

PETITION TO ADOPT RULES SETTING 2030
GREENHOUSE GAS EMISSION REDUCTION
TARGETS AND RESTRICTING NEW OR EXPANDED
FOSSIL FUEL INFRASTRUCTURE PROJECTS.

Petitioners EmpowerNJ, BlueWaveNJ, Clean Water Action NJ, Delaware Riverkeeper Network, Don't Gas the Meadowlands Coalition, Environment New Jersey, Food & Water Watch, and New Jersey Sierra Club hereby petition the New Jersey Department of Environmental Protection ("DEP"), pursuant to N.J.S.A. 52:14B-4(f) and N.J.A.C. 7:1D-1.1, to adopt rules that set a 50% GHG reduction target by 2030 from 2005 levels, implement how that reduction is to be achieved and restrict the issuance of operating permits for new fossil fuel infrastructure projects. This petition is also supported by 58 organizations listed in Appendix A.

PETITION SUMMARY

1. 2030 is the new 2050 when it comes to the climate crisis. The incontrovertible scientific consensus is that there must be a 45% reduction in greenhouse gas emissions ("GHGs") by 2030 to limit global warming to 1.5 °C in order to avoid climate catastrophe. The devastation caused by climate change is accelerating and becoming more immediate. Not a day goes by without headlines reporting record breaking heat waves, droughts, unprecedented flooding, raging wildfires, stronger and more frequent hurricanes. The list could go on and on.

2. Governments are finally starting to respond to this ongoing catastrophe by recognizing that time is everything in the battle against climate change. On April 22, 2021, President Biden announced a new GHG reduction target for the United States, a 50-52% reduction in GHGs from 2005 by 2030. States are adopting similar targets. Nothing sums up both the immediacy of the climate crisis and the actions that are starting to be taken than the events in Europe last week where the European Union announced that it would reduce GHGs by 55% by 2030 and the following day there was climate-caused flooding in Germany, Belgium and the Netherlands on a scale that had never been seen before.

3. New Jersey, however, is not keeping pace. New Jersey's Global Warming Response Act ("GWRA") requires DEP to set interim benchmarks needed to meet New Jersey's target of reducing GHGs by 80% by 2050. As a member of the United States Climate Alliance (the "Climate Alliance"), a group of 24 states and two territories, New Jersey also committed itself to:

Implement policies that advance the goals of the Paris Agreement to keep temperature increases below 1.5 degrees Celsius, by committing to reduce collective net GHG emissions at least 50-52 percent below 2005 levels by 2030.

4. DEP, however, is not taking the actions needed to comply with the GWRA, by codifying the State's commitment to reducing GHGs by 50% by 2030. Indeed, New Jersey is an outlier in the Climate Alliance. The vast majority of member States already have set 2030 targets, and many have set 2025 targets.

5. DEP should also promulgate rules denying permits for any new fossil fuel project unless it certifies that i) the 2030 GHG reduction target, interim benchmarks and the 2050 clean energy standards can be met if the facility is constructed and operates; ii) there are no renewable energy alternatives to provide the energy the project would produce; and iii) New Jersey's energy requirements cannot be met by any other means, including through energy efficiency measures. There are currently numerous new fossil fuel infrastructure projects in various stages of planning and development in the State. There is simply no place for any of them, or any other new fossil fuel projects, if we are to meet our commitment to reducing GHGs by 2030, or meet the 2050 GWRA clean energy standards.

6. This is anything but a radical proposal. In May 2021, the International Energy Agency, known for its cautious response to the climate crisis, issued a report calling for an immediate end to investments in new fossil fuel infrastructure, including the immediate cessation of permits for coal plants or new oil and gas field developments and coal mines. On June 28, 2021, Public Service Enterprise Group ("PSE&G"), which runs the State's largest utility company, announced its goal of achieving net-zero climate emissions by 2030, 20 years ahead of its previous goal. Indeed, it can no longer be rationally argued that natural gas is a bridge fuel to clean energy. Natural gas is primarily methane, which, on a 20-year time scale, is 86 times more powerful than carbon dioxide in heating the atmosphere; renewable energy is now generally cheaper than natural gas for newly built facilities, a gap that is continuing to widen; and any new fossil fuel facilities will become stranded assets well before the end of their useful life if we are

to achieve 100% clean energy economy-wide by 2050 as mandated by the 2019 NJ Energy Master Plan.

7. Restricting permits for new fossil fuel infrastructure would protect ratepayers and reflects current market conditions. 84% of new U.S. energy production in 2021 is expected to come from renewable energy sources because wind and solar are now less expensive than coal or natural gas. And this is before even considering the significant health and environmental costs of fossil fuel production, which are unjustly and disproportionately borne by communities of color and low-income communities. DEP must set 2030 GHG reduction targets and adopt rules implementing those targets, including restricting the construction of new fossil fuel infrastructure.

I. PETITIONERS' INTEREST IN THE PETITION

8. Petitioner EmpowerNJ is a coalition of 123 environment, community, religious and grassroots groups located in New Jersey. EmpowerNJ's mission, which is endorsed by its coalition partners, is to seek the reduction of GHG emissions and other pollutants. EmpowerNJ has been an active participant in DEP's NJPACT (Protecting Against Climate Threats) rule-making and other DEP proceedings.

9. Each of the petitioners actively seeks the reduction of GHGs and other pollutants and recognizes that climate change constitutes an existential threat to New Jersey, the country and the world. Indeed, every New Jersey citizen has an interest in the relief that Petitioners are seeking in this proceeding.

II. DEP'S AUTHORITY TO TAKE THE REQUESTED ACTION

10. The Air Pollution Control Act and the Global Warming Response Act, N.J.S.A. 26:2C-37, do not merely allow for the rules Petitioners are seeking, but mandate it.

