

Renewables overtake fossil fuels to provide 30% of EU electricity

Report finds 13 member states generated more energy from wind and solar power than coal and gas for first time in 2024

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Getting wind turbines on grid, such as these near Radom, Poland, are helping the EU move away from fossil fuels. Photograph: Dominika Zarzycka/NurPhoto/REX/Shutterstock

Wind turbines and solar panels have overtaken fossil fuels to generate 30% of the European Union's electricity in the first half of the year, a report has found.

Power generation from burning coal, oil and gas fell 17% in the first six months of 2024 compared with the same period the year before, according to climate thinktank Ember. It found the continued shift away from polluting fuels has led to a one-third drop in the sector's emissions since the first half of 2022.

Chris Rosslowe, an analyst at Ember, said the rise of wind and solar was narrowing the role of fossil fuels. "We are witnessing a historic shift in the power sector, and it is happening rapidly."



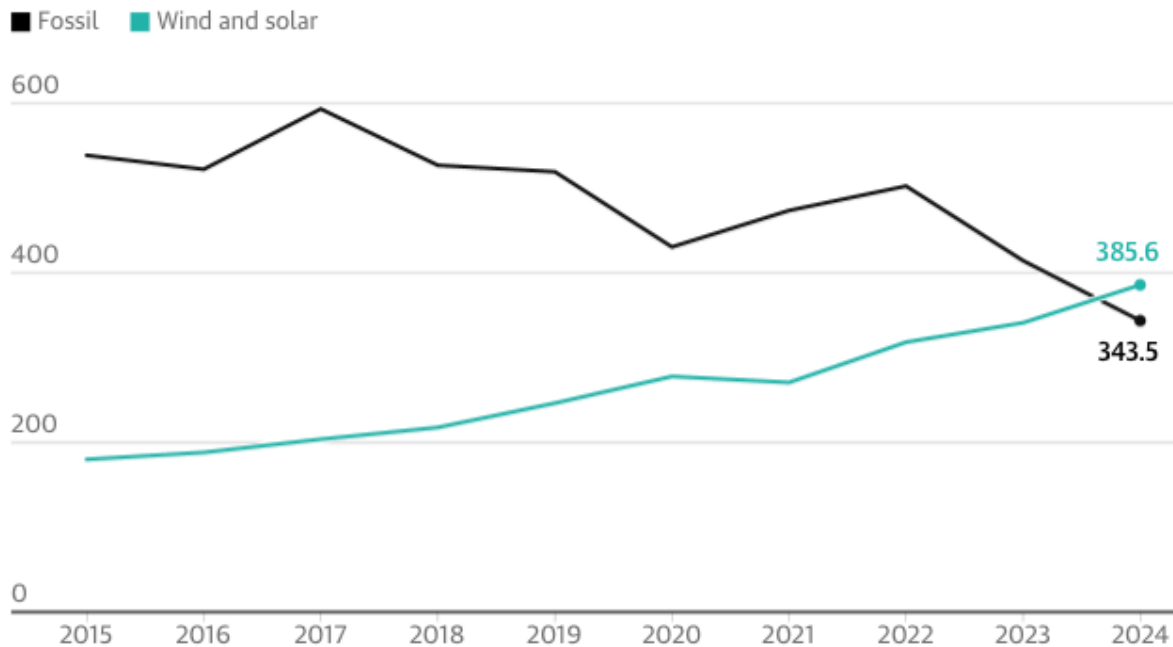
Labour must speed up wind power expansion or miss targets, says renewables industry

The report found EU power plants burned 24% less coal and 14% less gas from the first half of 2023 to the first half of 2024. The shift comes despite a small uptick in electricity demand that has followed two years of decline linked to the pandemic and Ukraine war.

“If member states can keep momentum up on wind and solar deployment then freedom from fossil power reliance will truly start to come into view,” said Rosslowe.

