

A Dutch solution for the European gas problem

Dutch gas fields have enormous volumes of gas left in them. They have the potential to replace a substantial amount of Russian import, almost instantaneously. Re-open Groningen gas field for three to five years, until new renewable capacity can backfill most Russian gas imports. This approach has limited risks and strong local support.

It is obvious that Europe's gas dependency on Russia must be reduced. Ultimately by replacing it with carbon-free energy, and in the meantime in such a way as to avoid creating new dependencies on other countries' fossil gas. This is not an idle risk, as gas contracts typically require long-term commitments. These commitments are often necessary because most of the capital for such projects is upfront and long-term contracts offset these financial risks. Dutch gas would side-step long-term ties and create a short-term bridge until a renewable surge can deliver the required electrons. This will require a more calculated focus on replacing fossil fuels directly with renewables.

In 2022 Europe is contracted to buy 140 bcm of gas from Russia, with another 40 bcm expiring by the end of the decade.¹ Replacing this with LNG likely requires 20-years take or pay commitments to build new LNG capacity, which will take at least several years to bring on stream. For example, the vast expansion of the Qatari export plants is not expected until later in the decade.

Notwithstanding much hubris and political tensions, Gazprom had an admirable record of dependable gas deliveries. No longer. Cutting off supplies to Poland and Bulgaria by requiring payment in rubles is a clear breach of contract, even if those contracts were due to expire soon and were unlikely to be extended. This precedent increases the likelihood that European clients will follow suit and break open Gazprom contracts – which they might otherwise have shunned away from. Russia's threats have led to a scramble to replace gas with gas, likely locked in for a long time.

Germany has already announced it will build several LNG terminals; European ministers are swallowing their pride and wooing governments in Riyadh, Doha and Algiers. The US continues its long-term push to become the main fossil gas supplier to Europe. Volumes are plentiful but high documented methane emissions in the US upstream make it likely less climate friendly than Dutch gas. The call for more renewables always is dutifully articulated but sounding like an afterthought. This whole approach is likely to further deepen Europe's dependency on fossil fuels.

LNG volumes are finite, until new capacity is built with a delay of at least five years. Europe's superior purchasing power will just end up diverting supplies currently heading to the like of China and India, who will be forced to replace the lost gas with additional coal. As a result, Europe will appear to import gas, but in reality it will be directly driving a surge in the dirtiest coal power, substantially increasing global emissions. Burning coal directly in Europe produces almost the same result. All this while electricity generated by new solar and wind energy will also be cheaper than from newly built LNG chains.

The Groningen field was discovered in 1959 and was at the time the largest known natural gas field in the world. Shell and Exxon Mobil own the joint venture 50/50 – with contracts structured so that most of the profit goes to the Dutch Government.

Groningen production is currently being ramped down from 70bcm to zero. After an earthquake in 2012 of 3.6 on the scale of Richter, there has been strong local pressure to reduce gas production. The Groningen gas field produced about 70bcm a year until 2013, when it started to be ramped down, heading to zero in 2023.² The loss of European production has contributed to the gas price increases seen starting in 2020. Billions are rightly being paid out to repair damages to buildings.³ Fields are being shut in – but some production capacity is being maintained for emergency situations.⁴ Substantially ramping up production might require some fresh capital – but far less than building LNG terminals for example. Due to the current very high gas prices, the

¹ <https://www.ica.org/reports/a-10-point-plan-to-reduce-the-european-unions-reliance-on-russian-natural-gas>

² <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2021-full-report.pdf>

³ <https://www.nytimes.com/2019/10/24/business/energy-environment/netherlands-gas-earthquakes.html>

⁴ <https://www.nam.nl/opruimen-en-hergebruik/fase1-van-productielocatie-naar-insluiting.html>

Dutch profit from reopening the fields for the benefit of Europe can be used to further compensate for the historical local damage.

The Dutch government has ruled out a resumption of production.⁵ While surveys show strong public support for re-opening the Groningen field in solidarity with Ukraine.⁶ The relationship between production and earthquakes exists, but it is very indirect and options to mitigate exist.⁷ Remaining reserves are estimated at 450 bcm – three years of Russian imports for all of Europe. It is therefore puzzling that no greater European pressure is being exerted on the Netherlands to resume production. It is not inconceivable that in the event of winter shortages, in addition to even higher gas prices, this also causes reputational damage to the Netherlands, which did not contribute to this European crisis.

Fortunately, an alternative exists. Gas volumes from Groningen can easily fill a large part of the gap in Europe in the medium term, especially in winter. This gives time to build a tidal wave of clean energy capacity, hopefully fueled by new European gigafactories to produce wind turbines and solar technology. This would also serve the interest of European industrial recovery. But it will take strong European pressure to overcome the reluctance of the Dutch government.

The war in Ukraine has changed the equation for Groningen.

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⁵<https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/natural-gas/091621-netherlands-rules-out-change-to-groningen-gasfield-policy-despite-high-prices>

⁶ <https://www.volkskrant.nl/columns-opinie/opinie-nu-toch-maar-gronings-gas-oppompen-zou-zoveelste-klap-zijn-voor-de-zwaarst-gedupeerden~b00332da/>

⁷ <https://www.tue.nl/en/news-and-events/news-overview/24-03-2022-groningen-is-the-saudi-arabia-of-europe/>