

# CAP<sub>2</sub> Position



What's next for the price of EU emission allowances?

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### What influences the price development of EU emission certificates?

One, if not the most important driver of the price trend for EU emission allowances (EUAs) is the electricity market in the EU. The relationship between the electricity market and EUA prices is complex and dynamic. A higher demand for electricity tends to lead to rising EUA prices, as more fossil fuels are used and therefore more emission allowances are required. At the same time, however, factors such as fuel prices, technological developments and regulatory measures also influence this relationship. In this publication, we analyze the various influencing factors and venture an outlook for the EUA price.

### Influence of electricity demand on the **EUA** price

When analyzing the influence of electricity demand on the EUA price, a distinction must be made between direct and indirect influence as well as long-term trends. Demand as such therefore has a direct influence: When electricity demand increases, especially at peak times, power plants have to produce more electricity. In many cases, this means that fossil fuels such as coal and gas are used, which cause higher CO<sub>2</sub> emissions. This increases the demand for emission allowances, which in turn drives up EUA prices. If the demand for electricity falls, for example due to more energy-efficient technologies or economic downturns, less electricity is produced and therefore fewer emissions are caused. This leads to a lower demand for emission allowances and can lower EUA prices.

Fuel prices have an indirect influence on this process. If gas is cheap, energy producers could switch from coal to gas, which means lower CO2 emissions and therefore less demand for EUA. This can lower the price of EUA.

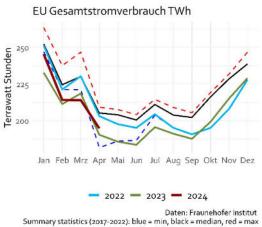
Changes in energy policy, such as the introduction of renewable energies or stricter emission limits, can also influence the demand for electricity from fossil fuels and thus indirectly affect EUA prices. Increased support for renewable energies can lead to lower demand for emission allowances and reduce EUA prices.

Long-term efforts to decarbonize electricity generation through the expansion of renewable energies and technological innovations contribute to a reduction in CO<sub>2</sub> emissions. This reduces dependence on emission allowances and stabilizes or lowers EUA prices in the long term.

Stricter climate targets and a reduction in available emission allowances in the EU ETS are increasing the pressure on companies to reduce their emissions, which may cause EUA prices to rise.

#### Lower demand for electricity in the EU

The following figure shows that the demand for electricity in the EU remains quite low compared to the last eight years.

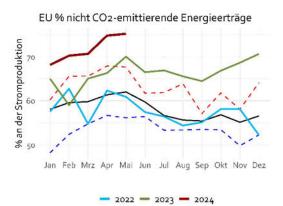


Nur öffentliche Erzeugung in EU 27 ~95%

What are the reasons for this slump in demand? On the one hand, the European economy, particularly the industrial sector, is in a slight recession, which is continuing to dampen demand for electricity. On the other hand, the increasing spread of decentralized solar power generation is also playing a role. Households and companies are increasingly generating their own electricity using solar systems, which reduces dependence on the central power grid. Around 14 GWh of battery storage capacity has already been installed in Germany, which further supports the use of solar power and increases grid independence.

### Increasing electricity production from non-CO₂ -emitting sources

Further analysis of the data shows that the proportion of non-CO<sub>2</sub> -emitting sources in 2024 is significantly higher than in previous years. This can also be seen in the following figure. In May 2024, 75% of electricity already comes from predominantly renewable energy sources.

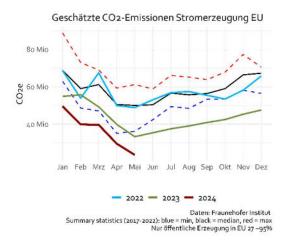


Daten: Fraunehofer Institut Summary statistics (2017-2022): blue = min, black = median, red = max Nicht CO2 emittierende Energietrager sind: Kernenergie, Laufwasser, Geothermie, Speicherwasser, Pumpspeicher, Andere Erneuerbare, Wind Offshore, Wind Onshore, Solar

In the first quarter of 2024, the share of electricity generation from renewable energies in Germany reached a record 58.4%. This is the highest share in a first quarter. The most important renewable energy sources were wind energy with a share of 38% and photovoltaics with a share of 6.6%.

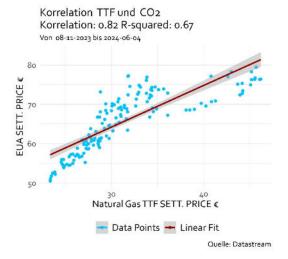
The favorable weather conditions at the beginning of the year with mild winter temperatures, favorable wind conditions and low cloud cover contributed significantly to this increase. These conditions led to an increase in electricity generation from wind power and photovoltaics. At the same time, electricity generation from conventional energy sources such as coal and gas fell. Electricity generation from coal fell by 28.2 percent and from natural gas by 1.9 percent.

This trend can also be clearly observed in other European countries. Particularly in countries with a highly developed wind and solar infrastructure, such as Denmark, Spain and the Netherlands, the share of renewable energies in electricity generation increased significantly. Overall, these developments have contributed to Europe recording the lowest CO<sub>2</sub> emissions in this sector in the first four months of this year. The year 2024 is on track to be the year with the lowest CO<sub>2</sub> emissions from electricity generation.

