

Empower New Jersey FAQs

1. What are the 13 fossil fuel projects you are opposing?

There are 12 projects in various stages of proposal, permitting and construction:

- **Pipeline and Compressor Stations**
 - PennEast Pipeline
 - Northeast Supply Enhancement Pipeline and Compressor Station
 - South Jersey Gas Pipeline*
 - Southern Reliability Link Pipeline
 - Garden State Expansion Project Compressor Stations**
 - Gateway Expansion Project Compressor Station
 - Rivervale South to Market Pipeline
 - Lambertville Expansion Compressor Station
- **Power Plants**
 - Meadowlands
 - Phoenix Energy Center
 - BL England*
 - Keasbey Energy Center

The thirteenth project is a power plant that was completed and went into service in mid 2018:

- Sewaren 7 (went into service in mid 2018)***

Detail on these projects can be found in the Empower NJ report at http://empowernewjersey.com/wp-content/uploads/2019/02/EmpowerNJ_Report_190211_Color.pdf

* In February 2019, RC Cape May Holdings, owner of BL England plant announced it would not convert to gas. This made the South Jersey Gas pipeline unnecessary. On March 9, 2019 the Pinelands Commission notified South Jersey Gas that its approval to build the pipeline is void. However, the pipeline project has not been officially terminated as South Jersey Gas has stated it plans to explore building a second transmission line, in case an accident or natural event damaged the only one serving the Cape peninsula. Sierra Club has a court date in June of 2019 to oppose this. Also, it remains to be seen if any other companies decide to purchase and upgrade the BL England plant and its affect on South Jersey Gas.

** These two compressor stations have been completed but are not being used to support the Southern Reliability Pipeline, as it is not completed. They can support other pipelines.

*** The Sewaren 7 plant is included in the list of new fossil fuel projects because its greenhouse gas emissions have not been included in the most recent DEP reports and must be viewed as an increase in the upcoming revised Energy Master Plan, over the baseline emissions when Governor Murphy signed Executive Order 28 to achieve 100% clean energy by 2050. Empower NJ is not asking for this power plant

to be shut down as part of the moratorium but does need to show it has increased GHG emissions while the Governor is asking for reductions.

2. Why do you oppose these projects?

We oppose these projects for several reasons:

- Their combined emissions will increase total GHG emissions in New Jersey by 32% over the baseline of 101 Million Metric tons/year at a time when New Jersey has committed to reducing GHGs and we need to cut emissions in order to keep global warming to 2° Celsius or less.
- These projects (as described in the Empower NJ report) are largely unnecessary, in fact two are designed to only send energy to New York. See more details in the answer below.
- These projects will lock in the use of fossil fuels and make it more difficult to economically justify new renewable energy projects and transition to clean energy.
- Emissions of hazardous air pollutants and ground level ozone precursors from these projects cause and exacerbate a wide range of illnesses including neurological, cardiovascular and respiratory disease (asthma, COPD), cancer, birth defects, premature death and many other diseases such as obesity, diabetes, Parkinson's, dementia and stroke. People in New Jersey will die prematurely if these unnecessary projects are built.
- These projects will incent property owners to convert to gas at a time when the solutions for saving the earth from the dangers of climate change will require a transition to electricity for heating and cooking.

3. Why don't you want to leave these decisions to the NJDEP as Governor Murphy is doing with the Meadowlands power plant?

While New Jersey has the legal authority to regulate GHGs and ground level ozone as tightly as necessary the current DEP processes and practices do not utilize this authority to effectively regulate these pollutants. GHGs are only limited to specific amounts by point sources under EPA rules; there is no limit on total GHG emissions. Similarly, even though New Jersey is already out of compliance (over the limit) with EPA ozone limits, the NJDEP allows project applicants to purchase ozone credits from defunct out of state power plants. Effectively, the DEP does not regulate ground level ozone no matter the total level in any part of New Jersey.

Due to these current DEP processes, they have said they are very likely to approve the Meadowlands air quality permit.