11. The GWRA mandates GHG reductions of 80% below 2006 levels by 2050 and requires the DEP to adopt rules and regulations necessary to achieve the 2050 limit and establish **interim benchmarks**. *Id.*, 26:2C-41(d), providing in relevant part:

26:2C-41. Establishment of a greenhouse gas emissions monitoring and reporting program; rules and regulations; scope of oversight.

No later than 18 months after the department prepares and transmits the report (this long-delayed report was [released in Oct. 2020](#)) as required pursuant to subsection c.

of section 6 of [P.L.2007, c. 112](#) reaffirmed and strengthened by [P.L.2019, c. 197, \(C.26:2C-42\)](#), the department shall adopt, pursuant to the “Administrative Procedure Act,” P.L.1968, c. 410 ([C.52:14B-1 et seq.](#)), rules and regulations establishing interim benchmarks necessary to achieve the 2050 limit, and measures necessary to achieve the 2050 limit and the established interim benchmarks.

26:2C-42. Evaluation of policies and measures; recommendations and report; adoption of an energy master plan.

e. Nothing in [P.L.2007, c. 112 \(C.26:2C-37 et al.\)](#) shall impose any limit on the existing authority of the department, the Board of Public Utilities, or any other State department or agency to limit or regulate greenhouse gas emissions pursuant to law.

In his signing statement in support of the 2019 GWRA amendments, Governor Murphy said:

I am directing the Department of Environmental Protection to use its existing legal authority, in addition to the authority provided by this bill, to administratively address the reduction of short-lived climate pollutants such as black carbon, which will provide short-term air quality benefits while also reducing climate warming pollutants.

12. The Air Pollution Control Act, also empowers DEP to promulgate rules “preventing, controlling and prohibiting air pollution throughout the State.” Under N.J.S.A. 26:2C-8, “Air Pollution” is defined as any “air contaminants in such quantities and duration as are, or tend to be, injurious to human health and welfare, animal or plant life, or property, or would unreasonably interfere with the enjoyment of life or property throughout the State...” Id., 26C: 2-2. [In 2005](#), DEP classified carbon dioxide (CO₂) as an air contaminant. The DEP has “broad authority to issue health-based regulations under N.J.S.A. 26:2C-8.” [In re Adoption of Amendments and New Regulations at N.J.A.C. 7:27-27.1](#), 392 N.J. Super 117, 134 (App. Div. 2007). The 2007 GWRA, reaffirmed by amendment in 2019, defines GHG as “carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and any other gas or substance determined by the Department of Environmental Protection to be a significant contributor to the problem of global warming.” GHGs, including black carbon and soot, are clearly “air pollution” subject to State regulation. See [Massachusetts v EPA](#), 549 U.S. 497, 532 (2007) (“Because greenhouse gases fall well within the Clean Air Act’s capacious definition of ‘air pollutant,’ we hold that EPA has the statutory authority to regulate the emissions of such gases...”). Indeed, [Massachusetts v. EPA](#) strongly supports the proposition that the failure to regulate GHGs would be arbitrary, capricious and unlawful. Id. at 535 (EPA’s failure to provide a reasoned explanation for its refusal to decide whether

GHG's cause or contribute to climate change was arbitrary, capricious, or otherwise not in accordance with law).

13. New Jersey is one of a few states in the country with delegated authority to enforce the Clean Water Act and Clean Air Act. This includes the ability to create and implement regulations that go beyond the minimum federal standards to protect air and water quality. Using this delegated authority, DEP is empowered to regulate GHGs emitted by interstate fossil fuel projects and has previously used this authority to reject water quality permits for FERC approved interstate fossil fuel projects such as the Williams Transco NESE pipeline.

III. THE SUBSTANCE OF THE PROPOSED REQUEST

14. To comply with the GWRA and meet the commitment the State made as a member of the Climate Alliance, DEP should adopt rules that set a 50% collective GHG reduction target by 2030 from 2005 levels and implement how that reduction is to be achieved. Those rules should include, but not be limited to, restricting the issuance of operating permits for new fossil fuel infrastructure projects, and stopping public forest logging programs, which directly increase GHG emissions and decrease future carbon sequestration capacity.

The table below compares the GHG reductions needed to meet either the Climate Alliance commitment and/or the IPCC goal with the projections made in New Jersey's 2020 Global Warming Response Act 80x50 Report, *New Jersey GHG Emissions Pathway to 2050*. These GHG numbers, which are taken from DEP reports, are understated because they are based on a 100-year time frame for short-lived but powerful climate pollutants such as methane and black carbon, instead of the 20-year timeframe required by New Jersey law, and are also net as they include carbon sequestration reductions of CO₂ from absorption of CO₂ by plants and trees, which is about 5 to 8 MMT per year over the timeframes shown.

2030 Targets (All Emissions in Units of MMT CO ₂ e)						
Program	Base Year	Base Year GHG Emissions	2030 Target % Reduction From Base Year	Remaining Volume of Emissions in 2030	Volume of Emissions Reduced from Base Year by 2030	Comparison of Percent Reduction from 2006
GWRA	2006	120.6	not specified	81.0	39.6	-33%
IPCC	2010	112.5	45%	61.9	50.6	-49%
US Climate Alliance	2005	136.3	50%	68.2	68.2	-43%

DEP's projections show New Jersey is not on track to meet either the Climate Alliance commitment or the IPCC goal. The DEP estimates are further suspect because they do not account for any of the new fossil fuel projects built and proposed around the State.

