

EMPOWER NJ'S COMMENTS REGARDING DEP'S RULES FOR REDUCING CARBON EMISSIONS IN NJ

Empower NJ, a coalition of more than 90 environmental, community, faith and labor organizations, submits the following comments with respect to DEP's rulemaking for reducing carbon emissions in New Jersey.

Comprehensive and well-crafted regulations are essential if New Jersey is to meet its clean energy goals and reduce greenhouse gas emissions ("GHGs"). We understand that DEP's rulemaking on this and other climate change matters is complex and cannot be done without great thought and effort. We also recognize that there are many dedicated DEP professionals, who are committed to doing this right.

Unfortunately, DEP's approach to promulgating these rules, set out in its presentation at the February 25, 2020 stakeholder meeting, fails to meet the urgency of our climate crisis or even comply with the mandates of the Global Warming Response Act (the "GWRA"), the 2019 New Jersey Energy Master Plan ("EMP") and Executive Order 100. By definition in the GWRA and Executive Order 100, greenhouse gases ("GHGs") include short-lived climate pollutants such as black carbon, hydrofluorocarbons and methane. DEP's presentation was not only limited to just a portion of the CO₂ emissions spectrum, but also did not address any of these pollutants, including methane emissions produced through the extraction, transmission, and burning of natural gas.

DEP is also disregarding what the scientific consensus dictates in two important respects. First, we must take emergency action to cut GHGs by 45% by 2030 per the IPCC. We cannot wait two years for DEP to come up with rules when it is apparent what must be done

and the earth is literally burning up. Further, all of DEP's climate change rules must be adopted within the Governor's term to reduce the political risk that they never get finalized.

Second, the science is clear that the use of natural gas is as bad as coal, if not worse with respect causing global warming. Methane is 86 times more potent than CO₂ in warming the atmosphere over a 20 year timeline and 104 times more powerful than carbon over a 10-year period, the critical periods of time for reducing GHG emissions. Curtailing methane emissions now will reduce those emissions more quickly than reducing CO₂. The DEP's slide presentation at the stakeholder meeting ignores all this. It only addressed CO₂ emissions and it is unclear when, if at all, DEP is going to be regulating methane. This flies in the face of what the law and science require. We address some of the proposed program's principal shortcomings, and the aspects that we support below.

1. DEP's rules must reduce methane as quickly as possible. Natural gas consists primarily of methane, which is 86 times more efficient at trapping heat than CO₂ over a 20-year time frame. Methane leaks occur at all stages of the gas process (extraction/production, gathering, processing, transmission, storage, local distribution and consumption). Methane leakage along the gas supply chain more than doubles the lifecycle emissions of gas compared to counting emissions only from gas combustion. A 2011 Cornell University study, comparing GHG potency, showed that fracked gas is worse than coal and worse than oil. Fracking lends itself to more leakage because it takes more time to drill the well, requires more venting and produces more flow-back waste.

Each new interstate transmission pipeline from the Appalachian Basin will spur new gas production. An analysis by the Delaware Riverkeeper Network showed that the PennEast

pipeline would likely result in the drilling of at least 3,000 new fracked gas wells in Pennsylvania. The bottom line: the growing scientific consensus is that producing electricity from fracked-gas is worse for climate change than coal or oil.

As noted above, methane is subject to regulation along with CO₂ in the GWRA and Executive Order 100. Goal 5.4.4 of the Energy Master Plan states that “[e]liminating methane leaks from New Jersey’s gas pipeline system is crucial to meeting the 80 x 50 greenhouse gas emissions.” The EMP further states that “methane emissions from natural gas transmission and distribution line leaks account for approximately 30% of the statewide methane emissions.” and that actual methane leaks are 60% higher than what EPA has been estimating. Id.

DEP’s position that it will only consider whether to regulate methane six months from now, violates the law and flies in the face of the State’s energy policy and common sense. As the EMP specifically states, the GWRA **directs** DEP to monitor these emissions. Id. DEP’s regulations must prevent methane emissions from leaks and the combustion process and do so on the fastest possible timetable.