When Governor Murphy said he does not want to be an umpire and wants to leave the decision in the hands of the DEP he implied they would make an objective

decision that protects the environment and health of NJ residents. Clearly, this is a misleading implication.

4. Isn't Governor Murphy going to control projects like these to achieve his climate change and 100% clean energy goals?

Governor Murphy has stated he is not going to umpire these projects and wants to leave this to the new Energy Master Plan, the DEP (Department of Environmental Protection) and the BPU (Board of Public Utilities). Governor Murphy has ordered New Jersey to achieve 100% use of clean energy for electric production by 2050, but refuses to stop any project that will increase the use of dirty fossil fuel usage which will only make it harder to achieve his directive. Empower NJ believes this is because the governor is afraid to be seen as taking away work from the construction unions who supported him in his recent election.

5. Aren't these projects needed to provide gas for heating, cooking and producing electricity in New Jersey?

The need for these new projects is minimal at best:

- The Meadowlands power plant would transmit electricity under the Hudson River to connect with a Con Edison substation in Manhattan.
- The Northeast Supply Enhancement (NESE) would deliver gas to the Rockaways Transfer Point in New York to be used by customers in Brooklyn, Queens, Staten Island and Long Island. NYC Comptroller, Scott Stringer, publicly opposes it.
- The New Jersey Rate Counsel and multiple independent studies have found that the PennEast Pipeline is unneeded. Rate Counsel concluded that the forecasted supply and demand requirements for New Jersey and Pennsylvania local gas distribution companies could be met through existing supply arrangements.
- A Skipping Stone report showed that the major purpose of the Cape Atlantic Reliability pipeline (aka South Jersey Gas (SJG) Pipeline) is to allow an expansion of SJG business.
- A Skipping Stone report showed that need for backup of the Southern Reliability Link (SRL) is highly unlikely. In addition, SRL fails to provide full backup and the same level of increased reliability could be provided by a 5.4-mile pipeline connection outside the Pinelands.
- Williams' Garden State Expansion project supports SRL and can support NESE and PennEast. Since none of those pipelines are necessary, the Garden State Expansion is not necessary.
- Williams has failed to cite any specific need other than general growth for its Gateway Expansion project.

- Williams stated that its Rivervale South to Market project, would serve the Northeast including NY and NY, but has not made any other specific claims.
- The Lambertville East Expansion expects to receive gas from PennEast, which itself, is unnecessary.
- Empower NJ has not been able to find any evidence that any New Jersey utility or PJM Interconnect has indicated there is demand for the Phoenix Energy Center power plant and it would use PennEast gas.
- The Pinelands Preservation Association has demonstrated that the BL England power plant is not needed for reliable electric service in the Pinelands and PJM Interconnect has said it is not needed to replace power from Oyster Creek.
- Empower NJ has not been able to find any evidence that any New Jersey utility or PJM Interconnect has indicated there is demand for the Keasbey Energy Center project.

6. How do you propose to support new energy needs in NJ if these projects are not built?

At a meeting with representatives of the Murphy Administration on February 7, 2019 to discuss the Empower NJ report, the representative of the DEP stated that most, if not all the proposed power plants will not be built because the demand for electricity in New Jersey is flat.

If there is need for additional energy in New Jersey it should be produced by renewable energy technology instead of new long-term fossil fuel infrastructure. New Jersey must immediately tackle the issue of converting from existing fossil fuel energy production, not wait until 2030 or 2040.

7. Can renewable energy technology completely replace fossil fuels? What happens when the wind doesn't blow and the sun doesn't shine.

The transition to renewable energy technology in the U.S. and New Jersey will not happen overnight, although it could take place much faster than the current rate. It will be a transition in which utilities and regulators will ensure that the mix of renewable sources, battery/storage technologies and interconnection with the regional grid will be able to provide adequate electricity year round. In 2017 renewable technology only provided 4.8% of electricity in New Jersey.¹ Clearly, there is room for additional renewable energy production as there is sufficient "backup" from fossil fuel and nuclear technology for many years to come, if needed.