15. DEP should also assess the climate-related financial risks associated with any new or expanded fossil fuel infrastructure projects and any other GHG emitting projects and not grant any permit for such a facility or project unless it certifies through a public process that i) the 2030 GHG reduction targets and GWRA's 2050 clean energy target can be met if the facility is constructed and operates; ii) there are no economically and technologically feasible renewable energy alternatives to providing the energy the project would produce; and iii) New Jersey's energy requirements cannot be met by any other means, including through energy efficiency and conservation measures. As part of this certification process, DEP would be required to solicit proposals for renewable energy, efficiency and conservation alternatives, allow for public input and provide detailed data and reasons to demonstrate that these standards have been met. This rule would apply to the expansion of existing fossil fuel facilities, but not to their repair or maintenance.

IV. THE REASONS FOR THE PROPOSED RELIEF

A. The Accelerating Climate Change Crisis

16. We have known about climate change for decades, but that change is occurring at a far faster rate than anyone had previously predicted. With each passing day, the crisis becomes more acute, the need for immediate action becomes greater, and the economic cost and human toll from inadequate action increases.

17. On June 7, 2021, the National Oceanic and Atmospheric Administration announced that the amount of carbon dioxide in Earth's atmosphere reached 419 parts per million in May 2021, its highest level in more than four million years, providing proof that the climate change problem continues to worsen and that governments must urgently act to reduce GHG emissions. <https://www.ucsusa.org/resources/underwater>.

18. The November 2018 National Climate Assessment underscores the urgent case for an immediate moratorium on all new fossil fuel development. The Assessment states, "future risks for climate change depend primarily on decisions made today." We are dooming future generations by not acting now. The report details how global warming poses a profound threat

to Americans' well-being and cites new research estimating that climate change could cause hundreds of billions of dollars in annual damage and, in the worst case scenario, a loss of more than 10% of US GDP by the end of the century. <https://nca2018.globalchange.gov/>.

19. The recent Intergovernmental Panel on Climate Change report by the world's climate experts highlights the urgent need for immediate actions to sharply reduce fossil fuel use and concludes that absent aggressive action, many effects once expected several decades in the future will arrive by 2040 and that global net human-caused emissions of GHGs need to fall by 45 percent from 2010 levels by 2030 to avoid catastrophic climate change.

<https://www.ipcc.ch/sr15/>.

20. New Jersey recognizes this existential threat to the planet and the State. New Jersey is a member of the Climate Alliance. As a member of that Alliance, Governor Murphy committed the State to **“Implement policies that advance the goals of the Paris Agreement to keep temperature increases below 1.5 degrees Celsius, by committing to reduce collective net GHG emissions at least 50-52 percent below 2005 levels by 2030.”**

<http://www.usclimatealliance.org>.

B. New Jersey is Ground Zero for Climate Change

21. New Jersey (and Florida) are ground zero for climate change in the United States as is evident from the devastating and still ongoing impact from Superstorm Sandy. A June 18, 2018 Union of Concerned Scientists report stated, “Of the roughly 14,000 commercial properties at risk on U.S. coasts within the next 30 years, more than one-third are in Florida and New Jersey.” *Underwater, Rising Seas, Chronic Floods and the Implications for US Coastal Real Estate* <https://www.ucsusa.org/resources/underwater>

22. DEP's 2020 *Scientific Report on Climate Change* lays out how devastating climate change has been and will be for New Jersey unless GHG emissions are curtailed, swiftly and dramatically. New Jersey will experience significant direct and secondary changes in its environment including increases in temperature, variability in precipitation, frequency and intensity of storms, sea-level rise, ocean acidification and the associated impacts to ecological systems, natural resources, built environments, human health and the economy.

<https://www.nj.gov/dep/climatechange/docs/nj-scientific-report-2020.pdf>.

23. The key findings of the Report are:

- Historically unprecedented warming is projected for the 21st century, resulting in longer and more frequent heat waves that impact larger geographic areas.
- Annual precipitation is expected to increase from 7% to 11% by 2050 and occur in more intense rain events that could result in an increase in localized flooding.
- By 2050, there is a 50% chance that sea-level rise will meet or exceed 1.4 feet and a 17% chance it will meet or exceed 2.1 feet, resulting in increased coastal flooding during sunny days and storm events, impacting infrastructure, residents and businesses. Sea level will further increase by 2100 -- by as much as 6 feet or more. [A NOAA report released this month](#) found sunny day flooding in New Jersey has doubled over the past 20 years and is predicted to double again in 10 years if mitigation efforts don't improve.
- Periods between rain events may be longer, causing more frequent drought conditions, increasing the potential for reduced water supply availability, reductions in agricultural capacity that lead to shortages in food production and increased prices, and economic loss from impacts to livestock, and reductions in hydroelectric power production.
- Unabated CO₂ emissions would reduce ocean pH, creating a more acidic ocean that could impact important marine and estuarine life and New Jersey's thriving fishing industry.
- Increases in temperature expected as a result of climate change could intensify air pollution as well as respiratory and cardiovascular health concerns. Such impacts are of particular concern for already overburdened environmental justice communities and in urban areas due to the heat island effect.
- New Jersey's agricultural yields could suffer as water supplies are stressed from an expanded growing season, while some crops may not thrive in warmer temperatures.
- Wildfire seasons could lengthen or become more intense as a result of hot, dry periods resulting from increased temperatures, potentially increasing the risk to New Jersey communities.

- The frequency and intensity of harmful algal blooms may increase, disrupting swimming and fishing in New Jersey's lakes, and posing risks to drinking water reservoirs.

