



COMMENTS on Draft 2019 NJ Energy Master Plan - 9/16/19

Clean Water Action and David Pringle Associates submit the following written comments on the Draft 2019 Energy Master Plan (EMP) in this document in addition to and by reference here the:

- 1) Verbal comments made by Amy Goldsmith, Eric Benson and David Pringle at the July 17, 2019, Kim Gaddy at the August 8, 2019, Janet Tauro at the September 3, 2019 hearing and David Pringle at the September 12, 2019 BPU public hearings on the EMP;
- 2) Written comments submitted under separate cover we've formally signed on to including -- a) Empower NJ's analysis of the EMP (also available at <http://empowernewjersey.com/wp-content/uploads/2019/07/Empower-EMP-comments-7-15-2019.pdf>) and report documenting the need for a moratorium on new fossil fuel infrastructure (http://empowernewjersey.com/wp-content/uploads/2019/02/EmpowerNJ_Report_190211_Color.pdf), b) business, labor, and environmental coalition letter in support of offshore wind from the NJ Sustainable Business Council, NJ Work Environment Council, National Wildlife Federation, ..., and c) Jersey Renew's on jobs, transportation, emission reductions; and
- 3) Written and verbal comments submitted separately by our coalition partners Delaware Riverkeeper Network, Environment New Jersey, Sierra Club - NJ Chapter, and the Unitarian Universalist NJ Environmental Justice Taskforce.

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General Comments

As the most densely populated state, one of the most industrialized, home to one of the largest ports and busiest airports, and an extensive supporting road and rail network, New Jersey faces unique environmental and economic challenges and opportunities on issues related to the EMP.

New Jersey is on the front lines of the climate crisis and the public health threat posed by our nation's overreliance on and still expanding use of fossil fuels. From increases in sea level rise, severe weather like Hurricanes Sandy and Irene, routine flooding, algal blooms and insect infestations to the heat island effect and air-pollution induced lost work and sick days from illness and premature death from cancer, asthma, emphysema, heart attacks and stroke, New Jersey suffers an unfair burden.

The EMP commendably takes a more holistic, broader approach to tackling climate change than its predecessors. As the Board of Public Utilities (BPU) notes, the EMP is a long overdue "initial blueprint for the total conversion of NJ's energy profile to 100% clean energy by 2050" with clean energy defined as "carbon-neutral electricity generation and maximum electrification of the transportation and building sectors to meet or exceed the Global Warming Response Act (GWRA) greenhouse gas (GHG) emission reductions of 80% relative to 2006 levels by 2050".

However, the overwhelming scientific consensus (even the federal government under President Trump last year) demonstrates that while this draft EMP starts us down the right path, it does not go nearly far enough fast enough.

The enormity of this challenge and the need to overcome it cannot be exaggerated. The EMP recognizes that New Jersey is far off track in meeting its clean energy goals and bold action is needed. Yet the details do not measure up. They fail too often to break new ground with reiterations of specific targets and legal requirements of the GWRA, and previous commitments on offshore wind, solar, energy efficiency, electric vehicles, and storage, many of which while once precedent-setting have since been surpassed by other states.

Accordingly, as described in detail below, the final EMP must be significantly strengthened to:

- 1) Heed scientists' urgent call to front load GHG¹ emission reductions 45% by 2030 to adequately reflect the immediate emergency we face;
- 2) Fairly frame and disclose ALL costs (short and long term economic, social, health and whole life cycle) of fossil fuels, nuclear energy and renewables;
- 3) Stop making things worse -- a moratorium on new fossil fuel projects is needed until regulations are in place and on target;
- 4) Regulate and don't undercount all GHG's (not just CO2 and especially methane) to meet IPCC's 2030 target and GWRA's 2050 mandate;
- 5) Regulate black carbon for the climate pollutant and killer that it is; and
- 6) Replace carbon neutrality with zero carbon.

1) **Heed scientists' urgent call to front load GHG emission reductions 45% by 2030 to adequately reflect the immediate emergency we face.** While the EMP recommits to the mandate established in the GWRA to reduce GHG emissions 80% by 2050, it provides no interim targets thus enabling reductions to be delayed. Meanwhile the consequences of climate change are occurring earlier and more rapidly than expected.

The latest (Fall 2018) and overwhelming scientific consensus (UN's [Intergovernmental Panel on Climate Change \[IPCC\]](#) and the federal [National Climate Assessment](#)) says we only have 10 years to act and thus must make far more immediate and stronger reductions in GHG emissions (45% from 2010 levels by 2030 and net zero emissions around 2050) than the draft EMP proposes.

To meet these critical targets, our clean energy goals must be 100% renewable energy for electricity by 2035 and 100% renewable energy economy wide by 2050 with legally enforceable, interim annual targets. These are readily attainable goals whose obstacles are mainly political, not technological or financial, when all costs and benefits are considered.

2) **Fairly frame and disclose ALL costs (short and long term economic, social, health and whole life cycle) of fossil fuels, nuclear energy and renewables.** The EMP's reliance on extensive modeling from the Integrated Energy Plan (IEP) in consultation with the Rocky Mountain Institute is sound. However, it is highly inappropriate for the EMP to rely so heavily on the modeling's cost projections without any disclosure or input from the public concerning the assumptions, definition of cost, and/or analysis of the results prior to final adoption of the EMP.