However, renewable energy and associated battery technology has already become competitive with fossil fuel technologies both economically and in terms of reliability. According to [Greentech Media](#), energy industry analysts at Wood

Mackenzie say the combination of renewables with battery systems can currently replace approximately two-thirds of U.S. natural gas turbines — right now. Estimates predict the cost of storage alone could drop 80 percent by 2040²

Wind, solar and storage are on the cusp of collaborating to provide near carbon-free energy at costs equal to the cheapest fossil fuels, according to MIT chemist and former CIA director John Deutch. “You are going to find yourselves very shortly in a situation where you have storage alternatives that, when matched with existing solar and wind generating systems, will be able to meet load extremely effectively.”³

Arguments that New Jersey needs more fossil fuel energy production now as a backup to future renewable technologies are simply not true. New Jersey should be focused on using renewable energy sources to both meet future needs as well as replacing existing fossil fuel production along with improvements in energy efficiency while capitalizing on constantly improving battery technology to meet all future energy needs.

8. Isn't gas cleaner than coal? Isn't it considered a good bridge fuel to renewables?

The proposed projects would distribute and burn natural gas, which consists primarily of methane. While methane does not produce as much hazardous air pollution as coal, such as particulate matter and heavy metals, methane has a far higher global warming potential than CO₂ because of the way it traps heat. Methane leaks at all stages of the gas process (extraction/production, gathering, processing, transmission, storage, local distribution and consumption). Leaked methane is 34 times stronger than CO₂ at trapping heat over a 100-year period and 86 times more efficient at trapping heat over a 20-year time frame.

Contrary to popular perception, producing electricity from fracked-gas is worse for climate change than coal. Methane leakage along the gas supply chain more than doubles the lifecycle emissions of gas compared to counting emissions only from gas combustion. Current studies cited in the Empower NJ report show that about 2.6% of all methane produced by fracking leaks into the atmosphere during its life cycle. A 2011 Cornell University study, comparing GHG potency, showed that shale (fracked) gas is worse than conventional gas, is worse than coal and worse than oil. The hydraulic fracturing process lends itself to more leakage because it takes more time to drill the well, requires more venting and produces more flow-back waste. As a result, developing new gas infrastructure is likely the absolute worst form of energy production in terms of negative impacts on climate change.

9. When you say you want to stop all fossil fuel projects in NJ do you mean shutting down existing gas lines and petroleum pipelines?

No. As described above we need to transition away from fossil fuels without disrupting people's lives and the commercial environment. The major issues are timing and political willingness, not technology or cost. We need to develop a plan to accomplish this and need to start executing this plan as quickly as possible. Currently, New Jersey has no such plan, only aspirational goals. We think a good start is to not build more fossil fuel infrastructure that will only make this transition more difficult and painful. The new Energy Master Plan being developed by the BPU is expected to address this.

10. What is the mechanism you propose that will stop these gas projects?

In order to align the findings of the Empower NJ report with the Administration's stated goals, **the Administration should impose an immediate moratorium on all new fossil fuel infrastructure projects.** The moratorium should last until the legislature, BPU and DEP develop rules and procedures and any laws needed to regulate GHG's in New Jersey, and adopt specific annual plans to reduce GHG's consistent with Executive Order 28, the State's commitments in the Global Warming Response Act and the US Climate Alliance.

Actions that must occur before the moratorium is lifted include:

- Establish rules pursuant to the Clean Air Act (Title V), the New Jersey Global Warming Response Act and the NJ Air Pollution Control Act that place limits on GHG emissions and other pollutants, require fossil fuel applicants to conduct a comprehensive alternatives analysis of renewable energy technologies and enable the DEP to reject permits for projects that would cause New Jersey to exceed these limits.
- Utilize the NJ Air Pollution Control Act to regulate CO₂/GHG emissions. In 2005 the DEP declared CO₂ an air pollutant that affects public health enabling it to regulate CO₂/GHG emissions.
- Revise DEP policies that allow polluters to purchase ozone credits, which today allows virtually unlimited production of ozone precursors even in areas of the State that exceed ozone attainment levels and are already rated as 'F' by the American Lung Association for ground level ozone pollution.
- Update the DEP rules regarding air deposition in order to enable rejections of permits that would increase water pollution beyond specific limits.
- Establish rules requiring all applicants for intrastate fossil fuel projects to provide realistic options for utilizing renewable energy technologies.
- Remove the cost cap on renewable energy projects, which does not exist on other energy sources.
- Reverse Governor Christie's rollbacks of regulations on flood hazard rules, water quality management planning rules, the Coastal Area Facility Review Act, Wetlands and Storm Water Management rules that make it easier to build fossil fuel infrastructure in the Highlands and Pinelands.