24. The impacts of climate change will fall most heavily on our most vulnerable citizens. In May 2020, the New Jersey Climate Change Research Center identified poverty and other factors as heightening the vulnerability of communities of color, immigrants and seniors, especially those living in flood plains, to the effects of climate change. New Jersey has the largest number of affordable-housing units exposed to sea-level rise among all coastal states and can expect that number to surge as waters climb in the next 30 years, according to a recent Princeton-based research group report. <https://www.njspotlight.com/2020/12/affordable-housing-sea-level-rise-flooding-poverty-climate-change-nj/>

C. The Health and Other Environmental Costs of Fossil Fuel Emissions

25. The devastation caused by climate change is accelerating. As the EPA has reported, there is no small town, city or rural community that is unaffected by the climate crisis and Americans are seeing and feeling the impacts up close, with increasing regularity. Wildfires are bigger, and starting earlier in the year; hurricanes are stronger; heat waves are more frequent; seas are warmer; flooding is five times more likely in many areas of the United States since the 1960s. The air is getting hotter. <https://www.nytimes.com/2021/05/12/climate/climate-change-epa.html>. As was just demonstrated in the Pacific Northwest, this climate change is literally killing us. <https://www.worldweatherattribution.org/western-north-american-extreme-heat-virtually-impossible-without-human-caused-climate-change/>. A recent report detailed that there has been a 37% increase in heat related deaths as a result of global warming. <https://www.nytimes.com/2021/05/31/climate/heat-deaths-climate-change.html>

26. New fossil fuel projects would come with a direct, heavy and unacceptable cost to our lungs. The burning of fossil fuels generates fine particulate matter, PM 2.5. EPA considers PM 2.5 to be a great risk to human health and one of the most dangerous environmental pollutants. <https://www.epa.gov/pm-pollution/particulate-matter-pm-basics>.

27. Scientists have known for years about the deadly impacts of fossil fuel combustion, but a new peer-reviewed April 2021 study authored by a team from Harvard University, the University of Birmingham, and the University of Leicester, published in *Environmental*

Research, puts the global death toll at more than twice that of previous estimates. Exposure to PM 2.5, from burning fossil fuels, was responsible for about 8.7 million deaths globally in 2018, roughly the same number of people living in New York City. To put this into further perspective, fossil fuel pollution is not only fueling the climate crisis, but also killing more people each year than HIV, tuberculosis, and malaria combined. The report also found that 10.2 million premature deaths worldwide resulted from PM 2.5 exposure and that the U.S. had the highest estimated rate of deaths among children under the age of five from lower respiratory infections. <https://www.nrdc.org/stories/fossil-fuel-air-pollution-kills-one-five-people>; Vohra, K., Vodonos, A., Schwartz, J., Marais, E.A., Sulprizio, M.P., Mickley, L.J., *Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem*, *Environmental Research*, <https://doi.org/10.1016/j.envres.2021.110754>.

28. Another study reported in the Proceedings of the National Academy of Sciences found that black and brown communities carry a disproportionate burden from air pollution, particularly fine particulate matter. Black and Hispanic populations bear a “pollution burden” by being exposed to 56% to 63% more PM 2.5 pollution than non-Hispanic whites. The report dubs this “pollution inequity.” Christopher W. Tessum, Joshua S. Apte, Andrew L. Goodkind, Nicholas Z. Muller, Kimberley A. Mullins, David A. Paoella, Stephen Polasky, Nathaniel P. Springer, Sumil K. Thakrar, Julian D. Marshall, and Jason D. Hill. *Inequity in consumption of goods and services adds to racial–ethnic disparities in air pollution exposure. Proceedings of the National Academy of Sciences*, March 11, 2019; DOI: [10.1073/pnas.1818859116](https://doi.org/10.1073/pnas.1818859116).

29. Particulates from burning fossil fuels also react with sunlight to create ground-level ozone, informally known as smog. Ground level ozone causes respiratory diseases and premature death. Smog can irritate the eyes and throat and also damages the lungs, especially those of children, senior citizens, and people who work or exercise outdoors. It is even worse for people who have asthma or allergies; these extra pollutants can intensify their symptoms and trigger asthma attacks. The tiniest airborne particles in soot, whether gaseous or solid, are especially dangerous because they can penetrate the lungs and bloodstream and worsen bronchitis, lead to heart attacks, and even hasten death. A 2020 report from Harvard’s T. H. Chan School of Public Health showed COVID-19 mortality rates in areas with more soot pollution were higher than in areas with even slightly less, showing a correlation between the virus’s deadliness and long-term

exposure to fine particulate matter. <https://www.nrdc.org/stories/air-pollution-everything-you-need-know>

30. The American Lung Association's 2020 "[State of the Air](#)" report found that New Jersey's "major metro areas continued to rank among the worst in the nation for ozone smog." <https://www.lung.org/media/press-releases/state-of-the-air-new-jersey>.

D. The Natural Gas Fantasy

31. It can no longer be seriously argued, as fossil fuel companies contend, that natural gas is a bridge fuel to clean energy. It is as bad as coal in terms of full life-cycle greenhouse gas emissions and, as detailed below, renewable energy costs are now cheaper for new facilities. Any new gas facilities will become stranded assets well before the end of their useful life if we are serious about meeting our clean energy targets.

32. Natural gas consists primarily of methane. Methane is 86 times more potent than CO₂ in warming the atmosphere over a 20-year timeline and 104 times more powerful over a 10-year period, the critical periods of time for reducing GHG emissions. In 2019, the GWRA amendments with regard to methane stated:

The Legislature further finds and declares that, while carbon dioxide is the primary and most abundant greenhouse gas, other greenhouse gases known as short-lived climate pollutants, including black carbon, fluorinated gases, and methane, create a warming influence on the climate that is many times more potent over a shorter period of time than that of carbon dioxide, and have a dramatic and detrimental effect on air quality, public health, and climate change; and that reducing emissions of these pollutants can have an immediate beneficial impact on climate change and public health.

In early 2020, Governor Murphy signed P.L.2019, c.319 that requires the State to use a 20-year time horizon and most recent IPCC Assessment Report when calculating global warming potential to measure the global warming impact of greenhouse gases. This mandate has yet to be implemented.