¹ In these comments, "greenhouse gas" or "GHG" means the NJ 2007 Global Warming Response Act definition ("carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and any other gas or substance determined by DEP to be a significant contributor to the problem of global warming") with DEP using this authority and Governor's Murphy directive in his bill signing statement for S3207 to include black carbon.

It would be unacceptable for costs to be so narrowly defined as just the costs that appear on an electric bill. Costs must be framed to include all costs and benefits, including but not limited to whole life cycle and relative costs, avoided costs, stranded costs, the costs of inaction, and economic growth, jobs, public health (avoided disease, sick days and health care) and climate (property damage, agricultural changes) impacts from various mixes of fossil fuels, nuclear energy, renewables and efficiency.

Further, the state's 3 aging nuclear plants' operating permits expire in the late 2030's and early 2040's and their current subsidies (ZEC's) last only 3 years and the whole program 10. Any analysis including these nukes in the energy mix in later years would too speculative.

3) Stop making things worse -- a moratorium on new fossil fuel projects is needed until regulations are in place and on target. Meeting the State's existing goals for reducing GHGs will be difficult enough without permitting any of the dozen or so proposed fossil fuel projects. These projects will increase GHG emissions by well over 30% per Empower NJ's report and confirmed by NJDEP in February 2019 and undermine renewable energy projects.

New fossil fuel projects would need to close before the end of their useful life to achieve 100% clean energy economy wide by 2050 yet the EMP is totally silent on these expansions. The final EMP must disclose the risks of stranded investments as New Jersey moves off fossil fuels. Who will foot the bill - ratepayers, the climate and/or investors? BPU must warn them now!

4) Regulate and don't undercount all GHG's to meet IPCC's 2030 target and GWRA's 2050 mandate. For more than a decade under state and federal air pollution law, the state has had the authority to regulate GHG's, especially CO2, but has failed to do so. The EMP proposes only discussing IF to regulate GHG's LATER when it needs to be deciding HOW to regulate GHG's NOW . State regulations should be amended as follows:

- Establish rules under the federal Clean Air Act, GWRA, and NJ Air Pollution Control Act to place limits on GHG emissions, require comprehensive alternatives analysis, and permit DEP to reject permits that exceed pollution limits and select the least polluting alternative to move forward.
- Regulate GHG's not just utilizing EPA's 100 yr. time horizon but shorter time horizons for short-lived climate pollutants/GHG's, like methane and black carbon, to reflect their maximum greater short-term global warming potential as recommended by IPCC. For example, over a 20-year period, methane is 86 times more potent than CO2 as a GHG yet the 30 year EMP only considers its impacts over a 100-year horizon where it is less potent. This drastically understates methane emissions occurring today and the volume of reductions required by 2030 and 2050.
- Reverse DEP policy that allows polluters to purchase ground level ozone credits which today allows virtually unlimited production of ozone precursors even in areas that are in non-attainment for ozone
- Update DEP rules for air deposition to permit rejection of permits that would increase water pollution beyond specific limits.

5) Regulate black carbon for the climate pollutant and killer that it is. Diesel powered vehicles and equipment, natural gas and coal plants are the largest sources of black carbon (aka soot or particulates), a major contributor to climate change (orders of magnitude more potent a GHG than CO2) and an ongoing threat to our respiratory and cardiac health.

Unlike CO₂, soot only stays airborne for days or weeks, not decades; but the damage soot does is huge and permanent. When soot lands, it blankets the Earth's surface and absorbs heat - making it the primary reason why glaciers and arctic ice are melting so fast.

Black carbon is also recognized by the World Health Organization as a human carcinogen. When it lands in our lungs, it causes premature death from cancer, respiratory disease, asthma, heart attacks, and strokes. This is especially true in communities of color and low income neighborhoods (environmental justice, EJ, communities) where industrial operations and NJ's ports, the largest on the East Coast, are concentrated. It particularly affects our most vulnerable populations (kids and seniors).

The draft EMP must make clear that the state will fast track appropriate regulations of all GHG's and co-pollutants, not just CO₂, and on a timeline that offers the most relief fastest for Newark and the greater port region, where over 18,000 diesel trucks go in and out of port every day.

Electrification of the goods movement is essential to mitigating climate change in the next ten years, as well as protecting the well-being of the local residents and drivers who breathe dirty diesel port and highway fumes every day.

The Energy Master Plan and companion policies mention equity, but offer few specific remedies to this injustice. The State of NJ must establish immediate mandatory reductions of climate changing substances and their co-pollutants within EJ communities, as well as designate a significant portion of future climate mitigation benefits, funds, and programs to these same communities who have long suffered the harms of polluting facilities.

6) Replace carbon neutrality with zero carbon for real clean energy. "Clean Energy" is typically defined as 100% wind, solar, energy efficiency, small scale hydro and geo-thermal. In contrast, "carbon neutral" can include energy from fossil fuel power plants with sequestration or "pay to pollute" credits and offsets, nuclear plants, garbage incinerators and dirty biomass. These dirty, dangerous energy sources too often disproportionately impact low income communities and communities of color. The EMP needs to go back to the traditional definition of clean energy.

Clean Water Action has more than 150,000 members statewide in New Jersey and is the nation's largest grassroots group focused on water, energy and environmental health. Since our founding during the campaign to pass the landmark Clean Water Act in 1972, Clean Water Action has worked to win strong health and environmental protections by bringing issue expertise, solution-oriented thinking and people power to the table. We will protect clean water in the face of attacks from a polluter friendly Administration and Congress. www.cleanwater.org/nj