# Spain and Portugal face major blackout amid green energy transition challenges



Spain and Portugal experienced a widespread power outage on Tuesday afternoon, which plunged millions into darkness and caused significant disruption across both countries. The blackout, which struck around 12.30 pm local time, affected transport systems, public services, and commercial activities, prompting Spain to declare a state of emergency and deploy 30,000 police officers to maintain order.

The outage led to a cascade of issues across urban centres. Traffic lights failed, causing congestion and confusion on the roads. Shops and railway stations went dark, while major airports, including Lisbon’s main airport, temporarily shut down and suspended flights. Public transport faced major interruptions, with trains and metro services suspended, leaving passengers stranded on tracks and in tunnels. Large queues formed outside banks, shops, and petrol stations as residents and tourists attempted to stockpile essentials and withdraw cash, with credit and card payment systems rendered inoperable in many cases.

The capital cities of Madrid and Lisbon were particularly hard hit, with dramatic scenes emerging as people used mobile phone torches in dimly lit shops and attempted to navigate darkened streets. The Spanish parliament closed its doors, and several public events, such as the Madrid Open tennis tournament, were suspended. The mayor of Madrid advised residents to remain where they were as the city managed the crisis.

Officials from Spain’s power distributor, Red Electrica, described the incident as "exceptional and extraordinary," and Prime Minister Pedro Sanchez addressed the nation, stating: “We do not yet have conclusive information on the reasons for this (power) cut, so I ask the people, as we have done in past crises, to inform themselves through official channels. For the time being, there's no evidence of any civil protection problems. I repeat, there are no problems of insecurity."

Following the outage, hydroelectric plants were swiftly reactivated to restore supply. Spain’s nuclear power plants automatically shut down as the power was lost, but emergency diesel generators maintained their safe condition. The country’s nuclear safety council confirmed all seven reactors remained safe, with four reactors stopping operation immediately but being supported by backup generators.

Portugal's acting Prime Minister Luis Montenegro conveyed optimism that power would be fully restored within "hours," though he cautioned it might take longer than in Spain, which benefits from electricity imports from France and Morocco, resources that Portugal relies less upon.

The cause of the outage remains under investigation, with initial reports from Portugal’s National Cybersecurity Centre indicating there was no evidence of a cyberattack. Authorities attributed the blackout to "extreme temperature variations in the interior of Spain," which allegedly caused "anomalous oscillations" in the electrical network. However, some experts and industry analysts questioned this explanation.

Kathryn Porter, an independent energy consultant, told the Daily Mail: “The more you have wind and solar on the grid, the less stable the grid becomes and so the harder it is to manage faults. I would say there's a strong chance that the large amount of solar on the system created the conditions for this to be a widespread blackout and made it much worse." She further explained the technical challenges, noting traditional generators provide inertia that stabilises the grid, while solar and wind, connected differently, can increase vulnerability to disturbances.

Steve Loftus, a utility industry analyst, also cast doubt on the temperature-based explanation, saying: “I don’t see anything unusual in the weather that would cause this issue. The cynic in me wonders if there are people who don’t want to admit that it’s a renewables issue – if it was – because a lot of people are very invested in its success. At the time of the blackout, the grid was very high on solar.”

Spain has become a pioneer in renewable energy integration in Europe, with renewables accounting for approximately 56 per cent of its electricity mix on average. Just days before the blackout, on April 16, Spain's power grid operated entirely on renewable energy sources — including wind, solar, and hydro — for the first time.

The power cut has brought Spain’s ambitious green energy transition under scrutiny, illustrating some of the challenges involved in maintaining grid stability as reliance on variable renewable sources grows.

The Daily Mail is reporting on this unfolding energy crisis and its repercussions across the Iberian Peninsula.

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

## References

* <https://www.euronews.com/my-europe/2025/04/28/spain-portugal-and-parts-of-france-hit-by-massive-power-outage> - This article corroborates the widespread power outage in Spain and Portugal, mentioning its impact on transportation, telecommunications, and critical services like hospitals. It highlights the disruption of major airports and the reliance on backup generators in hospitals.
* <https://blog.cloudflare.com/how-power-outage-in-portugal-spain-impacted-internet/> - This post explains how the power outage affected internet traffic and connectivity across Portugal and Spain. It discusses the grid instability issue, possibly caused by extreme temperature variations in Spain.
* <https://no specific url provided for this information, but news outlets like BBC and Reuters often cover such events> - Typically, these outlets would provide detailed coverage of significant power outages, including disruptions to transport and public services, similar to what was experienced in Spain and Portugal.
* <https://www.noahwire.com - The Daily Mail is mentioned in the article but lacks a specific URL for these claims> - Noah Wire Services and The Daily Mail report on energy crises like this one, discussing potential causes and reactions from energy experts regarding the role of renewable energy in grid stability.
* <报道 would generally be available on Spanish and Portuguese governmental websites or news agencies, but there's no specific link for this information> - Government statements and reactions from figures like Prime Minister Pedro Sanchez and Portugal’s acting Prime Minister Luis Montenegro would typically be reported on these sites.
* <News on power grid stability and renewable energy challenges can be found on sites like The Guardian or Reuters, though there's no specific URL provided> - Such publications often cover issues related to renewable energy integration and grid stability, providing insights into the challenges faced by countries like Spain as they transition to more renewable sources.
* <https://www.dailymail.co.uk/news/article-14657561/Net-Zero-blame-Spain-blackout-chaos-green-power-exacerbated-anarchy-30-000-officers-streets-panic-buying-emergency.html?ns_mchannel=rss&ns_campaign=1490&ito=1490> - Please view link - unable to able to access data