33. 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. The 2019 NJ Energy Master Plan states,

“methane emissions from natural gas transmission and distribution line leaks account for roughly 30% of the statewide methane emissions” and that actual methane leaks are 60% higher.

34. The vast majority of natural gas consumed in New Jersey comes from fracking. Fracking emits uncontrollable amounts of methane as the gas erupts to the surface with flowback and requires venting after well completion. One of the largest sources of fugitive methane is wells that have been closed but continue to vent.

35. Each new interstate transmission pipeline from the Marcellus and Utica shale formations and other fracked gas sources 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.

36. The science is clear that the use of natural gas is as bad as coal, if not worse, with respect to causing global warming. A Cornell University study, comparing GHG potency, showed that fracked gas is worse than either coal or oil.

<https://news.cornell.edu/stories/2011/04/fracking-leaks-may-make-gas-dirtier-coal>.

E. New Fossil Fuel Infrastructure is Uneconomical and will Lead to Stranded Assets

37. Report after report demonstrates that renewable energy is now less expensive than fossil fuels. It is not only an environmental imperative to stop building fossil fuel facilities; it makes economic sense.

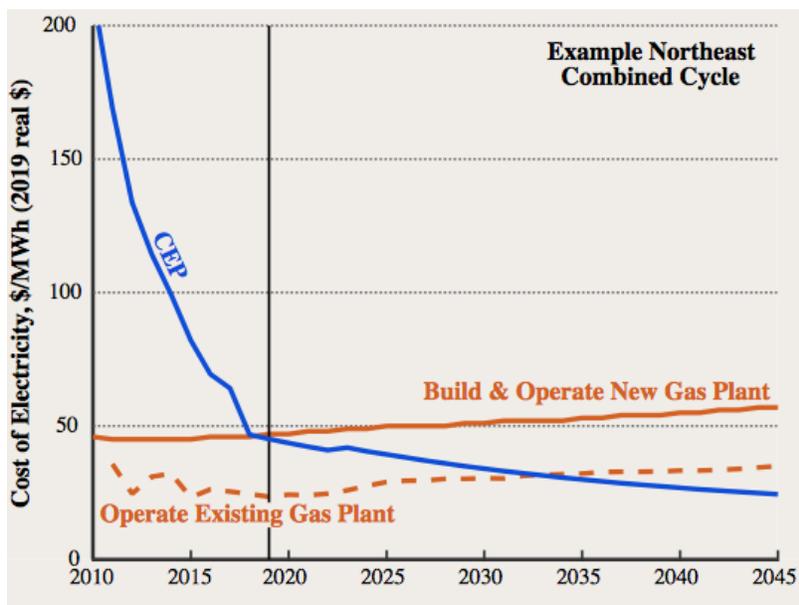
38. The Rocky Mountain Institute (RMI) is a well-regarded non-partisan, non-profit organization that works to transform global energy systems across the real economy. The Murphy Administration has retained RMI to prepare models in connection with the development of the 2019 Energy Master Plan and its current NJPACT proceeding. DEP should also follow RMI’s guidance with respect to the need and economics of transforming our energy sector away from natural gas and towards renewable energy sources.

39. In a September 9, 2019 report, *A Bridge Backward? The Risky Economics of New Natural Gas Infrastructure in the United States*, RMI analyzed “the economics of new natural gas-fired power plants and interstate gas pipelines in the context of the rapidly falling costs of clean energy resources” and found “that the natural gas bridge is likely already behind us, and that continued investment in announced gas projects risks creating tens of billions of dollars in stranded costs by the mid-2030s, when new gas plants and pipelines will rapidly become

uneconomic as clean energy costs continue to fall.” <https://rmi.org/a-bridge-backward-the-risky-economics-of-new-natural-gas-infrastructure-in-the-united-states/>.

40. The report contained the following findings:

- Clean energy portfolios (CEPs) can provide the same energy, capacity, and flexibility as new gas plants, often at significantly lower costs.
- 2019 represents a tipping point in the relative costs of CEPs and gas-fired power plants. Since 2010, CEP costs have fallen by 80 percent and are now at the point where they undercut the costs to build and run a new gas-fired power plant. Furthermore, by the mid-2030s, as the costs of clean energy technologies continue to fall, the costs to build a new CEP are likely to undercut (even) just the costs to operate a gas-fired power plant (see chart below).



- 90% of new gas-fired capacity proposed for construction in the next five years could be cost-effectively avoided with CEPs. Prioritizing clean energy investment in these cases would unlock \$29 billion in net customer savings and avoid 100 million tons of CO₂ emissions each year—equivalent to 5 percent of current US electricity-sector emissions.
- By 2035, over 90% of proposed combined-cycle gas plants, if built, would be uneconomic to run compared to the cost of building a new clean energy portfolio. Investors in these projects will likely face a significant risk of stranded

investments, with tens of billions of dollars in book value remaining on assets without a clear source of future revenues given competition from clean energy.

- Because less natural gas will be produced, there will be a corresponding decline in the need for gas pipelines. Volume on new gas pipelines will fall between 20–60%. This decline in volume will lead to rising costs for delivered gas borne, in most cases, by captive utility customers.

41. New fossil fuel projects generally have expected 30-to-40-year lifetimes and are only economical if they operate that long. But they will not operate that long if our clean energy goals are to be met. Building new fossil fuel projects would result in one of two outcomes: stranded assets for which ratepayers remain liable or the inability to meet our clean energy goals. The damages to the environment, residents' health, premature death rates, property damage and associated financial burdens from new fossil fuel projects will last long after these facilities are closed. As the RMI report concludes, there is a “significant risk that continued natural gas infrastructure investment will turn into a bridge to bankruptcy for investors and stranded investments that captive customers will have to pay for.”

