NATURAL GAS RUSH IN EUROPE: WHAT ABOUT CLIMATE CHANGE?

INTRODUCTION

Energy production and use are responsible for 75% of European Union greenhouse gas (GHG) emissions¹. However, energy is a crucial aspect of our everyday life and our whole society is built upon it, from the methods of production to the functioning of the main critical infrastructures. For this reason, the goal of reducing pollution deriving from the energy sector through the transition towards clean energy is one of the most complex challenges which lay ahead of the EU member states.

The European Union and its member states have committed to reduce significantly their GHG emissions by 2030 and to become climate neutral by 2050. In particular, in 2019 EU leaders in the European Council committed themselves to making the European Union climate-neutral by 2050, in accordance with the Paris Agreement, in a "socially balanced and fair transition to climate neutrality". Only one year later, EU leaders agreed to reduce at least 55% of emissions in comparison to 1990 levels by 2030 (Fit-for-55), increasing the target of 40% of reduction of emissions set previously in 2014. Some proposals have been put forward for countries to achieve this goal: green finance; strengthening of the EU emission trading system; climate-friendly innovation. Finally, in June 2021, the Council adopted the European Climate Law, through which EU member states are legally bound to the achievement of both 2030 and 2050 climate goals². Despite all the pledges, EU countries have often been criticised for not doing enough to pursue these climate commitments³.

Almost one year ago the challenges faced by the European Union in pursuing the transition towards clean energy suddenly increased: on 24 February 2022, Russia invaded Ukraine. In 2021, the EU countries imported 40% of their natural gas from Russia, with Germany and Italy being the countries most dependent on Russia (the percentage dropped to around 17% by August 2022)⁴. Therefore, the European Union had to face the sudden problem of becoming independent from Russian natural gas.

As a response to the necessity to eliminate European dependency on Russian gas, the Commission on May 18 presented the REPowerEU plan, which, building on the 'Fit for 55' package of proposals and complementing the actions on the security of energy supply and storage, has diversification, energy saving and acceleration of clean energy as key pillars. The main objective is for the EU to become independent from Russian gas imports and to create partnerships with reliable suppliers, including cooperation on hydrogen or other green technologies.

The main issue now is to understand whether the actions undertaken by the European Union and its member states in securing the supply of natural gas from other suppliers, such as Azerbaijan, are compliant with climate commitments to which they are legally bound. In fact, even though natural

¹ https://www.consilium.europa.eu/en/5-facts-eu-climate-neutrality/

² https://www.consilium.europa.eu/en/policies/climate-change/#law

³ https://caneurope.org/eu-countries-off-target-in-fighting-climate-change/

⁴ https://www.bbc.com/news/58888451

gas is considered to be a "transition" energy source for being less polluting in comparison with oil and carbon, it is still a fossil fuel and causes greenhouse gases emission.

RECENT EUROPEAN UNION AND MEMBER STATES' ACTIONS

The answer is not easy, yet, some considerations can be done. If the energy crisis needs an immediate replacement of Russian gas, it is expected that the agreements signed in the aftermath of the war refer to the immediate future. However, it is not like that.

In July, the European Commission signed a Memorandum of Understanding with Azerbaijan in order to double imports of natural gas by 2027, with the goal to bring them to at least 20 billion cubic metres a year in 15 years, from the 8 billion imported in 2021. To face this increase in demand, Azerbaijan will need to increase the production of natural gas⁵.

In Northern Europe, new gas projects have been started, such as the one regarding a new gas field 12 miles away from the shores of the 10-mile-long island of Schiermonnikoog, Netherlands, which spans German and Dutch territory in the North Sea. This gas field is not expected to deliver gas to German and Sutch households before 2024 and has the license to operate until 2042. Han Dolman, director of the Royal Netherlands Institute for Sea Research, who is against the project, highlights that: "In principle, we need to get rid of all the fossil fuels, and we need to get rid of them very fast, it's not an immediate solution to anything [related to] the Russian gas crisis". Moreover, Danmark, while in 2020 it announced the plans to phase out fossil fuel production, is now increasing extraction from gas fields which have already licenses. In Eastern Europe, Hungary committed to increasing domestic natural gas production from 1.5 to 2 billion cubic metres⁶.

