

Average BESS price per 500MW in Italy





Overview

The Elemens Italy BESS Index is the first performance indicator for spot market revenues of stand-alone utility-scale batteries operating in the Italian electricity system.

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Another 1.75GW is under construction, projects totaling 230MW have obtained permits, and 1.2GW of new BESS capacity has been announced. If the entire pipeline comes online, Italian installed capacity will amount to 4GW. This means the country will need to attract an additional 11GW of BESS capacity.

This article sets out current key trends shaping BESS value in Italy, from renewables rollout and arbitrage value to historical asset performance and the upcoming MACSE auctions. 1. Renewable capacity development Italy's 2030 National Energy and Climate Plan (NECP) targets a doubling of solar and.

That implies a figure of around 564MW. The contract is worth €47,000 (US\$49,000) per MW per year for both new and existing resources (foreign ones get a different price) and the bulk of capacity was in the North region. Italy has eight electricity market (and price) regions. The BESS figure is a.

As of most recent estimates, the cost of a BESS by MW is between \$200,000 and \$450,000, varying by location, system size, and market conditions. This translates to around \$200 - \$450 per kWh, though in some markets, prices have dropped as low as \$150 per kWh. Key Factors Influencing BESS Prices.

Revenue Streams for BESS: The business case for BESS in Italy is underpinned by four main revenue streams: wholesale trading, the Ancillary Services



Market (MSD), the Capacity Market (MC), and the new energy storage subsidy scheme (MACSE). Zonal Market Dynamics: Italy's electricity market is a. Is Bess a good investment in northern Italy?

While Northern Italy currently has the largest installed BESS capacity in the country, a build-out of RES in the South is increasing energy price volatility, creating a more compelling investment case for BESS in this region.

What is the Elemens Italy Bess index?

The Elemens Italy BESS Index is the first performance indicator for spot market revenues of stand-alone utility-scale batteries operating in the Italian electricity system. The tool has been designed to provide industry players with up-to-date and detailed insights into the economic performance of BESS assets.

What is the business case for Bess in Italy?

Revenue Streams for BESS: The business case for BESS in Italy is underpinned by four main revenue streams: wholesale trading, the Ancillary Services Market (MSD), the Capacity Market (MC), and the new energy storage subsidy scheme (MACSE).

How is the Italian government aiming for 15GW of Bess capacity?

The Italian government is aiming for 15GW of BESS capacity by 2030 to maintain security of supply. The Italian government, regulator, and Transmission Service Operator (TSO) are creating an attractive regulatory environment for BESS by offering multiple incentive schemes and updating the grid code.

How much does Bess cost?

The cost of BESS has fallen significantly over the past decade, with more precipitous drops in recent years: This is nearly a 70% reduction in three years, owing to falling battery pack prices (now as low as \$60-70/kWh in China), increased deployment, and improved efficiency.

How big is Bess in Italy?

BESS capacity development Total BESS installations in Italy now exceed 6 GW / 14 GWh, but this is mostly behind-the-meter storage co-located with rooftop solar in the North zone. Terna's plans aim for over 70 GWh by 2030 to achieve



Italy's NECP RES targets — a fivefold energy capacity increase (Chart 2).



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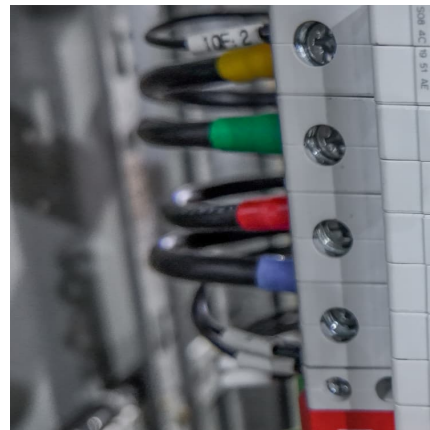


[Battery Report 2024: BESS surging in the "Decade of ...](#)

In 2024, the cost per kWh of BESS systems dropped by 40% year-on-year from 2023, now averaging \$165/kWh - less than half the price seen just five years ago. In China, prices have fallen even further, with bids for a large-scale system ...

