's energy needs. Renewable portfolio standards can be an effective tool for requiring utilities to build utility scale solar projects. Additional sources of energy can come from distributed rooftop solar projects. This will require policies and public investment. Policies should focus on maximizing development and access to community solar projects, removing caps on net metering, and changing building codes to require that new construction is fitted with onsite and/or rooftop solar panels.

Wind: The bulk of New Jersey's clean energy future can also be seen in unrealized energy potential from offshore wind. Offshore wind has the technical potential to provide double the energy demand for current electricity needs, plus estimated demand for electrified vehicles and heating. While New Jersey shows significant opportunities for wind, we should not rely solely on offshore wind technology and must also consider onshore wind energy. Proper siting of offshore wind resources that consider fishing, shipping lanes, and ecological impacts may result in lower levels of offshore wind energy being harnessed. It will also take time to study and build out the infrastructure to fully utilize offshore wind energy, and we must act immediately to replace fossil fuels with clean energy sources.

Tidal: Tidal energy technology is improving and could provide a steady flow of energy to meet demand when intermittent electricity sources like wind and solar are not producing electricity. Scotrenewables Tidal Power recently reported that a 2MW floating tidal stream turbine produced over 3 Gigawatt hours of renewable electricity in its first year of testing.

Eliminating Dirty Energy

While New Jersey moves forward utilizing clean renewable energy generated from solar, wind, and tidal sources, the state's renewable portfolio standard actually allows many dirty energy sources to be counted as renewable. These sources emit greenhouse gases and other harmful



pollutants that adversely impact public health. These dirty energy sources include biogas and garbage incineration. New Jersey must also address the expansion of fracked gas infrastructure.

Fracked Natural Gas: While not included in New Jersey's renewable portfolio standards, continuing to rely on fracked natural gas poses one of the greatest threats to our planet. While fracked gas burns cleaner at an end point, methane is 85 times more potent at trapping heat than carbon dioxide. Methane leaks from every stage of the natural gas system — from well sites to processing plants and compressor stations to beneath city streets. With over 12 proposed pipeline projects, several compressor station proposals, and gas fired power plants being proposed in places like the Meadowlands, New Jersey must put a moratorium on all new fossil fuel infrastructure projects while it continues to develop an energy master plan and build out a clean renewable energy system.

Biogas: New Jersey's RPS included burning waste methane from landfills, sewage treatment plants and animal waste, such as factory farm manure. This methane, often referred to as biogas, is essentially indistinguishable from fracked natural gas, with many of the same problems. Burning biogas or methane releases greenhouse gases as well as pollutants including nitrogen oxides, ammonia and hydrogen sulfide.

Garbage incineration: New Jersey also allows garbage incineration to count toward its renewable energy goals. Incinerating trash produces toxic air emissions like mercury and contributes to climate change. New Jersey is home to five municipal waste incinerators that combined burn about 4.8 billion pounds of municipal waste annually. The Newark Covanta garbage incinerator is the largest in the state, accounting for nearly half of the state's waste incineration. The incinerator, and the hundreds of trucks that deliver garbage every day, has polluted the predominantly lower-income community of color of Newark for decades. The facility violated New Jersey DEP air permits over 150 times in the five years between 2013 and 2017.

Besides adversely impacting public health and the climate, allowing these fuels to masquerade as renewable undermines the impact of the state's renewable portfolio standard and efforts to achieve truly clean, renewable electricity. Even by including these sources of dirty energy in the transition to renewable energy is allowing the creation of markets that don't currently exist, and thereby facilitate the demand for dirty energy. This market incentivizes polluters to continue to expand their operations. We must acknowledge that we cannot consider fracked gas as a bridge fuel to renewables, and equally should not consider sources of dirty energy like biogas and garbage incineration as a bridge fuel. Doing so would replicate the same senseless



expansion of infrastructure like places like New Jersey and Pennsylvania are experiencing with fracked gas infrastructure.

To conclude this point, New Jersey's Renewable Energy Credit program is finally in the process of being overhauled; in previous years, New Jersey had been meeting its RPS goals with almost as much "renewable" energy from garbage incineration RECs as from solar power. In addition to only allowing utilities to purchase RECS from clean energy sources, the state must ensure that the RECs are bundled with the electricity they represent. Allowing utilities to purchase unbundled Renewable Energy Credits creates a system of offsets whereby utilities will send dirty energy into the grid and offset that through the purchase of meaningless credits. Worse yet, ratepayers must subsidize these unsustainable industries and dirty energy sources through their electricity bills.

Technology

The technological challenges created due to intermittency of wind and solar can be addressed through redundancy, storage, demand response and energy efficiency. Effective programs can help to bring down costs for consumers in the transition to renewable energy, as well as reduce the ecological impact renewable development might have.

Storage: Technology in electricity storage is improving significantly, and becoming cost effective, which will reduce the need for redundancy. The California PUC has already taken action to force utilities to install utility scale batteries to replace gas to meet peak energy demand.

Demand Response: Demand response programs can help reduce peak electricity demand by reducing the costs associated with storage or redundancy to meet energy demands on high energy days. The BPU should explore various incentives and penalties that can be incorporated to ensure large energy users are implementing demand response programs.

Energy Efficiency: Energy efficiency can help reduce peak energy demand by reducing our overall energy footprint per user. The state must institute an energy efficiency portfolio standard that requires utilities to scale up energy efficiency annually, as well as institute state policies that significantly increase energy efficiency in the state.

A just transition and environmental justice



As we transition to a 100% clean energy system, we must transition workers from jobs in the fossil fuel industry to living wage union jobs that support energy efficiency and the development of a renewable energy system. Low income communities and communities of color have long experienced the overburden of relying on a fossil fuel and dirty energy economy. Environmental Justice communities must be protected in our state energy plan.

Just Transition:

To achieve a just transition we recommend the state establish a “state renewable energy revolving fund” to provide grants and low-interest loans that supports the generation of renewable energy and job training programs in the renewable energy sector. Priority should be given to low-income communities, communities of color, immigrant communities, and communities disproportionately impacted by fossil fuel development. The program should include job training programs and relocation assistance that prioritizes workers in displaced industries and those living in environmental justice communities. These funds shall only support community solar projects and provide technical assistance where at least 50% of the customers and owners are minorities, immigrants, low-income, or people of color. And any projects that utilize these funds must rely on union labor, and a workforce that is at least 50% minority.

Environmental Justice:

To move forward on environmental justice we recommend the creation of a statewide appointed Climate Justice Working Group be established. They will advise the DEP and BPU on plans and progress made by state agencies, and utilities that are developing and implementing plans to achieve 100% renewable energy. The working group shall be comprised of members who are residents of low-income communities or environmental justice communities.

The working group will be tasked with evaluating and advising the DEP on areas they see fit, but must include expanding access to renewable energy in low-income and immigrant communities, as well as advancing environmental, climate, economic and racial justice.

The working group will be empowered to receive reports and other relevant information from companies, utilities, and other entities necessary to evaluate and advise the DEP and BPU on plans and progress towards 100% renewable energy.

Similarly, we recommend that each County or Municipality with at least 50,000 residents creates a local Climate Justice Working Group (CJWG) to evaluate the performance of standard in expanding access to renewable energy, advancing environmental, climate, economic and



racial justice. They should be empowered to issue recommendations on local plans and implementation of these plans to achieve 100% renewable energy.