2. Black carbon must be regulated. DEP is also required by the GWRA and Executive Order 100 to regulate super-pollutants such as black carbon (soot), which is a million times more potent as a GHG than CO₂ over its lifetime. DEP must comply with its statutory responsibilities and stop delaying or not providing for the regulation of black carbon, hydrocarbons and perfluorocarbons.

The National Climate Assessment also puts a renewed emphasis on the impacts of other atmospheric pollutants like ozone, smoke, and black carbon which cause respiratory problems and lead to premature death. The report notes with “high confidence” that climate change will

increase ozone levels. Most of Northern and Central New Jersey already have an “F” grade from the American Lung Association for ground level ozone pollution, which would only increase by approving new gas infrastructures such as the proposed Transgrid power plant in the Meadowlands. Altogether, new fossil fuel projects, especially power plants and compressor stations, will significantly increase the volume of ozone and HAPs (Hazardous Air Pollutants) in New Jersey.

As the law requires, DEP must start drafting rules immediately to cut black carbon emissions. It must reverse its policy that allows polluters to purchase ground level ozone credits, which in turn allows virtually unlimited production of ozone precursors even in areas of the State where ozone pollution is currently unacceptably high.

3. DEP must fast track the implementation of GHG rules and regulations. In the interim, there should be a moratorium on all new fossil fuel projects in the State. If DEP does not immediately address the slew of fossil fuel projects now planned for the State and prevent them from going forward, our clean energy goals cannot be met. But absent that, DEP must fast track rules with respect to regulating greenhouse gas emissions. Put simply, if DEP does not immediately address the slew of fossil fuel projects now planned for the State and prevent them from going forward, our clean energy goals cannot be met.

EmpowerNJ’s February, 2019 report, **Fighting Climate Change In NJ: The Urgent Case for a Moratorium on all Fossil Fuels** (the “Empower NJ Report”), details how we will be unable to reach our goals of reducing GHGs and clean energy if the slew of proposed fossil fuel projects are allowed to go forward. The Report showed that if the proposed projects became operational, they would increase GHG emissions by approximately 32 million metric tons per

year, a figure which DEP has agreed was reasonably accurate. To put this in context, New Jersey's total GHG emissions from all sources in 2015 were about 101 million metric tons. These new projects would increase total GHG emissions by approximately 30 percent. Operation of these five power plants alone would increase emissions from electricity generation by approximately 76%.

Since the issuance of the Empower NJ Report, a few of these projects have stalled, but other new ones have been added including NJ Transit's 104-140 MW fracked gas fired plant in the Kearny Meadowlands and the development of a deep-water port for the overseas export of fracked liquified natural gas from Gibbstown, Gloucester County through the Delaware River.

NJ Transit's \$526 million transitgrid powerplant in the Meadowlands would be located in a flood plain area and would instantly become one of the top 15 polluters in the state emitting up to 576,757 tons of CO₂ each year. It will burn fracked gas for decades, spewing pollutants in an area of Hudson County that has a failing grade from the American Lung Association for ozone levels and already suffers from some of the worst air pollution in the nation. To our knowledge, NJ Transit, the proponent of this ill-conceived project, never considered whether its resiliency needs could be met through renewable energy sources and energy storage.

To achieve the State's existing GHG reduction goals, the DEP must fast track more stringent permitting rules for new fossil fuel infrastructure. Even the end of the Governor's first term is far too long.

4. The final regulations must be in place by the end of the Governor's first term. While the GWRA allows DEP to pursue a late January 2022 deadline to adopt its rules, it would be

unconscionable to wait this long for two reasons. First, the science requires far more urgent action. The overwhelming scientific consensus, set forth in the IPCC report dictates that we have until 2030, not 2050, to drastically cut greenhouse gas emissions by transforming our energy production and usage. The DEP cannot spend a fifth of that time studying the issue when we know what has to be done. DEP's failure to act with the required urgency is all the more troublesome because DEP had the authority to adopt these regulations since 2005 for CO2 when DEP ruled it an air pollutant and 2007 for other GHG's when the GWRA was first passed, and it could have, and should have, started this task at least 2 years ago at the beginning of this Administration.

