



Climate Action Network

G20 Issue Brief

Fossil Gas: No Bridge to Climate Goals

Suggested language for the G20 Leaders' Summit Communiqué:

Aligned with our ambitious, economy-wide, long-term low-GHG emission development strategies, we commit to setting a deadline to halt new developments of all fossil fuels, including both conventional and unconventional natural gas. We will cease energy-related infrastructure developments that are not aligned with mid-century net-zero GHG emissions development strategies ensuring that the Paris Agreement goal of limiting the temperature rise to 1.5°C is met, to minimize the impacts of climate change and the risk of costly stranded assets in all fossil fuel infrastructure, including natural gas.

Limiting global warming to 1.5°C, as included in the Paris Agreement, will require the energy sector which is responsible for almost three quarters of global greenhouse-gases emissions (GHG), to undergo a rapid, orderly and just transition towards zero-emissions by mid-century. This must happen even earlier for the electricity sector.¹ The effort required demands a phase-out of all fossil fuel generation and its absolute replacement by renewable energy in the next three decades. This absolute fossil fuel phase-out has been downplayed by the gas industry to position itself as a key player in the transition and to justify the exploitation of global gas reserves as an alternative to other fossil fuels. This approach lacks a clear-headed analysis of how much gas can be burned within the carbon budget for the 1.5°C limit for several reasons:

- **There is already too much fossil gas which will overwhelm the carbon budget aligned with the Paris goals.** Presently, fossil gas emits 21% of global energy-related CO₂ emissions, and up to one third of all anthropogenic methane emissions originate from leakage in the energy sector². Even if all coal mines were shut tomorrow, the gas and oil alone would take us far above 2°C.^{3,4}
- **Given the huge drop in the costs of renewables, building new gas capacity competes with renewable energy, not coal.** The cost of renewable energy has fallen dramatically and will continue to drop as installations increase. The cost of building and operating new utility-scale solar and onshore wind is now competitive on an unsubsidized basis with new fossil fuel plants, meaning that new gas capacity often displaces new wind and solar rather than old coal.⁵
- **Promoting fossil gas to deal with weather-related variability of some renewables like solar and wind is not required.** For the electricity sector, it is well established that functioning and cooperation of transmission grid line operators (TSO) on issues of grid and load management can drive variable renewable electricity share up to 50% of all supply without any interference on grid reliability. According to Bloomberg New Energy Finance, the installation and use of non-fossil fuel technologies to manage intermittency will increase over five-fold by 2040.⁶
- **Gas infrastructure development increases the risk of stranded assets and will mean a GHG emissions lock-in beyond 2050.** Pipelines and LNG terminals are multi-billion dollar investments that require decades of operation to generate profit, meaning that gas plants built over the next few years would still be operating when emissions from the power sector need to be zero. Investments in so-called “clean” fossils such as gas are false solutions that are likely to result in higher long-term costs, exacerbate impacts from climate change and carry a large risk of asset stranding.⁷

CAN calls on all G20 countries to:

- **Align their domestic energy plans with the long-term strategies that are compatible with the 1.5°C limit of the Paris Agreement;**
- **Cease energy-related infrastructure developments that are not aligned with long-term zero GHG development strategies** to minimize the risk of leading to costly stranded assets in non-resilient fossil fuel infrastructure, including those for natural gas;
- **Commit to an absolute phase-out of all fossil fuels by 2050**, starting from the setting a deadline to halt all developments of new coal, oil and gas projects.

¹ (Bruckner et al. 2014) & IPCC, Fifth Assessment Report.

² IEA, World Energy Outlook 2017

³ Greg Muttitt, “The Sky’s Limit: Why the Paris Climate Goals Require A Managed Decline of Fossil Fuel Production,” Oil Change 25 International, September 22, 2016, pg. 21.

⁴ <http://priceofoil.org/2016/09/22/the-skys-limit-report/>

⁵ Alexander Pfeiffer et al., “The ‘2°C capital stock’ for electricity generation: Committed cumulative carbon emissions from the electricity generation sector and the transition to a green economy,” Applied Energy, Volume 179, October 1, 2016, pages 1395-1408. <http://www.sciencedirect.com/science/article/pii/S0306261916302495>

⁶ <http://priceofoil.org/content/uploads/2017/11/gas-briefing-nov-2017-v5.pdf>

⁷ Michael Liebreich, ‘Breaking Clean’. Presentation at Bloomberg New Energy Finance London Summit 2017. Sept. 19, 2017.

<https://data.bloomberglp.com/bnef/sites/14/2017/09/BNEF-Summit-London-2017-Michael-Liebreich-State-of-the-Industry.pdf>

⁸ See [NASA report on methane emissions from natural gas](#) and OECD, *Investing in Climate, Investing in Growth*, 2017, p.114