42. Consistent with the RMI report, an April 2021 report from the Goldman School of Public Policy, University of California, Berkeley uses the latest renewable energy and battery cost data to demonstrate the technical and economic feasibility of achieving 80 percent clean (carbon-free) electricity in the United States by 2030. The report finds achieving an 80 percent clean electricity grid by 2030 is technologically feasible, would not raise customer costs or compromise reliability, and would deliver major benefits including \$1.5 trillion in clean energy capital investments and \$100 billion in transmission capital investments, while avoiding over \$1.7 trillion in health and environmental costs and 93,000 premature deaths.

<https://energyinnovation.org/wp-content/uploads/2021/04/2030-Report-FINAL.pdf>

43. Recognizing the massive economic risks associated with climate change, President Biden signed an executive order on May 20, 2021 directing federal government agencies to assess the risks climate change brings to both public and private financial assets in the U.S. This will provide the data needed to convince the public and decision-makers that the costs of climate change will far exceed the costs of actions to reduce its impact.

<https://www.rollingstone.com/politics/politics-news/biden-executive-order-financial-impact-climate-change-1173078/>

44. New Jersey and the DEP must conduct the same assessments and follow the science and the lead of the Biden Administration. The few cost issues the State has addressed have only been framed in terms of risks to geographically constrained assets, such as Shore properties. The far larger economic risks must be considered whenever the DEP acts, but particularly when deciding whether to issue operating permits for new fossil fuel infrastructure projects.

F. Green Energy Projects will Create More Jobs

45. Green energy projects will create more jobs than fossil fuel projects, as numerous studies have shown.

46. The Stanford based TheSolutionsProject.org study has shown that a transition to 100% renewable energy in New Jersey for all purposes (electricity, transportation, heating/cooling and industry needs) would create 58,600 operations jobs and 86,000 construction jobs. At the same time this would prevent 1,528 annual deaths from air pollution.

<http://thesolutionsproject.org/infographic/#nj>

47. A study by Synapse Energy Economics, sponsored by the Labor Network for Sustainability, shows the nationwide commitment to reducing GHGs by 80% by 2050 would produce more than 550,000 jobs on average per year. It includes new jobs in energy efficiency programs, renewable energy production, and auto manufacturing (making electric cars).

<http://climatejobs.labor4sustainability.org/>

48. A recent report by the ACEEE (American Council for an Energy Efficient Economy) shows that the energy efficiency sub-segment alone employed 2.25 million Americans in 2017—more than the combined total of jobs to produce coal, oil, gas, and electricity (including renewables). [http://empowernewjersey.com/wp-](http://empowernewjersey.com/wp-content/uploads/2019/02/EmpowerNJ_Report_190211_Color.pdf)

[content/uploads/2019/02/EmpowerNJ_Report_190211_Color.pdf](http://empowernewjersey.com/wp-content/uploads/2019/02/EmpowerNJ_Report_190211_Color.pdf)

G. The Market Already Recognizes that Renewables Must Replace Fossil Fuels

49. The market has already recognized that new fossil fuel projects make no environmental or economic sense. “84% of all new electric capacity planned to come onto the electric grid this year is clean energy,” because it’s both cheaper and cleaner. [Remarks by President Biden on 1/27 Before Signing Executive Actions on Tackling Climate Change, Creating Jobs, and Restoring Scientific Integrity.](#)

50. According to the [U.S. Energy Information Administration](#), the new electric capacity slated to come online in 2021, measured in total gigawatts, will be 39% solar, 31% wind, 11% from batteries, and 3% nuclear. U.S. Energy Information Administration, [Renewables account for most new U.S. electricity generating capacity in 2021](#).

51. The 2021 numbers are no outlier. Renewable energy sources accounted for over 70% (14,734 MW) of the 20,803 MW of new utility-scale electrical generating capacity added in the first 11 months of 2020. In 2017, renewables accounted for 55% of the 21 GW of U.S. capacity additions, the fourth consecutive year in which renewables made up more than half of those additions. <https://www.eia.gov/todayinenergy/detail.php?id=36092>. Over the past ten years, renewables have averaged over 57% of new utility-scale electric capacity renewable energy sources (which include biomass, geothermal, hydropower, solar and wind). <https://www.solarpowerworldonline.com>.

52. Thirteen publicly traded utilities announced support for a measure that would eliminate 80% of fossil fuel emissions from the energy sector by 2030. <https://www.reuters.com/business/sustainable-business/exclusive-white-house-pushing-80-clean-us-power-grid-by-2030-2021-04-26/>

53. On June 28, 2021, Public Service Enterprise Group (“PSE&G”), which runs the State’s largest utility company, announced its goal of achieving net-zero climate emissions by 2030, 20 years ahead of its previous goal. <https://www.njspotlight.com/2021/06/pseg-biggest-nj-energy-company-pseg-new-ambitious-net-zero-clean-energy-target-2030/>

H. The IEA Report

54. The International Energy Agency is composed of 30 countries including the United States and virtually all western democracies. The IEA historically has been criticized for its cautious response to the climate crisis.

55. In May 2021, the IEA issued a report, *Net Zero by 2050, A Roadmap for the Global Energy Sector*, which calls for an immediate end to investments in new fossil fuel infrastructure, including the immediate cessation of permits for coal plants or new oil and gas field development and coal mines. <https://www.iea.org/reports/net-zero-by-2050>

56. The IEA Report recognizes that good intentions and rhetoric are not enough to meet the climate emergency. As the foreword to the report states, “the gap between rhetoric and

action needs to close if we are to have a fighting chance of reaching net zero by 2050 and limiting the rise in global temperatures to 1.5 degrees C.”