? Electricity prices in Italy

Europe Italy ? Electricity prices ?? Italy IT ? The latest energy price in Italy is EUR 120.31 MWh, or EUR 0.12 kWh This is -3% less than yesterday. 2025-08-09 - 2025-09-09



[How do the costs of battery energy storage systems ...](#)

Battery Energy Storage Systems (BESS): Cost: The average cost of BESS ranges from \$400 to \$600 per kWh. Advantages: Li-ion batteries are widely used due to their efficiency and long lifespan, though they are more ...

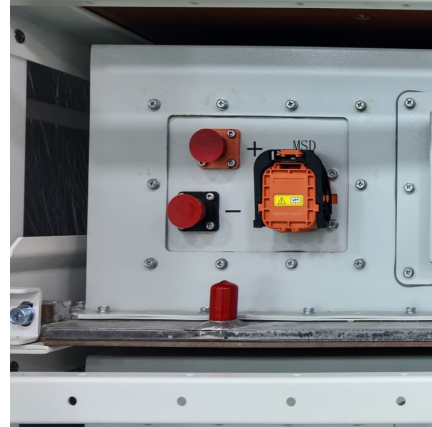


Step-by-Step BOQ for Battery Energy Storage Systems (BESS)!!

In the rapidly evolving energy landscape, Battery Energy Storage Systems (BESS) play a pivotal role in stabilizing grids, optimizing renewable



energy, and ensuring ...



[Italy BESS Index , Elemens , Energy Boutique Consulting](#)

The Elemens Italy BESS Index is the first performance indicator for spot market revenues of stand-alone utility-scale batteries operating in the Italian electricity system.

cost of bess per mwh

Investing into BESS A Goldman Sachs report from February 2024 indicates an average price of \$115 per kWh for EV batteries. However, these figures primarily relate to battery cells. Total ...



[BESS in Germany 2025 and Beyond: Use Cases, ...](#)

BESS Capacity across Germany and Projected Growth By mid-2024, Germany's total BESS capacity reached 16 GWh, which included: 13 GWh residential 1.1 GWh commercial 1.8 GWh large-scale systems Germany led ...



[BESS in Great Britain: Ten key trends in 2024](#)

Why battery revenues are becoming more location-dependent, with assets in Scotland and Southeast England outperforming the ME BESS GB Index. How cycling rates and optimization strategies are widening revenue differences ...



[Italy cost of battery storage per mw](#)

How many storage systems are there in Italy? More specifically, 311,189 storage systems were present in Italy in mid- 2023, with a total power of 2,329 MW and a maximum capacity of 3,946 ...

Utility-Scale Battery Storage , Electricity , 2021 , ATB

Current costs for utility-scale battery energy storage systems (BESS) are based on a bottom-up cost model using the data and methodology for utility-scale BESS in (Feldman et al., 2021). The bottom-up BESS model accounts for major ...



Cost Projections for Utility-Scale Battery Storage: 2023 Update

Executive Summary In this work we describe the development of cost and performance projections for utility-scale lithium-ion battery systems, with a focus on 4-hour duration ...



Electricity prices

To meet its goals, Italy will need to install an average of 10.2 GW of new renewable capacity per year through 2030. A tall order--but one that promises economic growth and climate resilience.



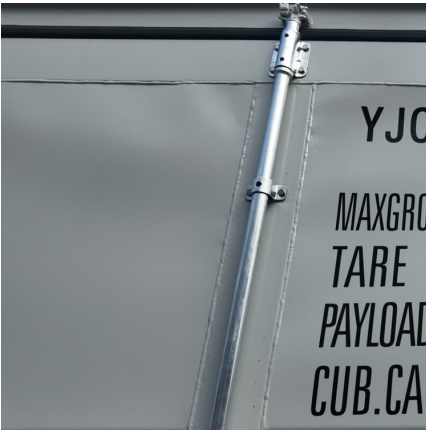
Backup power for Europe

In this article, we will examine the lucrative opportunities the Italian government has created for BESS investment, positioning Italy among the most attractive countries for ...

[Italy: BESS wins nearly 600MW in 2027 capacity market](#)

The contract is worth EUR47,000 (US\$49,000) per MW per year for both new and existing resources (foreign ones get a different price) and the bulk of capacity was in the North ...



