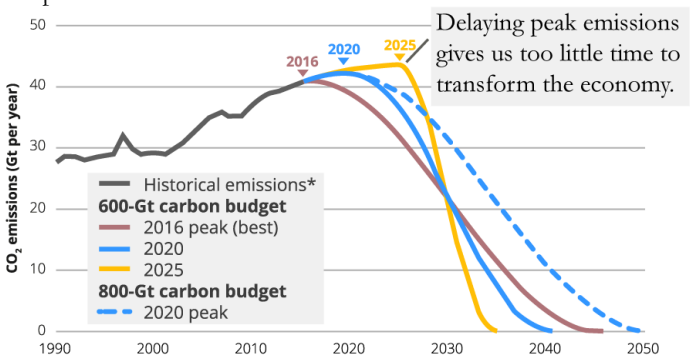
Statement to Philadelphia Department of Licenses and Inspection Regarding the SEPTA natural gas power plant in Nicetown

While it is in the interest of the customers for transit to be provided at a reasonable price, it is also in the long-term best interest of SEPTA, their customers, and the broader community to **transition to net-zero carbon by 2050 or sooner**. It will be no easier or cheaper to do so justly if we wait to do so in thirty years when the impacts of climate change are more severe and inequities more extreme. We at 500 Women Scientists Philadelphia Pod stress the importance of a decisive and quick transition away from fossil fuel use.

Carbon crunch: As of 2016, there was a mean budget of around 600 gigatonnes (Gt) of carbon dioxide left to emit before the planet warms dangerously, by more than 1.5–2°C. Stretching the budget to 800 Gt buys more years, but at a greater risk of exceeding the temperature limit.



Data from The Global Carbon Project.[13]

Philadelphia is already experiencing the effects of climate change, with negative effects on our health and built infrastructure. We are seeing warmer winters and more rainfall in our city, and these impacts will continue to grow.[1,2] Heatwaves in summers will disproportionately affect urban areas that are heat islands like Philadelphia—exacerbating air pollution and straining infrastructure.[3,4] How extreme the impacts become will depend on how quickly we, along with the world, decarbonize. Meeting the goals of the Paris Agreement, as the City agreed to do,[5] will require a dramatic reduction of transit emissions in what currently makes up approximately 17% of the municipal output. This will be a massive undertaking and will require that SEPTA continue to move forward on efficiency and renewable energy sources in keeping with Goals 1 and 2 of the SEP-TAINABLE 2020 Report.[6]

The urgency described by the Intergovernmental Panel on Climate Change report late last year means that we can not conduct business as usual and wait for market assessments of externalities to catch up with reality. Far from investing in new fossil fuel infrastructure, we need to be actively working to transition away from natural gas and towards carbon-free energy and increased efficiency. We urge the city and SEPTA to find socially responsible, non-fossil fuel sources of energy for the benefit of the people of Philadelphia.

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