57. The Report’s summary states that the climate crisis calls for nothing less than a complete transformation of how we produce, transport and consume energy” and pledges of clean energy are not “underpinned by near-term policies and measures.” (p. 13). The report goes on to state that the “path to net zero emissions is narrow; staying on it requires immediate and massive deployment of all available clean and efficient energy technologies” and that “[a]ll the technologies needed to achieve the necessary deep cuts in global emissions by 2030 already exist, and the policies that can drive their deployment are already proven” (p. 14).

I. Actions by Other State and Local Governments

58. On April 22, 2021, President Biden announced a new target for the United States to achieve a 50-52% reduction in GHGs from 2005 by 2030. <https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/22/fact-sheet-president-biden-sets-2030-greenhouse-gas-pollution-reduction-target-aimed-at-creating>.

59. Almost all the other states in the Climate Alliance have taken significant steps in this direction by setting aggressive, but realistic targets for reducing GHGs not just by 2030, but 2025; New Jersey is the outlier and has not. Setting near term targets is especially critical as without such it will be much harder, if not impossible, to achieve long term goals and GHG reductions will almost always be back-loaded, neither of which we can afford here. Here are examples of what other states have done:

- Colorado: Reduce GHGs 50% by 2030 from 2005 levels and 26% by 2025.
- Massachusetts: Reduce GHGs 50% below 1990 levels by 2030.
- Nevada: Reduce GHGs 45% by 2030 from 2005 levels and 28% by 2025 with 50% of electricity from renewable resources by 2030 and 100% carbon-free (zero carbon dioxide emissions) resources by 2050.
- Louisiana: Reduce GHGs 45% to 50% by 2030 and 26-28% below 2005 levels by 2025.
- Oregon: Reduce GHGs 45% below 1990 levels by 2035.
- New Mexico: Reduce GHGs 45% below 2005 levels by 2030; 100% carbon-free electricity by 2045, with at least 80% from renewable energy by 2040.

- Washington: Reduce GHGs 45% by 2030 from 2005 levels; utilities must be 100% carbon-neutral by 2030 with 80% of their power must come from “non emitting electric generation and electricity from renewable resources.”
- Maine: Reduce GHGs 45% below 1990 levels by 2030.
- Rhode Island: Reduce GHGs 45% below 1990 levels by 2035.
- Connecticut: Reduce GHGs 45% below 2001 levels by 2030.
- California: Reduce GHGs 40% below 1990 levels by 2030; 100% carbon-free electricity by 2045, with 50% from renewables by 2026; 60% from renewables by 2030, and 100% carbon-free energy by 2045.
- New York: Reduce GHGs by 40% from 1990 levels by 2030.
- Maryland: Reduce GHGs 40% below 2006 levels by 2030.
- Vermont: Reduce GHGs 40% below 1990 levels by 2030 and 26% below 2005 levels by 2025.
- North Carolina: Reduce GHGs 40% below 2005 levels by 2025.
- Minnesota: Reduce GHGs 30% below 2005 levels by 2025.
- Michigan: Reduce GHGs 26-28% below 2005 levels by 2025.
- Pennsylvania: Reduce GHGs 26% below 2005 levels by 2025.
- New Hampshire: Reduce GHGs 20% below 1990 levels by 2025.
- Hawaii: 100% renewable energy by 2045.

Source: <https://www.c2es.org/document/greenhouse-gas-emissions-targets/>

60. Internationally, a Dutch court recently entered an order requiring Royal Dutch Shell to reduce the CO₂ emissions of the Shell group 45% from 2019 levels by 2030.

<https://www.jdsupra.com/legalnews/royal-dutch-shell-ordered-to-reduce-its-5436630/#:~:text=In%20a%20significant%20judgment%20that,2030%2C%20compared%20to%202019%20levels>

J. Proposed New Fossil Fuel Projects in New Jersey

61. There is no scenario in which the State’s clean energy goal can be met if new sources of GHGs are developed. As the saying goes, when you are in a hole, stop digging.

62. Despite this undeniable reality, New Jersey has continued to allow the construction of new fossil fuel facilities with many more on the drawing board. In the last three years, the following projects have been built:

- Garden State Expansion Project (Bordentown, Chesterfield)
- Gateway Expansion Project (aka Roseland Compressor Station) (Roseland and Paterson)
- Rivervale South to Market (Bergen, Hudson Counties and Meadowlands)
- Lambertville East Expansion (Lambertville)
- Sewaren 7 PSE&G gas-fired power plant (Woodbridge)

63. In 2018, the EmpowerNJ coalition presented a report to the DEP showing that there were more than a dozen new fossil fuel projects planned for the State that would increase GHG emissions by 30%. DEP did not take issue with these numbers.

http://empowernewjersey.com/wp-content/uploads/2019/02/EmpowerNJ_Report_190211_Color.pdf

64. A number of the 2018 projects were completed and the momentum of others such as NESE has been slowed. However, numerous new fossil fuel projects are now in various stages of planning and development throughout the State, most notably a proposed LNG export facility in Gibbstown, NJ. While, the Biden Administration, many states, industry and much of the market are quickly pivoting from fossil fuels toward renewables, New Jersey is still allowing developers to proceed with new fossil fuel projects. The following major fossil fuel projects are currently in the works.

Pipeline and compressor projects:

- PennEast Pipeline. On June 29, 2021, the US Supreme Court reversed a Third Circuit ruling and allowed fossil fuel developers to seize state land for this massive pipeline.
- Northeast Supply Enhancement (aka NESE) (Somerset and Middlesex Counties and the Raritan Bay). While New York and New Jersey denied permits for this project last year, Williams/Transco is actively seeking to revive the project and is asking for a two-year extension of their federal approval.
- Southern Reliability Link (Pinelands). This project remains under construction despite massive leaks and cost overruns.