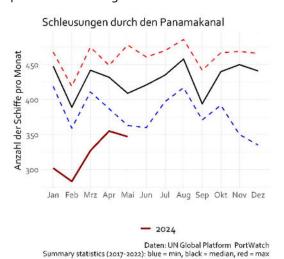


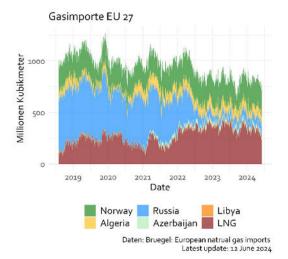
### Gas price as a game changer? LNG uncertainty

The lower demand for electricity and the increase in the share of non-CO2-emitting sources in the electricity mix should continue to have a price-dampening effect on the EUA price. The game changer in this scenario could be the gas price. There are a number of arguments in favor of rising gas prices in the near future. There tends to be a high correlation between gas and EUA prices, i.e. the prices for gas and EUA tend to rise or fall together.



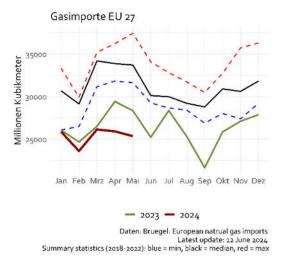
The LNG (excess) supply is currently having a dampening effect on the gas price. Due to the effects of El Niño on the water level in the Panama Canal, the number of shipments this year is at a record low. As the transportation of LNG to Asia through the Panama Canal is more difficult, many LNG tankers are switching to routes to Europe. This makes Europe a preferred destination for LNG deliveries. As soon as this phenomenon subsides, and it can already be seen in the following figures that the low point of shipments and the high point of LNG gas imports has been reached, the gas price should rise again.



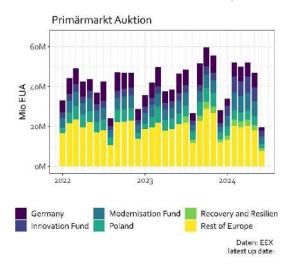


In addition, the hurricane season could tighten the LNG supply. Colorado State University's (CSU) seasonal forecasts for the 2024 hurricane season in the North Atlantic basin indicate an extremely active season. The impact of hurricanes on LNG exports is significant. For example, Hurricane Laura in 2020 led to the temporary closure of LNG export facilities on the US Gulf Coast, which impacted gas supplies. Similarly, Hurricane Ida in 2021 caused significant disruption to energy infrastructure, including LNG exports, leading to an increase in gas prices.

Short-term interruptions to LNG exports from the Gulf of Mexico caused by hurricanes could therefore drive up gas prices and, if the correlation with EUA prices persists, lead to higher EUA prices. The hurricane season peaks between mid-August and the end of October. This period is particularly critical as the energy infrastructure along the Gulf Coast is prone to disruptions, which can lead to significant price fluctuations on the gas market.



#### Supply side has a price-dampening effect



The latest figures on the free allocation and auctioning of EU emission allowances show that the total supply of EUAs in 2024 will be at least 6 % higher than in the previous year, without taking into account the full scope of the market stability reserve. This is due to three main factors:

- Bringing forward the supply of certificates: Certificates that were originally intended for later years are brought onto the market early.
- The introduction of new compliance units, which will receive free certificates, will also help to increase supply.
  In particular, efficient companies will benefit from free allocation in future, while inefficient plants will have to fear

- cuts if they do not implement efficiency measures.
- Additional shipping traffic: Shipping traffic, which is now also included in EU emissions trading, increases the number of certificates available, but also the number in demand.

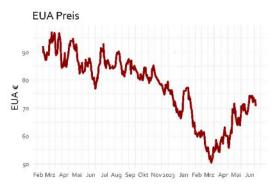
By June 12, 2024, around 254 million EUAs had been auctioned via the European Energy Exchange. This figure includes 42.6 million certificates auctioned for funds and the REPowerEU program.

The aim of the REPowerEU program is to end the EU's dependence on Russian fossil fuels. This is to be achieved through the diversification of energy sources, energy savings and the accelerated introduction of renewable energies. Part of the REPowerEU plan is financed by the Economic Recovery and Resilience Facility (ERRF) through the sale of ETS certificates. The European Commission plans to raise 20 billion euros through the sale of these certificates. Around 40% of these funds are to be raised by bringing forward the auctioning of allowances that were originally due to be auctioned between 2027 and 2030. These certificates will now be brought forward to the period before August 31, 2026.

In summary, there will be more certificates on the supply side of the primary market in 2024, which could have a price-dampening effect on the market.

### EU emission allowances will remain affordable

There is a good chance that EUA prices will remain affordable into the fall. This is currently around €70 for one tonne of CO₂. Demand for electricity should continue to have a pricedampening effect, European industrial companies are still in recession and supply has increased.



Source: Datastream

The black swan of this forecast could be a sharp rise in the price of gas triggered by a severe hurricane season, which is also fueled by a faster-than-expected economic recovery in the industry. In addition, the amended Greenhouse Gas Emissions Trading Act has postponed the deadline for the submission of emission allowances from April 30 to September 30. In the past, an increase in the price of emission allowances was observed before this date, as plant operators had to purchase the required allowances and transfer them to the deletion account

If all these events coincide in September, the EUA price could also make a significant leap upwards, but a sideways movement is more likely.

## Decarbonization through decommissioning of EUAs remains an attractive solution

CAP2 offers to decarbonize its unavoidable emissions by decommissioning EUAs.

At the same time, CAP2 also offers independent research on the expected price development of EUA.



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