# Europe faces urgent rethink of interconnector strategy after Spain-Portugal grid failure



The recent meltdown of the electricity grids in Spain and Portugal, which subsequently affected France, has prompted calls for a reassessment of Europe’s interconnector strategies. This incident highlights the vulnerabilities associated with interconnected energy systems, especially as European countries seek to enhance their energy security and transition towards renewable energy sources.

On Tuesday, the grid failure in the Iberian Peninsula led to significant disruptions, sparking concerns over the increased integration of national electricity networks. Although the exact cause of the blackout remains undetermined – with suggestions pointing towards a frequency maintenance failure – it was reported that the interconnector with France was tripped during the incident. This event serves to underline a critical aspect of energy trading: failures in one country can have cascading effects across borders.

The growing reliance on gas imports from Russia, the United States, and the Gulf states has intensified the urgency for greater electricity trading within Europe. Enhanced interconnection is seen as a vital solution to mitigate this dependence and facilitate a transition to net-zero emissions. During the gas crisis of 2022, for instance, the interconnected European grid helped stabilise electricity prices by allowing surplus power to flow from areas with adequate generation to regions experiencing shortages.

Experts argue that the current electricity grid must be optimised to accommodate the increasing share of intermittent renewable energy sources. With the potential for high production during windy or sunny periods, it is essential to construct more cables to enable the transfer of electricity from these areas to regions with less generation capacity. A more efficient grid could significantly decrease the operational need for expensive backup power sources, including gas plants equipped with carbon capture technology.

Despite the advantages, building interconnectors has faced considerable delays. Reports suggest that Europe needs to construct at least a third more interconnections than currently planned by 2030 to achieve optimal functionality. This is crucial as interconnectors facilitate the flow of electricity from surplus to deficit regions, ultimately helping to lower costs across systems.

Norway's experience serves as a recent example of how interconnectors can impact electricity pricing. As Norway exports hydropower to Britain, Denmark, and Germany, these transactions have significantly driven up prices during periods of minimal renewable generation – termed Dunkelflaute. In light of these challenges, various Norwegian political parties are debating whether to deactivate the interconnector with Denmark when it comes up for renewal in 2026 and are urging negotiations concerning interconnections with Germany and the UK.

A critical issue at hand is the strain on domestic electricity grids. Analysts recommend that stronger regulatory frameworks and enhanced information-sharing mechanisms be established to prevent problems in one country from affecting neighbouring states. However, Germany is currently struggling to comply with EU regulations that mandate 70% of its transmission capacity be allocated for electricity trading by year-end, largely due to its grid constraints.

The geographical distribution of generation and demand in Germany exacerbates pricing issues. While the northern regions benefit from abundant wind power, much of the industrial demand is concentrated in the south and west. Consequently, high demand and low renewable production lead to increased electricity imports from neighbouring regions, thereby driving up prices across the board.

To alleviate these issues, suggestions have been made to decentralise large national markets into smaller regional ones. This strategy, recommended by the European Network of Transmission System Operators for Electricity (ENTSO-E), could enable lower electricity prices in wind-rich areas, fostering greater electricity exports to neighbouring countries and ultimately benefiting consumers.

While this proposal may face resistance, as evidenced by the contentious debate in the UK surrounding local pricing, there are pathways to manage the associated challenges. Accelerating the planning and construction timelines for solar plants and interconnectors is essential. Additionally, capping profits from interconnectors could help redirect excess revenues back to consumers, thus lowering electricity bills.

Ultimately, the dynamics of the electricity market are closely tied to geographic factors. By ensuring that consumers and industries are responsive to more reflective pricing mechanisms, European countries can create incentives for improved efficiency across the energy system, potentially securing a more robust energy future.

Source: [Noah Wire Services](https://www.noahwire.com)

## References

* <https://www.ft.com/content/84381d25-5578-4b79-b6f9-8853a6470981> - This article discusses the massive power outage that struck Spain and Portugal, paralyzing the Iberian Peninsula and raising concerns about energy grid stability amid the green transition. It highlights the insufficient interconnection capacity between Spain and France, which contributed to the blackout.
* <https://www.ft.com/content/3b807eff-fdaf-49f6-9611-00c4ff992a43> - This piece examines the massive blackout that occurred in Spain and Portugal, disrupting transportation, healthcare, communications, and industry. It emphasizes the rapid collapse of the grid and the international concerns about grid reliability amid the growing reliance on renewable energy.
* <https://www.ft.com/content/f0b621a1-54f2-49fc-acc1-a660e9131740> - This article reports on Norway's governing parties advocating for cutting electricity interconnectors to Denmark and renegotiating power links with the UK and Germany due to unprecedented high electricity prices. It highlights the impact of interconnectors on electricity pricing and the debates surrounding their deactivation.
* <https://energy.ec.europa.eu/news/european-commission-and-energy-ministers-france-portugal-and-spain-strengthen-cooperation-cross-2023-12-19_en> - This announcement details the Memorandum of Understanding signed by the European Commission and the energy ministers of France, Portugal, and Spain on cross-border energy interconnections in South-West Europe. It underscores the commitment to building necessary energy infrastructure to achieve a secure and efficient internal energy market.
* <https://www.ree.es/en/press-office/press-release/2024/12/interconnections-with-france-and-portugal-generate-%E2%82%AC71-4-million-for-spanish-electrical-system> - This press release from Red Eléctrica discusses the financial outcomes of interconnections with France and Portugal, highlighting the revenues generated and their contribution to price stability in the internal electricity market.
* <https://www.iea.org/articles/france-electricity-security-policy> - This analysis by the International Energy Agency examines France's electricity security policy, including investments in transmission and distribution networks and the development of interconnections with neighboring countries to enhance grid stability and accommodate renewable energy sources.
* <https://news.google.com/rss/articles/CBMinwFBVV95cUxNZEs0VXZWSkJZRDRjS2xUbFpfT09RMHhXSncwZ0tVYjRCWUdwZW9RdC1rMFBtTHdvXy1PamwyamxMQ1plakpxOEtfaFdzWmVmbmtzNTZObnU1QkhOQkpaRlFocktoR1hmWWFJaWwyQktNQU1oN0NNczVJeVdmd3d4bFdLeEh2b1V4RE5ubEVvM09HRTRVVkluVlZ1T3Q2ZDg?oc=5&hl=en-US&gl=US&ceid=US:en> - Please view link - unable to able to access data