

CHART OF THE WEEK

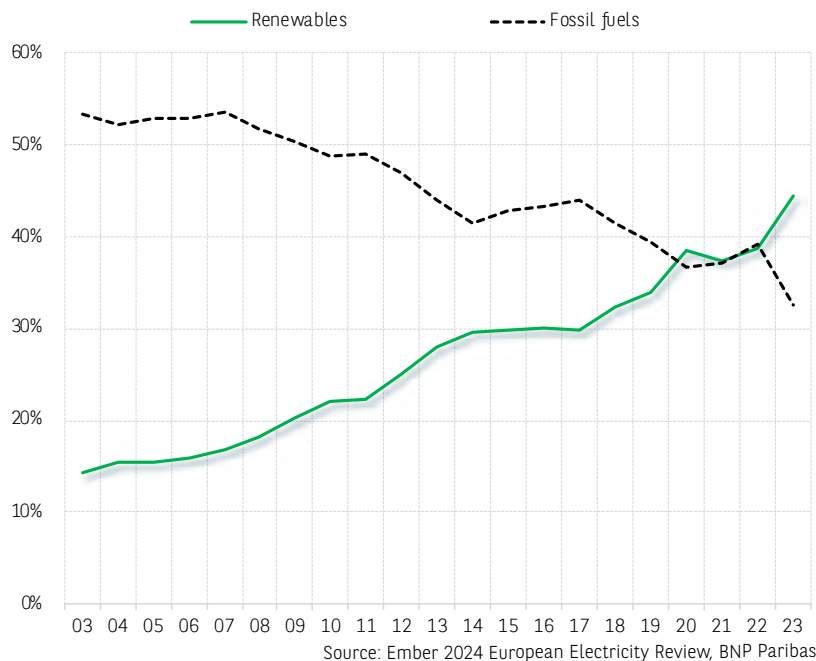
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14 February 2024

EUROPEAN ELECTRICITY: GREENING GATHERS PACE

Jean-Luc Proutat

European Union : respective share of fossil fuels and renewables in electricity generation



Less active on the environmental front, European policy to combat climate change continues to score points in terms of decarbonization. In 2023, the greening of the EU-27's electricity generation was as rapid as it was remarkable. According to the EMBER research institute¹, EU's greenhouse gas (GHG) emissions from electric plants fell by 19%, generating a saving of 157 million tonnes of CO₂ equivalent, compared with 2022. While energy sobriety and efficiency gains may have contributed to this result, the main factor has been an unprecedented wave of "green" investment, which has gained momentum since the war in Ukraine.

Despite obstacles (such as technical or regulatory constraints, rising component costs, etc.), wind power has continued to expand, outperforming gas for the first time in the European Union's (EU) electricity production. With 263 gigawatts of capacity reached in 2023 (27% more than in 2022), photovoltaics provided further momentum, even getting a step ahead of the REPowerEU roadmap. The use of fossil fuels has fallen symmetrically, with a notable reduction in the use of coal-fired power plants, which are now being closed again. Between 2024 and 2025, one-fifth of the fleet should have disappeared, largely due to capacity reductions in Germany.

As a result, fossil fuels, historically the leading source of electricity in Europe, have definitively given way to renewable energies (graph). In 2023, renewable energies supplied the EU with 1,200 terawatt-hours, or 44% of its needs. A new all-time record, set to be surpassed rapidly.

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¹ EMBER European Electricity Review (2024) Europe's electricity transition takes crucial steps forward, January.

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