EMPOWER NJ
NO FOSSIL FUEL PROJECTS

# Completed and Pending Murphy Administration Fossil Fuel Projects

| **Completed Fossil Fuel Projects in NJ – 2018 to 2021**<br>(Greenhouse gas (GHG) emissions are annual and measured in million metric tons (MMT) CO2e). | |
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| Sewaren 7 power plant | 540MW combined-cycle power plant in Woodbridge. Air quality permit was approved in 2018 and it went into service later that year.<br>GHG emissions - 5.2MMT |
| Rivervale South to Market pipeline | Upgrade of existing gas pipeline in Bergen, Hudson Counties and the Meadowlands adding capacity to carry 190,000Mcf/day.<br>GHG emissions – 4.2MMT |
| Garden State Expansion Project compressor | New gas compressor station in Bordentown, with a capacity of 180,000Mcf/day that connects to the Southern Reliability Link Pipeline.<br>GHG emissions - 4MMT |
| Southern Reliability Link pipeline | New Jersey Natural Gas 28-mile, 280Mcf[1]/day, pipeline through portions of Burlington and Ocean Counties in the Pinelands.<br>GHG emissions - 3.1MMT |
| Gateway Expansion Project compressor | Expansion of the existing Roseland gas compressor station adding the capacity to carry 65,000Mcf/day.<br>GHG emissions – 1.4MMT |
| Lambertville East Expansion compressor | New gas compressor station in Lambertville with a capacity of 60,000Mcf/day.<br>GHG emissions – 1.4MMT |
| **Total GHG potential from completed projects[2]** | **19.3MMT/year**<br>– 5.2MMT from gas plant<br>– 14.1MMT from pipelines and compressors[3] |

| **Pending Fossil Fuel Projects**<br>(Greenhouse gas (GHG) emissions are annual and measured in million metric tons (MMT) CO2e). | |
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| Regional Energy Access Expansion (REAE) pipeline | Williams Transco gas pipeline with a capacity of 829,000Mcf/day. Project includes compressor station expansions in Branchburg and Old Bridge and a new compressor station in West Deptford. All gas is planned for consumption in NJ.<br>GHG emissions - 18MMT[4] |
| Gibbstown Liquid Natural Gas Port and LNG bomb trucks and trains | New project to compress and transport LNG via train/trucks for export through Gibbstown export terminal. LNG volume is 5 million gallons/day.<br>GHG emissions – 12.56MMT[5] |
| NJ Turnpike and Garden State Parkway expansion projects | New Jersey Turnpike Authority plans to widen 60 miles of the Turnpike and 64 miles along the Parkway for a total of 370 lane miles, which will generate roughly an increase of 1,816 million VMT (Vehicle Miles Traveled) per year.<br>GHG emissions – 1.4MMT[6] |
| Tennessee Gas Pipeline compressors | TGP expansion of existing Wantage compressor and new compressor in West Milford adding capacity for an additional 115,000Mcf/day.<br>GHG emissions from operations of compressors - 0.313MMT[7]<br>GHG emissions from downstream consumption of gas - 2.53MMT[8] |
| Keasbey Energy Center (aka CPV2) | Competitive Power Ventures (CPV) 630MW gas power plant in the overburdened environmental justice community of Keasbey (section of Woodbridge). This will be the third major fossil fuel power plant sited in Woodbridge.<br>GHG emissions– 2.36MMT[9] |
| New Jersey Transit Microgrid (NJTRANSITGRID) power plant | New 140 MW gas power plant in Kearny to operate trains during loss of commercial power. NJT refuses to consider a solar/storage-based microgrid despite its proven viability. Expected to go into service in 2028.<br>GHG emissions - 0.6MMT[10] |
| Passaic Valley Sewerage Commission (PVSC) fracked gas power plant | New 84MW capacity PVSC gas plant in Newark to power operations when commercial power is lost.<br>GHG emissions - 0.028MMT[11] |

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| **Total GHG potential from pending projects[12]** | **GHG emissions – 37.8MMT**<br>- 3.0MMT from gas plants<br>- 34.8MMT from pipelines, compressors, LNG and highway expansion |

[1] Mcf - thousand cubic feet of gas.

[2] Not related to any other increases or decrease of GHG in previous years.

[3] Total GHG emissions associated with compressors include emissions from the volume of gas identified as compressor capacity that will be carried by pipelines as well as direct compressor emissions. The model assumes that the purpose of new compressors on existing gas lines is to increase gas volume without new pipeline development. In order to be conservative, estimated gas volume of all new compressors and pipelines is assumed to be 90% of stated capacity.

[4] OCI tool using gas capacity.

[5] 1,000 LNG gallons = 1.6MMT. Total methane shipped is 2.92MMT/year. Leakage rate from API report is 5%. Total leakage is 0.146MMT. Using methane GWP of 86 this equates to 12.56MMT CO2e.

[6] Note, this is a rough estimate. Assumes adding an average of 1.5 lanes in each direction for total of 370 new lane miles and 1,816 million additional VMTs/year. Assumes 15% of new traffic is trucks with an average weight of 35,000 lbs each.
The average freight truck in the U.S. emits 161.8 grams of CO2 per ton-mile (EDF).
The average passenger vehicle emits about 404 grams of CO2 per mile (EPA).

[7] GHGs from K. Frost experience/analysis based on manufacturer data from same turbines. Known emissions from the turbines being used is 90,958 tpy CO2e (using 100-year GWP). Multiplied by 86/25 to get 20-year value of 312,896 tpy or 0.313MMT.

[8] OCI tool using gas capacity.

[9] CPV air quality permit application.

[10] NJT NJTRANSITGRID FEIS

[11] Emissions from planned operations. Assumes 1,284 hours of non-emergency operation plus 72 hours of emergency operation per year, emission rate of 1,317 lb CO2e/MWhr operating to produce 34MW.

[12] Does not account for any other potential increases or decreases of emissions in the previous or coming years.