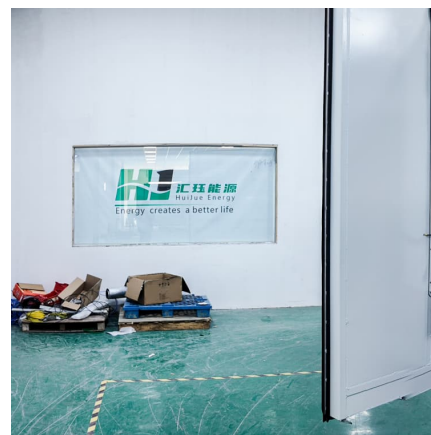


What is the Cost of BESS per MW? Trends and 2025 Forecast

As of most recent estimates, the cost of a BESS by MW is between \$200,000 and \$450,000, varying by location, system size, and market conditions. This translates to ...

[Understanding MW and MWh in Battery Energy ...](#)

In the context of a Battery Energy Storage System (BESS), MW (megawatts) and MWh (megawatt-hours) are two crucial specifications that describe different aspects of the system's performance. Understanding the ...



Italian 2027 Capacity Market Auction: MACSE's impact & the BESS ...

On 26 th February 2025, Terna held Italy's Capacity Market (CM) auction for the 2027 delivery year, assigning 38 GW of derated capacity (CDP) in 1-year contracts and almost ...

[How Italy is Driving BESS Investment](#)

While Northern Italy currently has the largest installed BESS capacity in the country, a build-out of RES in the South is increasing energy price volatility, creating a more compelling investment case for BESS in this region.



[How Italy is Driving BESS Investment](#)

Consumers face a Single National Price or "PUN", the weighted average energy price across these zones. There have been discussions around phasing out the PUN and transitioning to a zonal price for consumers; ...



Customized predictions of the installed cost of behind-the-meter

In Section 2, I review the prior literature that estimates or forecasts the installed cost of BTM BESS. Typically, prior works have estimated the installed cost of a representative ...



[White paper BATTERY ENERGY STORAGE SYSTEMS ...](#)

The majority of newly installed large-scale electricity storage systems in recent years utilise lithium-ion chemistries for increased grid resiliency and sustainability. The capacity of lithium ...





[BESS prices in US market to fall a further 18% in ...](#)

The average 2024 price of a BESS 20-foot DC container in the US is expected to come down to US\$148/kWh, down from US\$180/kWh last year, a similar fall to that seen in 2023, as reported by Energy-Storage.news, when CEA launched ...



Understanding BESS Price per MWh in 2025: Market Trends and ...

Understanding BESS Price per MWh in 2025: Market Trends and Cost Drivers When evaluating battery energy storage system (BESS) prices per MWh, think of it like buying a high ...

[BESS Investment in Italy: Which Market Option is Best?](#)

Market Options Italy's ambitious drive towards renewable energy integration, targeting 50 GW solar and 28.1 GW wind capacity by 2030, has created distinct pathways for Battery Energy Storage System (BESS) ...



[Global Power Storage Pricing: BESS Most Cost ...](#)

Key View Battery energy storage systems will be the most competitive power storage type, supported by a rapidly developing competitive landscape and falling technology costs. We expect the price dynamics for ...



5: Average value of a 1 MW, 1 MWh BESS on the Germany DAM per ...

5: Average value of a 1 MW, 1 MWh BESS on the Germany DAM per year, in function of the NRMSE of the predicted DAM prices, and for a maximum of 300, 500 and 1000 cycles per year.



How do the costs of battery energy storage systems (BESS) ...

Battery Energy Storage Systems (BESS): Cost: The average cost of BESS ranges from \$400 to \$600 per kWh. Advantages: Li-ion batteries are widely used due to their ...

[BESS arbitrage revenue ranked by country & duration](#)

Timera Energy set out a ranked analysis of BESS day-ahead arbitrage revenue capture across European markets in 2022 vs 2023 & look at key investment takeaways.





Levelized Cost of Storage for Standalone BESS Could Reach INR4.12...

Levelized Cost of Storage for Standalone BESS Could Reach INR4.12/kWh by 2030: Report Battery energy storage system based on low-cost lithium-ion batteries can ...

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