

# Backup power madrid

Why do we need battery energy storage systems in Spain?

Due to the large capacity of installed hydroelectric and thermal storage systems and the resilience of the Spanish power grid, the need for Battery Energy Storage Systems (BESS) in Spain has been relatively low. The lack of a clear regulatory framework for BESS has also hindered its development in Spain so far.

Why is battery storage a problem in Spain?

Along with the lack of urgency around battery storage on the Spanish grids, key regulatory and market fundamentals have been lacking for the BESS business in Spain. The Spanish market has primarily relied on pumped hydro storage and thermal storage.

How much energy storage capacity does Spain have?

When it comes to installed energy storage capacity in general, Spain is one of the leading countries within Europe (see figure 2). Currently, Spain has 6.3GW of hydroelectric and 1GW of thermal storage capacity installed. In fact, the non-BESS storage capacity in Spain is higher than in any other European country.

How much energy storage does Spain need in 2030?

The projected storage needs of Spain in 2030 are similar to those of the UK and Italy. In its National Energy and Climate Plan (NECP), the Spanish government aims to have 22.5GW of energy storage by 2030 (see table 1). This amount of storage capacity will be needed to integrate the growing capacity of intermittent generation.

According to El Pais newspaper, the Ford Almussafes car plant is currently without power, with production lines completely stopped, and truck manufacturer Iveco, which has factories ...

In this article, we discuss the latest developments in Spain's regulatory framework and power system that will improve the market attractiveness for BESS investments.

On April 28, 2025, at 12:33 PM local time, a massive power outage swept across Spain and Portugal, leaving millions without electricity. The blackout disrupted transportation, communications, and ...

This incident resulted in a loss of 15 gigawatts of electricity generation, equivalent to 60% of Spain's consumption at that time, and has triggered a growing demand for backup power systems ...

The Bay of Biscay interconnection project will soon link Spain and France with more power lines. This project will raise the amount of power they can share from 2,800 MW to 5,000 MW.

We examined a sample of ten PV installations in Spain, all equipped with the Tigo EI Residential all-in-one system featuring integrated backup, and monitored through the Energy ...

Learn the cause of the massive Spain power outage in April 2025, dive into the timeline and affected regions, and find out how energy storage can prevent blackouts going forward.



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At 12:33 PM on April 28, 2025, a catastrophic power grid failure left millions across Spain and Portugal without electricity. Transportation paralysis, communication blackouts, and disrupted ...

Hospitals scrambled for backup power, trains stopped, and businesses lost billions. It was one of Europe's worst grid failures ever. At mygeneratorplus , we believe battery storage is the key to ...

On April 28, 2025, large parts of Spain and Portugal were plunged into darkness. In a matter of seconds, over half of Spain's electricity demand vanished from the grid. The outage left millions without power ...

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