EU wind and solar surpassed fossil fuel power in the first half of 2024

EU electricity generation in the first half of each year, terawatt hours



Guardian graphic. Source: Ember monthly electricity data. Note: analysis of 13 EU member states

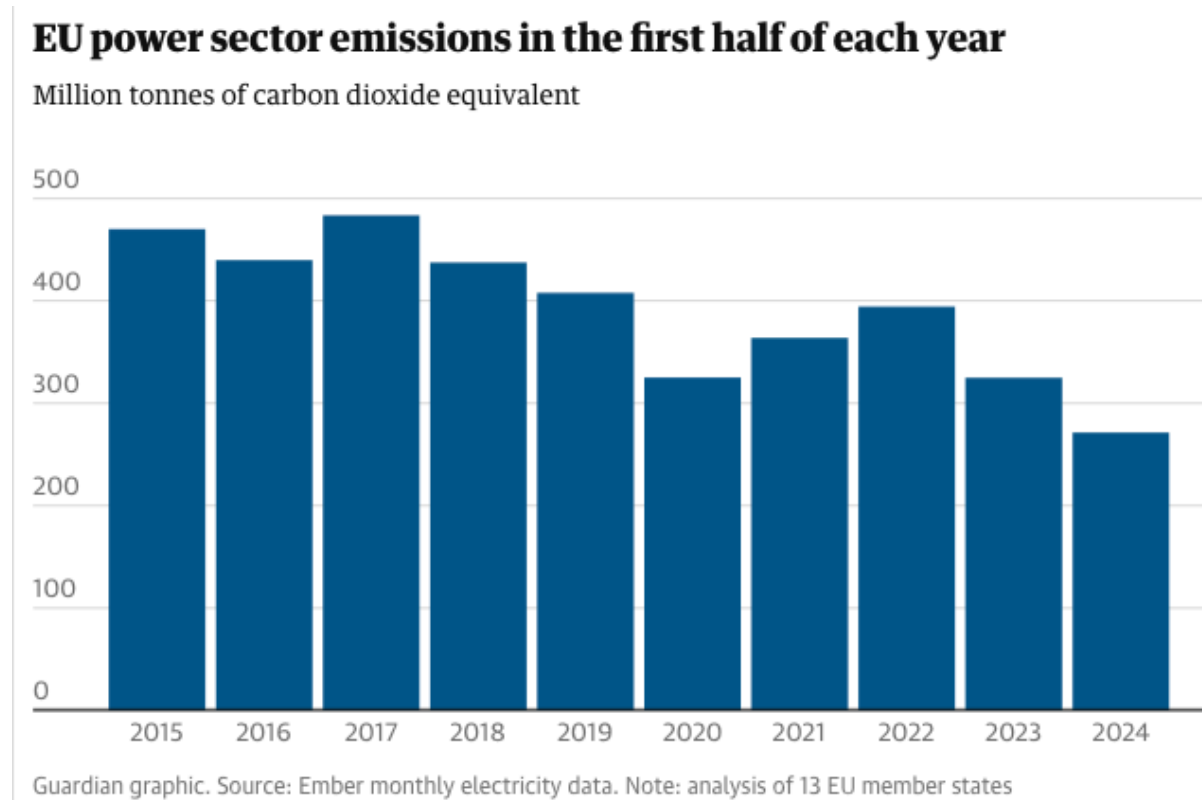
Europe is among the biggest historical polluters that have contributed the planet-heating gas that has made extreme weather more violent, but it also has some of the most ambitious targets to clean up its economy. Since Russia's invasion of Ukraine, European leaders have sped up their shift to renewables with stronger rhetoric and looser permitting rules.

But while solar power has boomed, the wind industry has struggled with high inflation on top of continued opposition from politicians and the public. The EU installed a record 16.2GW of new wind power capacity in 2023, according to the lobby group Wind Power Europe, but this was about half of what was needed that year to meet its climate targets for the end of the decade.

Scenarios modelled by the Intergovernmental Panel on Climate Change (IPCC) and International Energy Agency show that most of the electricity needed to power a clean economy will come from rays of sunlight shining on panels and gusts of wind spinning turbines.

The Ember report found 13 member states generated more electricity from wind and solar than from fossil fuels in the first half of the year. Germany, Belgium,

Hungary and the Netherlands hit that milestone for the first time, the authors found.



Andrea Hahmann, a scientist at Denmark Technical University who co-wrote an IPCC report chapter on energy systems, said the development was “significant but not surprising”.

“Strong winds were prevalent during the first six months of 2024 in northern Europe, where most wind energy is generated,” she said. “The ‘crossing of the lines’ demonstrates that the EU’s electricity transition is possible, and we should not give in to pessimism. The renewable energy targets that must be met are substantial but achievable with the proper policy measures.”