EUROPEAN ENERGY STORAGE DEMAND FALLS

How long will gas storage last in Europe? Full gas storage could sustain European countries for,at best,about three months,according to Aurora Energy Research. In Germany,home to nearly a quarter of the EU's storage,stored gas could meet 80 to 90 days of average demand.

Will Europe's gas storage be 80% full? Following a scramble for fuel over the summer after top European gas supplier Russia invaded Ukraine,Europe's gas storage is now 79.94% full,Gas Infrastructure Europe data shows,setting up countries to exceed their target to have 80% full storage by November. In a normal year that could cover Europe's winter peak in gas use.

Will Europe have a low gas storage capacity in 2023-24? A recent analysis by Paula Di Mattia,European gas market analyst at commodities consultancy ICIS,also showed that in five out of seven scenarios,Europe could head into the winter of 2023-24 with gas storage sites at only 65 per cent of capacity,the lowest level at that point since at least 2016,when records began.

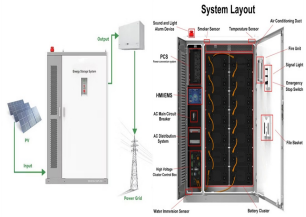
How has the energy crisis affected Europe? While natural gas supply to Europe was front and centre of the crisis,the ripple effects have been felt throughout the energy industry and across all regions of the world. In the European Union,the carbon dioxide intensity of the power sector increased significantlyin 2022.

How much gas is stored in the EU? Gas storage in the EU is now at more than 90%. It was 30% in February 2022,and since then we have been working with EU countries to increase Europe???s energy reserves In order to secure the EU's energy supply at affordable prices,the Commission and the Member States have established an EU Platform for the common purchase of gas,LNG and hydrogen.

EUROPEAN ENERGY STORAGE DEMAND FALLS

Will Europe have enough storage in 2022? Scenarios that would allow Europe to have ample storage levels involved significant demand destruction either in the winter or throughout November 2022 to September 2023, as well as raised LNG imports to 440mn cubic metres a day, more than this year.

Source: Bruegel based on IEA (2024), European Commission (2024) 4 The European Commission's 2040 Impact Assessment provides different assessments of final electricity consumption in 2030. Table 10 in Part 1 suggests that about 2931 terawatt hours will be the final electricity consumption level (converting 33 percent of 764 Mtoe of final energy ???



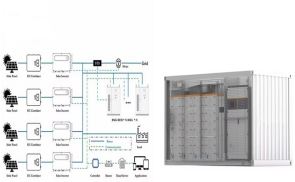
Europe has seen its first year when energy storage deployments by power capacity exceeded 10GW in 2023. The eighth annual edition of the European Market Monitor on Energy Storage (EMMES) was published last week by consultancy LCP Delta and the European Association for Storage of Energy (EASE).

At the forefront of this evolution is the increasing demand for energy storage solutions. In this comprehensive analysis, we delve into the forecast for European energy storage demand up to 2024, exploring the driving factors, anticipated trends, and the role of various technologies in shaping the continent's energy storage narrative.

It addresses the most important issues contributing to the broader deployment of energy storage. EU countries should consider the double "consumer-producer" role of storage by applying the EU electricity regulatory framework and by removing barriers, including avoiding double taxation and facilitating smooth permitting procedures.

EUROPEAN ENERGY STORAGE DEMAND FALLS

Europe Energy Storage Market is poised to grow at a CAGR of 18% by 2028. Factors like increasing demand for uninterrupted power supply and decreasing price of lithium-ion batteries are expected to drive the market. This will increase the demand for battery energy storage systems during the forecasted period. For instance, in February 2022



The European Commission, the executive arm of the European Union (EU), has said countries across the continent should be encouraged to deploy energy storage. The group has said storage will

The Norwegian energy storage market is expected to grow from 38 MW in 2023 to 179 MW in 2030, on a smaller scale. Hydropower accounts for 90%, and 1.4 GW of micro pumped hydro ???

In Europe, there is a growing consensus amongst policymakers that energy storage is crucial to securing affordable and low carbon energy. In May 2022, European Union launched their REPowerEU plan, a part of the European Green Deal, which mandates that 45% of Europe's energy generation needs to come from renewable sources by 2030.

Europe's industries are diverse, and so are its energy needs. But the common thread binding them is the need for sustainable, reliable, and cost-effective secure energy solutions, Julia Souder writes.