- Champion a full ban on fracking and its associated activities throughout the Delaware River Basin and in New Jersey.
- Appoint new members to the Pinelands Commission and Highlands Council, who will protect these fragile areas and the water supplies they provide and act consistently with Executive Order 28.
- Create a strong green jobs program including training and placement in the new green economy, built on and driving living wage, union jobs in emerging sectors (solar, offshore wind, electric car infrastructure, efficiency, etc.) with a special focus in environmental justice communities and a just transition for displaced fossil fuel workers.

11. What other moratoriums have past NJ governors declared?

Governor's Byrne, Florio and Kean have all declared short-term moratoriums in order to protect the environment, while awaiting legislative and/or regulatory actions to codify the necessary protections.

In 1978 the US Congress had passed the National Parks and Recreation Act, which made the Pine Barrens the first National Reserve. In 1979, because of concern that this unique area would be destroyed by overdevelopment, Governor Byrne declared a moratorium on development in the Pine Barrens. This prompted the New Jersey legislature to pass the Pinelands Protection Act to end the moratorium while the Pinelands Commission put rules in effect to regulate development in the Pine Barrens.

In June 1987, Governor Kean declared an 18-month moratorium on development in New Jersey's remaining 300,000 acres of unprotected freshwater wetlands. In signing an executive order, he said the moratorium was needed to protect water quality, fish and other wildlife and to provide flood control. The Governor said he would lift the moratorium as soon as the Legislature sent him a bill that he could sign.

In October 1988, in order to control development along New Jersey's coastline, Governor Kean signed an executive order requiring all new construction to be approved by the DEP, which had the immediate effect of imposing a moratorium on new housing construction along the coast.

In April 1990, Gov. Florio issued Executive Order #8, which established a moratorium on garbage incinerators in order to respond to the systemic failures of State government planning and regulation and the demands of the public and environmental groups.

12. How has the Murphy Administration reacted to this report and its recommendations?

Governor Murphy has not made any public statements regarding the Empower NJ report or its demand for a moratorium on new fossil fuel projects. As noted above, Governor Murphy has stated he will not interfere with the DEP permitting process for the Meadowlands power plant [regardless of its impact on climate change and air pollution in New Jersey].

Members of the Murphy Administration have met with Empower NJ on February 7, 2019 and stated:

- They found the greenhouse gas emissions analysis in the report to be reasonable and had no substantive issues with the numbers or the methodology.
- They expect the issues raised by the Empower NJ report to be addressed in the forthcoming Energy Master Plan.
- They were investigating the legal aspects of a moratorium.

13. How will a transformation to renewable energy affect jobs?

There are far more jobs in clean energy per unit of energy than in the fossil fuel world (see study results below). Fossil fuel projects may look attractive to unions in the short term but they are long-term job killers, because once built they don't need much labor to operate and they prevent competition from green technology, which requires more maintenance and ongoing operational workers per unit of energy output. This means that, on average, more jobs are created for each unit of electricity generated from renewable sources than from fossil fuels. The issue is that the fossil fuel projects such as those listed above, are very visible to unions and they have no guarantees of work on renewable technology projects so they fight very hard to support fossil fuel jobs.