Second, the failure to adopt and finalize the rules in the Governor's first term creates the substantial political risk that they never get adopted. There is no guarantee of a Murphy second term and no guarantee that his successor would either enact watered down rules or prevent any rules from being enacted.

We are in a climate crisis where every day counts and time is our biggest enemy. The DEP must recognize this.

5. DEP's rules on new fossil fuel infrastructure must consider the long term costs of carbon and pollution. Every analysis shows that these long term costs far outweigh short term increases in costs to take preventive measures. Many costs to convert to renewable energy are actually investments with positive paybacks, not just additional payments that have no benefit to consumers. All investment decisions must be based on maximizing GHG reductions over the next 20 to 30 years.

It is appropriate to recognize and take into account increases in short term costs. But that is only part of the equation. Short term costs must be balanced against the far greater societal, environmental and economic costs of using fossil fuels.

The DEP must establish rules pursuant to the Clean Air Act (Title V), the GWRA and the NJ Air Pollution Control Act that place limits on GHGs, require applicants for all new energy projects to conduct a comprehensive alternatives analysis of renewable energy technologies to meet the proposed project need, and enable the DEP to reject permits for projects that would cause New Jersey to exceed GHG and air and water pollution limits, and to select the least polluting project alternative to move forward.

6. DEP's rules must consider the cost of stranded assets. The new fossil fuel projects have expected 30 to 40 year lifetimes, and are only economical if they operate that long. But they will not stay operational that long if our clean energy goals are to be met. Putting aside the damage to residents' health and premature death rates, allowing new fossil fuel projects to proceed would result in one of two outcomes: stranded assets that ratepayers remains on the hook paying for or the inability to meet our clean energy goals.

7. DEP should not rely on sequestration as a strategy for reducing CO2. There is no evidence that any of the sequestration and storage techniques are more cost effective than simply not creating carbon emissions in the first place. Carbon capture sequestration is an expensive and untested technology that will divert resources away from clean energy development, which has a larger per dollar impact in reducing CO2 emissions than investments in CCS. Furthermore, CCS does not address any of the ancillary impacts of fossil fuel development - from extraction, transportation, processing, storage and combustion - that cause

a litany of public safety and public health impacts. In our prior comments concerning DEP's monitoring and reporting rules, we noted that the DEP values for terrestrial carbon sequestration are questionable. A separate effort should be made to measure and find proven, cost effective ways to increase terrestrial carbon sequestration.

8. DEP should support municipal efforts to reduce CO2. DEP's rules should work with municipalities to reduce energy use and increase the percentage of their power from renewable energy technologies.

9. NJ must also have an incentive program to get commercial and residential users to convert to ground source heat pumps.

10. Reducing power demand must be a key focus. It is equally if not more important to focus on reducing power demand than sources of new energy as this will naturally stop development of new fossil fuel projects while saving everyone money.

11. DEP must use its ability to regulate ozone and NOx credits to reduce CO2. DEP must stop allowing EGU applicants to purchase ozone or NOx credits as this allows polluters to avoid emissions reductions, making it easier for them to get approved while making already poor air quality worse and not recognizing the enormous social and public health costs of these pollutants.

12. DEP has to regulate for CO2 much more comprehensively than just sources from facilities it already regulates and/or document where more drastic cuts elsewhere will offset them enough to reduce GHGs 45% by 2030 .

13. DEP must conduct cumulative impacts assessments for all foreseeable upstream and downstream impacts from fossil fuel infrastructure development, including, but not limited

to, both short and long-term impacts and those that may occur locally, regionally and globally, and analysis of alternatives to projects that include renewable energy and energy efficiency.