In November 2022, Germany sealed a 15-year with Qatar to buy 2m tonnes of liquid natural gas (LNG): deliveries will start from 2026 and it will be sold by Qatar to the U.S. company ConocoPhillips, which will then be delivered to Brunsbuttel where there is an LNG terminal. Even though this agreement is set to terminate 4 years before the deadline set by Germany to achieve carbon neutrality, in 2045, however, it will not serve the purpose of avoiding gas shortages during winter in 2023 and 2024, as a consequence of the sudden stop of imports of Russian gas⁷.

Italy has recently signed two agreements with Libya and Algeria in order to increase imports of natural gas from Northern Africa and to become an energy hub for Europe. In fact, on January 23, Eni and Sonatrach, respectively the Italian and Algerian energy companies agreed on developing joint projects to improve the Algerian energy export capacity⁸. Five days later, on January 28, Eni and Libya's National Oil Corporation signed an \$8 billion gas production deal in order to boost energy supplies to Europe. The output will begin in 2026⁹. Both deals have been criticised. First of all, Italy's gas reserves amounting to 110 billion cubic metres are used less and less: making Italy a gas hub would be more polluting and less efficient than extracting the resources that are already

⁵ https://www.euronews.com/my-europe/2022/07/18/von-der-leyen-heads-to-azerbaijan-to-secure-new-gas-import-deal

⁶ https://edition.cnn.com/2022/08/01/energy/gas-fields-europe-energy-crisis-russia/index.html

⁷ https://www.theguardian.com/world/2022/nov/29/germany-agrees-15-year-liquid-gas-supply-deal-with-qatar

https://www.reuters.com/markets/deals/italys-eni-algerias-sonatrach-sign-deals-gas-supply-decarbonisation-2023-01-23/ https://www.reuters.com/business/energy/italys-eni-signs-8-gas-deal-with-libya-2023-01-28/

there. Moreover, the Italian infrastructure system already has a capacity well above the demand¹⁰. Finally, even though right now Algerian gas might be needed to replace Russian gas, Italy and Europe are facing a rapid decline in gas demand. Why, then, make long-term goals, such as the one with Libya, starting only in 2026?

In Italy, again, SNAM, the gas grid operator, wants to boost Italy's role in the European energy system by increasing investments: it plans to invest 9 billion euros, out of the 10 for the next four years, for gas infrastructures, in particular for the construction of the Adriatic pipeline, to be completed by the end of 2027, for the setting up of two LNG terminals and the expansion of gas storage¹¹.

CONCLUSION

Climate change is happening now and governments must commit to making our society and way of life **sustainable**. The energy sector is crucial in this challenge. While the Russian invasion of Ukraine made unavoidable the need to make new agreements with other gas suppliers and to diversify gas supply, is it really necessary to sign agreements which will come into effect only in 2026, by which already three winters will have passed?

While it is true that both Germany and Italy have declared that the new infrastructures built for natural gas will then serve hydrogen, a renewable source of energy, is it really necessary to make deals with politically unstable countries which do not respect human rights, such as Qatar?

Climate change mitigation requires major efforts in reducing as soon as possible GHG emissions and governments must transform the commitments previously made into reality.

¹⁰

https://www.editorialedomani.it/idee/commenti/cosa-ce-dietro-lo-slogan-dellitalia-come-hub-del-gas-niente-eni-meloni-libia-algeria-v03dfm6v

¹¹ https://www.reuters.com/business/energy/snam-invest-10-bln-euros-2026-italys-gas-security-2023-01-19/