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EU: record drop in gas demand in 2022

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According to the International Energy Agency (IEA), gas demand in the European Union fell by a record 55 bcm (13% y/y) in 2022. The strongest declines were seen in the countries of northern Europe (in particular Finland, Lithuania and Sweden). Consumption in the buildings sector (both households and commercial & public buildings) fell the most, by 28 bcm, or 20% y/y. This was mainly due to warmer winter and lower heating demand. In addition, the decline in gas consumption was related to high prices and changing consumer behaviour: the reduction in heating levels which many countries promoted, fuel switching, and finally the increase in energy poverty. In addition, changes were also caused by increasing efficiency in energy use (due to efficiency retrofits and the better energy performance of some buildings, among other factors) and more installations of heat pumps.

The IEA also noted a large drop in gas consumption in the EU's industry sector; it fell by 25 bcm, or as much as 25% compared to 2021. This was mainly a reaction to large increases in gas prices and the resulting reduction or even cessation of production, as well as a partial switch to importing gas-intensive products from outside the EU (most visible in the case of the fertiliser industry). This brought about some destruction (although it remains unclear how permanent) of industrial demand. In addition, as with the buildings sector, fuel switching (primarily to oil) was also evident in industry.

The only sector in the EU where gas consumption rose in 2022 compared to the previous year was the electricity sector. This was despite a drop in energy consumption (down 3% y/y) and an increase in wind and solar panel installations. Gas-fired electricity generation rose due to large falls in generation from nuclear power plants (mainly due to the maintenance and/or temporary shutdowns of a significant part of the French fleet) and hydroelectric power plants during the summer (as a result of exceptional drought in Europe).

Commentary

- The decline in gas demand – along with the filling of storage facilities, contracting alternative supplies, the increased use of other energy sources, and a warm winter in 2022/3 – has helped defuse the short-term risks of an energy crisis, and got Europe through the end of the heating season unscathed. At the same time, it is still possible that more serious challenges will arise in the next heating season of 2023/4. The future weather conditions, and therefore the demand for natural gas associated with it, remain uncertain. Competition for the limited uncontracted volumes of gas available on global markets may intensify: the post-pandemic economic recovery in China is likely to contribute to this. Finally, everything indicates that significantly lower volumes of gas

from Russia will reach the EU in 2023 than the previous year; Russian gas was still being shipped to the European market in line with the terms of long-term contracts until the end of last April.

- Another important factor influencing the reduction of gas consumption in the EU during 2022 was the high and dynamically fluctuating commodity prices on European gas hubs. Meanwhile, their marked decline since the beginning of 2023 and their persistence at levels above 40 euros/MWh in recent weeks on the TTF hub (similar to those in the first half of 2021) may contribute to an increase in gas consumption. As a result, measures to increase the security of gas supplies and structurally reduce its consumption are being advocated by the IEA (during a special meeting of energy ministers of member states) among other institutions.
- In order to keep levels of gas consumption low and promote further reductions in its use, on 20 March the European Commission proposed extending the current emergency regulations on the coordinated reduction of gas consumption in the EU until the end of March 2024. According to data from the EC, the EU's gas consumption fell by 19% (41.5 bcm) in the period from August to the end of December 2022; this exceeded the original target for voluntary reduction by 15%. The EC's new proposals would extend the period of voluntary reductions in member states' gas consumption by 15% relative to the five-year average until the end of the 2023/4 heating season (as compared with reference period from 1 April 2017 to 31 March 2022); they also prolong the EC's option to introduce mandatory restrictions in the event of a more serious market crisis. EU states would also be required to report on the situation in their markets more frequently, on a monthly basis. EU energy ministers will discuss the Commission's proposal at the Energy Council on 28 March.
- Despite a record fall in the EU's gas consumption in 2022, the IEA stresses that the value of EU imports last year rose very strongly, more than tripling from the previous year to nearly €400 billion. Russia's high revenue from gas exports also persisted, according to the Agency, despite the declines in its volume and market share in the EU (from 40% in 2021 to about 10% by the end of 2022). Limiting gas consumption, then, will not only be one of the tools used to reduce the challenges to the security of Europe's gas supply; it should also reduce the risk that Russia's manipulation of gas supplies, which is still possible, will deepen uncertainty on the EU market and cause renewed jitters and price spikes on EU gas hubs.