

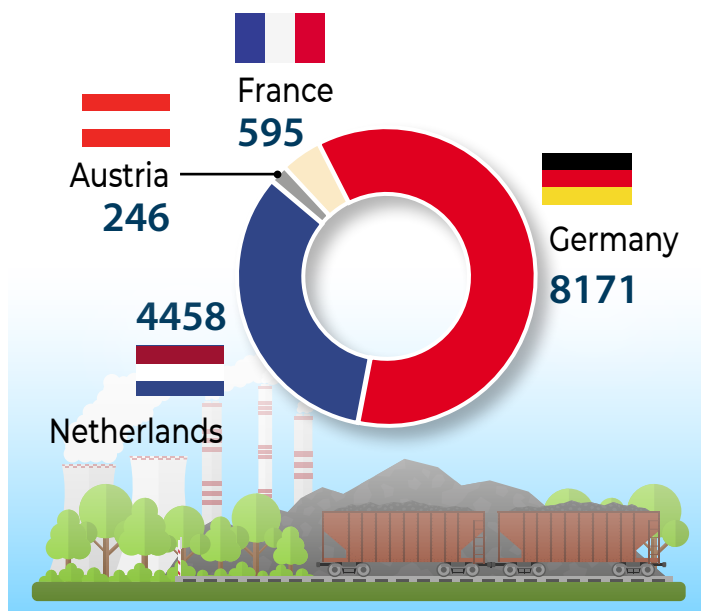
COAL COMES BACK TO EU

The EU is expected to increase coal power generation because of gas shortage, but it is not the trend of only this year. Shift to coal began earlier – in the second half of 2021, when rising gas prices caused coal to become more financially competitive in the EU power sector. As a result, gas generation decreased 5% across the EU in 2021, while coal generation increased by 20%. In 2021, coal power CO₂ emissions rose 17%. It is the largest increase since the EU-ETS began in 2005, and the first increase since 2015.

In 2022 shift to coal generation is continuing because of the Russia-Ukraine war. Russia is using gas exports as a blackmail tool. The EU fears that gas supplies from Russia may be completely cut off. Germany, Austria, France and the Netherlands have recently announced plans to increase coal power generation in the event that Russia stops gas supplies. This decision would allow diverting gas from electricity production to other purposes, for example, to fill gas storage facilities.

In total four abovementioned countries will place 13.5 GW of coal-fired plants in supply reserve facilities, adding 12% to the EU's existing coal power fleet (109 GW) and 1.5% to its total installed power generation capacity (920 GW). The use of coal is considered to be a last resort and a short-term measure. Coal burning will increase if Russia cuts gas supply further. If this does not happen the coal plants will not come back online.

Added coal power capacity, MW



Source of data: Ember, calculations of GMK Center

According to Ember's estimations, if all the plants operate at 65% of their 13.5 GW capacity, the net additional CO₂ emissions in 2023 would be approximately 30 million tons, representing 4% of 2021 EU power sector emissions and 1.3% of total 2021 EU

30 mln tons
additional carbon emissions in 2023

79.2%
additional CO₂ will be emitted in Germany

CO₂ emissions. In terms of EU ETS, 30 mln tons is almost 2.0% from the total cap on emissions.

With a high probability, other EU countries will also return to coal generation, so the carbon emission will be higher. For example, Greece intends to increase lignite mining by 50% in the next two years. The country also extends the operation of all its coal-fired power plants to 2028, instead of closing them down by 2023 as previously planned. Portugal, which in 2021 became the fourth country in Europe to phase out coal, has floated the idea of reopening the 1,200 MW Sines and 600 MW Pego coal plants. Italy is also considering the revival of up to 2.5 GW of coal-fired power generation capacity to limit gas consumption. The Czech Republic had planned to end coal mining by 2033 but the government is now reconsidering, and they have already decided to delay a ban on old coal-fired boilers by two years.

No country has prolonged coal phase out target. So, it is widely believed that a return to coal is a short-term solution, and the current crisis will accelerate European clean energy transition. According to our opinion, further situation will depend on speed of resuming stable gas supplies because gas is intermediate fuel for green transition. EU dependence on Russian gas supplies has been formed over the years, so this problem can not be solved in 1 or 2 years. Now diversifying gas supplies is an important challenge for the EU green transition.

More detailed information can be provided upon your request:

- ▶ coal exports and imports across the world;
- ▶ electricity generating facilities by countries;
- ▶ other information on your request.

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