EUROPEAN ENERGY STORAGE DEMAND FALLS

Strong imports of liquefied natural gas, warm weather and demand reduction as a result of high prices in recent years have all helped keep gas stored in the EU's underground storage facilities

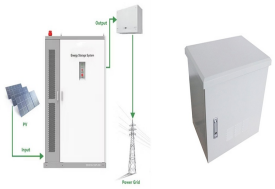
In the current "EU Energy Outlook 2060", we show long-term trends in Europe. To give an idea of how the energy market may develop in the future, Energy Brainpool's "EU Energy Outlook 2060" illustrates commodity prices, power plant expexpansion and electricity demand, and shows the wholesale power prices resulting from these factors up to

Energy storage can stabilise fluctuations in demand and supply by allowing excess electricity to be saved in large quantities. With the energy system relying increasingly on renewables, more and more energy use is electric. Energy storage therefore has a key role to play in the transition towards a carbon-neutral economy. Hydrogen

It is further projected that between 2023 and 2025, the installed energy storage capacity in the United States will expand to 28.3GWh, 44.2GWh, and 68.2GWh respectively. European Market: The appetite for household storage remains robust, and the capacity of large-scale energy storage will witness the expansion.

Although the installation growth rate in the European market in 2024 is expected to be slower than that in 2023, it will still maintain a high growth rate, primarily supported by the rise in utility energy storage installations. The demand for utility energy storage in mainstream European countries is primarily driven by government tenders and

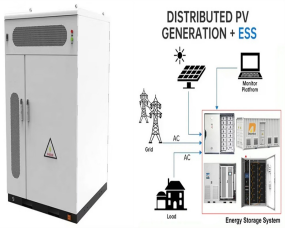
EUROPEAN ENERGY STORAGE DEMAND FALLS



Unique energy insight, spanning the renewables, energy and natural resources supply chain, to support strategic decision-making. to winter demand and risk reducing European storage inventories down to 4% by March and up to only 63% ahead of the start of following winter, inevitably resulting in demand curtailments.

Europe's energy crisis is set to persist for years if the region fails to reduce demand and secure new gas supplies, according to fresh warnings from energy industry executives and

Major European countries witness a surge in demand for large-scale energy storage driven by government bidding projects and market initiatives. The versatility of large-scale energy storage projects, applicable ???

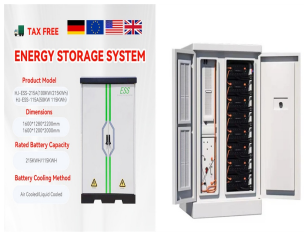


In the April-June 2024 period, EU gas consumption continued its structural decline, driven by a decline in fossil gas-fired power generation, higher energy savings, reduced demand, and growing renewable energy production. Overall, EU gas import volumes remained on a downward trend, while already historically high storage levels continued to

The electricity Footnote 1 and transport sectors are the key users of battery energy storage systems. In both sectors, demand for battery energy storage systems surges in all three scenarios of the IEA WEO 2022. In the electricity sector, batteries play an increasingly important role as behind-the-meter and utility-scale energy storage systems that are easy to ???

EUROPEAN ENERGY STORAGE DEMAND FALLS

Major European countries witness a surge in demand for large-scale energy storage driven by government bidding projects and market initiatives. The versatility of large-scale energy storage projects, applicable both on the grid and power sides, contributes to their robust growth. Forecasts on Energy Storage Installations for 2024 in the U.K



As Europe's renewable energy capacities expand, electricity systems face increased risks of energy droughts???periods of low production coinciding with high demand. We evaluate characteristics

Lower electricity demand. EU electricity demand fell by around 3% in 2022. This meant that around 14 bcm of gas demand was avoided. Weather played a part in reducing electricity demand, even though higher summer temperatures and drought conditions drove up gas-fired power generation in parts of Europe.

With the increase in energy demand and the goal of carbon neutrality, energy storage projects and supporting policies are now being rolled out in emerging European countries. Australia is one of the world's leading markets for energy storage deployments with more than 3.5 GW energy storage projects in the first quarter, of which BESS projects

The country is one of just a handful in Europe that includes energy storage in its national energy and climate plan, with a target of 6 GW of capacity by 2030. is a phenomenon whereby solar power dominates the generation mix in the middle of the day but falls off rapidly in the evening, forcing other technologies to ramp up and meet rising

EUROPEAN ENERGY STORAGE DEMAND FALLS

Key actions. The EU needs a strong, sustainable, and resilient industrial value chain for energy-storage technologies. There is an increasing demand for data transparency and availability, and greater data granularity, including network congestion, renewable energy curtailment, market prices, renewable energy, greenhouse gas emissions content and installed energy-storage ???

A panel discussion on the Polish market at the recent Energy Storage Summit CEE in Warsaw. Image: Solar Media . The European Commission (EC) has approved a ???1.2 billion (US$1.32 billion) state aid package for Poland to support the deployment of electricity storage facilities.

Meanwhile, demand for batteries across the electric vehicle (EV) and battery energy storage system (BESS) markets will likely total 950GWh globally in 2023, according to BloombergNEF. On average, pack prices fell 14% from 2022 levels to a record low of US$139/kWh this year.

Bridging the supply-demand gap. Enhancing energy security with battery storage. Solar and wind energy production fluctuates based on weather conditions and the time of day, which leads to periods of over- or under-production. By mitigating the variability of renewable energy sources, battery storage contributes to energy security and independence.