

Clean Air Council Comments
to the Philadelphia City Council Committee on Transportation and Public Utilities
Regarding the Sustainability of the Philadelphia Gas Works

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My name is Matt Walker and I am the Advocacy Director with Clean Air Council, a non-profit environmental health organization headquartered in Philadelphia. The Council has been working to protect everyone's right to a healthy environment for over 50 years. The Council has 37,000 activist members, including many in the Philadelphia region.

According to the recent Intergovernmental Panel on Climate Change report, we only have 11 years to cut greenhouse gas emissions 45% to avoid catastrophic climate change. This includes a 35% or more reduction of methane, the main component of natural gas, by 2050 relative to 2010 levels. Transitioning Philadelphia Gas Works to a sustainable energy utility that no longer uses fossil fuel natural gas and contributes zero greenhouse gas emissions must be a crucial part of meeting, and hopefully surpassing, the City's climate goals.

The Council is pleased that the Committee on Transportation and Public Utilities is holding this hearing. The issue of how to transition PGW into an environmentally sustainable utility is a complex topic and a robust and inclusive planning process is required for analysing the options and holding PGW accountable to the plan. While I think this hearing is a useful kickoff of the discussion, the public needs full transparency about what the plan for the entire public planning process and how this hearing fits into that vision. Advanced planning and outreach to experts to testify at public hearings are crucial for ensuring the Committee can recruit high quality experts to provide necessary information and perspective.

In order to fulfill the City's vision and climate goals, the City must commission a study of how PGW can rapidly transition fully off of fossil fuel-based natural gas to renewable energy with net zero greenhouse gas emissions. The Council recommends that this Committee establish a public engagement and planning process to solicit public feedback, then hire a consultant to perform an

analysis about the various options for transitioning PGW, and then create a specific, time-bound transition plan. This process should include the following elements:

1. Solicit feedback (possibly through a survey) from labor, consumer protection groups, environmental and clean energy advocacy groups, affordable housing groups, low-income ratepayer advocates, environmental justice groups, civic associations and other relevant stakeholders to determine the scope of the PGW transition study.
2. Hire a consultant to analyze the various options for transitioning PGW off of fossil fuel natural gas and issue a report with recommendations. The study should include the economic, environmental, health, and safety costs and benefits including details about how the different options would reduce greenhouse gas emissions and harmful air pollution, how many jobs would be created, lost, or transitioned, and how the options would be financed.
3. Hold a public hearing to present the report and solicit public and written comment about the most preferred options.
4. Hold stakeholder meetings with the above mentioned groups to solicit additional feedback about the most preferred options from the report.
5. Facilitate discussions with representatives from all of the above constituencies to work through any potential disagreements in the most preferred options from the report.
6. Hire a consultant to develop a draft plan that fully transitions PGW away from fossil fuels.
7. Hold a public hearing to present the draft plan and solicit additional public and written comments.
8. Incorporate comments and issue the final PGW transition plan.
9. Require PGW to submit annual public status reports that compare progress to anticipated milestones in the final transition plan.
10. Take appropriate actions necessary to ensure PGW stays on track to meet the goals of the transition plan.

Recommendations for Study and Report:

The Council recommends that the study analyze case studies from around the world to explore short-term and long-term options for completely eliminating fossil fuels from PGW's portfolio.

One underlying assumption for the study should be that PGW will greatly accelerate its energy efficiency programs and incentives for low-income households, including subsidizing home repair and weatherization. For the short-term options (1 to 10 years), the study should explore the feasibility of using renewable natural gas produced from food scraps or wastewater streams (not landfill gas) and hydrogen produced using renewable energy in PGW's existing pipeline network. The study should determine the potential markets and business opportunities of producing these fuels at the industrial scale required for meeting PGW's needs. It should also identify how much hydrogen could effectively be blended into the biogas without needing major changes in any infrastructure. A recent study found that the UK could substitute one third of its existing natural gas with hydrogen without requiring changes to any infrastructure or end uses.¹ A gas utility in the Netherlands has plans to eventually replace natural gas in its transmission pipelines to hydrogen created through electrolyzing water using electricity from wind power.²

For the longer-term options (10 to 15 years), the study should explore how PGW could develop into an entity that could sell or lease a variety of renewable energy or energy saving technologies related to heating, water heating, and electricity generation. A non-exhaustive list of potential technologies to include in the feasibility study for heating and water heating could include passive solar units for heating water, on-demand water heating, geothermal systems, and fifth generation district heat networks. The study should also determine how PGW could overcome legal and regulatory obstacles to become an entity or form one that could sell or lease rooftop photovoltaic systems to its customers. The study should calculate how much of PGW's business model could be based on these renewable energy technologies as opposed to delivering a mix of hydrogen and renewable biogas.

The Council urges the Committee on Transportation and Public Utilities to advance a public engagement plan and process to analyze how to transition PGW to a sustainable energy utility that can play a vital role in Philadelphia's clean energy future. The Council also urges you to

¹ <https://www.swansea.ac.uk/press-office/latest-research/30oftheuksnaturalgascouldbereplacedbyhydrogencuttingcarbonemissions.php>

² Lester R. Brown and Christopher Flavin, "A New Economy for a New Century," in Lester R. Brown et al., *State of the World 1999* (New York: W.W. Norton & Company, 1999), p. 17.

delay any decision on PGW's proposed LNG plant until *after* this planning process, analysis, and a long-term PGW business plan is completed.

Thank you for your time and consideration.