Empower NJ proposes that the Murphy Administration use the following carrot and stick approach to change this dynamic:

- The stick is to declare a moratorium on new fossil fuel projects and put in place the means to regulate GHGs. Effectively, this is saying to the unions we just can't continue to build fossil fuel projects because of the impact on our world, including their health and welfare and that of their families.
- The carrot is that, as described above, there are many jobs in renewable technology but the administration must develop a strong green jobs program including training and placement in the new green economy with a just transition for displaced fossil fuel workers. This must include credible demonstration of the existence of many green jobs and willingness on the part of the governor to make a grand bargain with the unions that will convince the unions to accept this. It will also be helpful if counties and

municipalities help the governor see this opportunity and help him make it reality.

This will not be easy but imagine if we reached the point where unions are demanding more green energy technology and faster conversion from fossil fuels. A true win-win for all.

Examples of Clean Energy Job Growth and Needs

- In 2009 the Union of Concerned Scientists study of a 25-percent-by-2025 renewable energy standard found that such a policy would create more than three times as many jobs (more than 200,000) as producing an equivalent amount of electricity from fossil fuels⁴
- The Department of Energy 2017 U.S. Energy and Employment Report⁵ shows that clean electricity jobs are outstripping the number of paychecks provided by the fossil fuel industry by at least five to one. All told, nearly 1 million Americans are working near- or full-time in the energy efficiency, solar, wind, and alternative vehicles sectors. This is almost five times the current employment in the fossil fuel electric industry, which includes coal, gas, and oil workers.⁶
- The Stanford based TheSolutionsProject.org study⁷ 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.
- A study by Synapse Energy Economics⁸, 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).
- A recent report by the ACEEE (American Council for an Energy Efficient Economy)⁹ 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).
- The number of U.S. jobs in solar energy overtook those in oil and natural gas extraction for the first time in 2015. Employment in the U.S. solar business grew 12 times faster than overall job creation, the International Renewable Energy Agency said in a report in May 2016. About 8.1 million people worldwide had jobs in the clean energy in 2015, up from 7.7 million in 2014, according to the industry group based in Abu Dhabi.¹⁰
- The same report also showed that the number of jobs per unit of energy output was much higher in the solar industry than in the oil and gas industry. In 2014 the number of employees in solar required to produce the equivalent of a million tons of oil was 39,402 vs. 166 in the oil and gas industry, a factor of 237 or 23,700%.

14. How can I help?

Contact Governor Murphy at:

Email: constituent.relations@nj.gov

Phone: 609-292-6000

Twitter: @GovMurphy

Messages:

- *More renewables, less fossil fuels!*
- *Please enact moratorium on fossil fuel projects to ensure we meet NJ's renewable energy goals. #Empower NJ*

Facebook: Tag @GovernorPhilMurphy in your posts

Moratorium Mondays - call Governor Murphy every Monday at:
866-586-4069

Contact your state Assembly representatives and Senators, and county Freeholders

Sponsor a local education session. Contact us at
<http://empowernewjersey.com/contact/>

Sign our petition at: <http://empowernewjersey.com/petition/>

Urge friends, family and colleagues to do the same!

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¹<https://www.state.nj.us/dep/aqes/images/NJ%20Total%20Generation%20by%20Fuel%20Type.png>

² <https://www.desmogblog.com/2019/02/22/inevitable-death-natural-gas-bridge-fuel-renewables>

³ <https://www.forbes.com/sites/jeffmcmahon/2019/02/17/renewables-plus-storage-ready-to-demonstrate-competitiveness-mit-expert-says/#7ab2aab54bd6>

⁴ <https://www.ucsusa.org/clean-energy/renewable-energy/public-benefits-of-renewable-power#globalwarming>

⁵ <https://www.energy.gov/downloads/2017-us-energy-and-employment-report>

⁶ <https://www.nrdc.org/experts/lara-ettenson/us-clean-energy-jobs-surpass-fossil-fuel-employment>

⁷ <http://thesolutionsproject.org/infographic/#nj>

⁸ <http://climatejobs.labor4sustainability.org/national-report/>

⁹ <https://aceee.org/blog/2018/05/rising-tide-energy-efficiency-now>

¹⁰ <https://wattsupwiththat.com/2016/05/26/clean-energy-jobs-surpass-oil-drilling-for-first-time-in-u-s-so-what/>