- South Jersey Gas pipeline. Even though its original purpose no longer exists, SJG is exploring other options.
- Expansion of the Tennessee Gas Pipeline, including expanded/new compressor stations in Wantage and New Milford. (Considered to be 2 projects)
- Regional Energy Access Pipeline with 3 compressor stations

Gas-fired power plant projects:

- Phoenix Energy Center (aka Highlands Power Plant) (Holland Township)
- Keasbey Energy Center (Woodbridge)
- NJ Transit Meadowlands Power Plant (Kearney). Despite agreeing to rethink the project to build a 140 MW gas-fired power plant and use renewable energy, it is unclear how much renewable energy technology will be used in this project.
- PVSC power plant (Newark). Passaic Valley Sewerage Commission plans to build an 84 MW gas power plant for operating power when commercial power is not available.

Liquified Natural Gas

- In December 2020, the NJ, PA, DE and Federal members of the Delaware River Basin Commission voted to approve a liquid natural gas (LNG) export port at Gibbstown, NJ. There are outstanding permits/approvals needed from New Jersey et al. before the project can move ahead.

65. As detailed in EmpowerNJ's 2019 report, we do not need new fossil fuel projects to meet New Jersey's energy needs and many of those listed here are not even intended to meet New Jersey's energy demands. http://empowernewjersey.com/wp-content/uploads/2019/02/EmpowerNJ_Report_190211_Color.pdf

66. For example, the NESE pipeline would deliver gas to the Rockaways Transfer Point in New York for use by customers in Brooklyn, Queens, Staten Island and Long Island. The Gibbstown LNG Export Terminal is a private enterprise that will only sell LNG that is shipped overseas. And, as detailed above, any new energy needs could be more economically provided from clean energy sources.

K. The NJPACT Rule-Making Proceeding

67. In addition to the power DEP has to regulate and reduce GHG emissions and other air pollutants, the GWRA requires DEP to adopt rules by January 2022 that address climate change impacts, and establish interim benchmarks (milestones) necessary to reduce GHGs by 80% by 2050 along with the measures necessary to achieve those interim benchmarks.

68. DEP is currently considering addressing climate change impacts in its NJPACT rulemaking proceeding. DEP's schedule called for rules to be proposed by January 2021. Those rules are now seven months late. When the final rules will be promulgated is unknown but it appears highly unlikely that DEP will meet its January 2022 deadline.

69. But even putting aside DEP's on-going delay in complying with the GWRA and addressing the existential issue of our time, DEP is not even seeking to codify interim benchmarks as part of the ongoing NJPACT proceeding, despite being required to do so under the GWRA. Indeed, DEP has acknowledged that it has no intention, much less any plans, to reduce GHGs by 50% or even 45% by 2030, the minimum reduction identified by IPCC to avoid climate catastrophe, despite having the statutory authority to do so, the State's commitment as a member of the Climate Alliance and the clear and compelling need for immediate action.

70. Further, DEP Commissioner Shawn LaTourette has publicly stated that a moratorium on new fossil fuel projects was "unrealistic because we still depend on fossil fuels." (January 22, 2021 webinar). What is "unrealistic" is to believe we can meet our mandated GHG reduction goals without considering the impact of new fossil fuel facilities. Our continued, short term reliance on existing fossil fuel facilities does not mean we should be building new ones. Further, DEP's position fails to reflect the monumental changes taking place in the energy marketplace and the scientific consensus that natural gas is not a bridge to clean energy, but a road to climate disaster.

CONCLUSION

To adequately address the climate crisis, the DEP should comply with its obligations under the GWRA and implement the commitment the State made as a member of the Climate Alliance by setting a target of a 50% reduction in GHGs by 2030 from 2005 levels and adopting

rules to meet this target. Those rules must include restricting the issuance of operating permits for new fossil fuel infrastructure projects.

Dated: July 21, 2021

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Appendix A

This petition is also supported by the following organizations:

350NJ-Rockland	NJ 11th For Change
Action Together New Jersey	NJ Citizen Action
Atlantic Climate Justice Alliance	NJ Forest Watch
Bergen County Green Party	NJ Skylands Sunrise Movement Hub
Central Jersey Coalition Against Endless War	NJ Student Sustainability Coalition
Central Jersey Environmental Defenders	NJ Walk and Bike Coalition
Clean Ocean Action	NJ Working Families Alliance
Climate Reality	NJ-08 For Progress
ClimateMama	North Jersey Sierra Group
Coalition Against Pilgrim Pipeline - NJ	Northern New Jersey NOW
Coalition to Ban Unsafe Oil Trains	Occupy Bergen County
DivestNJ Coalition	Our Revolution Ocean County, NJ
Eco-Poetry.org	Our Revolution Trenton Mercer
Env'l Justice team, Unitarian Society of Ridgewood	Raritan Headwaters Association
Ethical Culture Society of Bergen County	Resistance Cafe
Franciscan Response to Fossil Fuel	SOMA Action
Green Party of Monmouth County NJ	Summit Area Indivisible
Green Party of NJ	Sunrise Hunterdon
GreenFaith	Sunrise Morris County
Indivisible Cranbury	Sunrise Movement Union County
Indivisible Highland Park New Jersey	Sunrise Stockton University
Indivisible NJ5	Surfrider Foundation South Jersey
JOLT USA	Surfrider Foundation, Jersey Shore Chapter
League of Women Voters of New Jersey	Sustainable West Milford
Long Valley Indivisible	The Climate Mobilization, North Jersey Chapter
Make the Road NJ	The Wei LLC
Middletown for Clean Energy	Waterspirit
New Jersey People's Party	We The People NJ-07
New Jersey Tenants Organization	Westfield 20/20