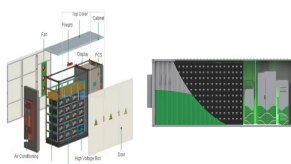
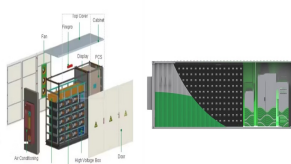


# EUROPEAN ENERGY STORAGE DEMAND

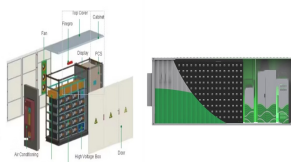
## 2025



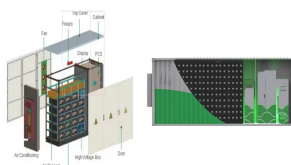
How big is the demand for storage in 2022? Demand for storage is bigger than ever: about 4.5GW of new installations in 2022 and an even more positive outlook of > 6GW for 2023. The European-wide energy crisis, national government support, growing Front of the Meter project development pipelines, and an overall positive future policy direction on a EU-level are accelerating this demand.



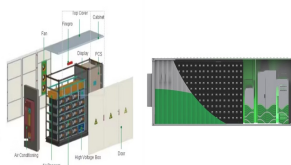
When will European energy storage start? In the European energy storage market, Eastern European countries started later than their Western European counterparts. In September 2022, Romania announced a goal to deploy 480 MWh of battery energy storage by 2025.



Why should EU countries consider the 'consumer-producer' role of energy storage? 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.

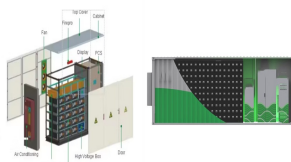


What is the biggest energy storage project in Sweden? Neoen and Nidec announced construction of a 9 MW/93.9 MWh BESS??? the largest BESS project in both Sweden and all of Northern Europe. It is expected to enter operation in the first half of 2025. BESS remained the mainstay of energy storage projects over the quarter, with a small number of PHS projects promoted.

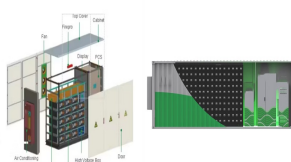


Why is energy storage important in the EU? It can also facilitate the electrification of different economic sectors, notably buildings and transport. The main energy storage method in the EU is by far 'pumped hydro' storage, but battery storage projects are rising. A variety of new technologies to store energy are also rapidly developing and becoming increasingly market-competitive.

# EUROPEAN ENERGY STORAGE DEMAND 2025



How much energy storage will the world have in 2022? New York, October 12, 2022 ??? Energy storage installations around the world are projected to reach a cumulative 411 gigawatts (or 1,194 gigawatt-hours) by the end of 2030, according to the latest forecast from research company BloombergNEF (BNEF). That is 15 times the 27GW/56GWh of storage that was online at the end of 2021.



The plan proposes that by 2025 energy storage will enter the large-scale development stage, with system costs falling by more than 30% through improved technology performance. Since the plan was released, 12 provinces and cities have announced 2025 cumulative energy storage deployment targets, totaling around 40GW.



batteries, combine high energy and power densities, long lifetimes, longer storage duration than li-ion and low- cost materials. Suitable for grid scale storage and from this sector come most of ???



As Europe moves to energy systems reliant on renewables, long duration energy storage investments are key, writes Alex Campbell, Director of Policy and Partnerships at the Long Duration Energy Storage Council.. After a summer of climate catastrophes, Europe is taking historic strides to reaffirm its leadership among nations charting the course of the global ???



Additionally, factoring in current installations, the demand for lithium carbonate in the energy storage sector is expected to reach 90,900, 148,200, and 230,300 tons from 2023 to 2025. Moreover, the global demand for lithium carbonate in consumption and other typical industries is estimated to be 973,000, 1,179,000, and 1,388,000 tons in 2023

# EUROPEAN ENERGY STORAGE DEMAND 2025



Technical annex. Demand data is compiled from a variety of sources. Use of the ENTSOG transparency platform is prioritised where available. This is complemented in certain cases by national transmission system or market operators (Enagas, GRTGaz, THE) and for power we use the ENTSO-E transparency platform to obtain the electricity produced in gas ???



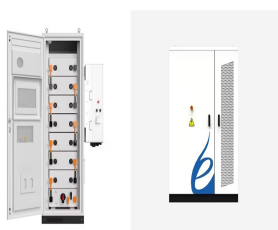
The EU energy sector witnessed a fall in energy demand and supply, and lower levels of CO2 emissions and air pollution, amid the sharp reduction of air and road transport and industrial activity. By 2025, the Commission expects 1 million public recharging and refuelling stations (and 3 million by 2030) will be needed for the 13 million zero



EASE has published an extensive review study for estimating Energy Storage Targets for 2030 and 2050 which will drive the necessary boost in storage deployment urgently needed today. Current market trajectories for storage deployment are significantly underestimating the system needs for energy storage. If we continue at historic deployment rates Europe will not be able to ???



On March 31, 2024???the last day of the heating season???Europe's natural gas storage levels were 83% above the previous 13-year (2011???23) average for the same day. From January through June 2024, Europe's storage inventories remained at all-time highs, closely tracking last year's storage levels.



A recently deployed large-scale BESS project in Germany. Image: Smart Power. The European Commission wants to advance the use of energy storage in managing supply and demand of electricity, according to a leaked document seen by Energy-Storage.news.. The Electricity Market Design (EMD) process, currently underway and seeking to reform the way ???

# EUROPEAN ENERGY STORAGE DEMAND 2025



On 30 March 2023, amid persisting risks and challenges in the energy market, the Regulation (EU) 2023/706 - was adopted by the Council of the European Union extending the coordinated gas demand reduction measures till 31 March 2024 to help avoid supply issues for winter 2023/2024 and fully compensate for the permanent decrease in Russian gas.



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 storage capacity has been installed, with limited demand for battery energy storage. Norway's ???



Latest Report: European Household Energy Storage Data Review and Prospects (2021-2025) On 24 November, the European Photovoltaic Industry Association released its latest Market Outlook for Household Battery Storage in Europe 2021-2025. From the data disclosed in the report, the growth trend of household battery storage in Europe is self ???



In the short to medium-term, deficits are expected for lithium in 2022-2023, whereas the global supply/demand market balance will be tight for nickel (by 2029), graphite (by 2024) and manganese (by 2025). By 2025, the EU domestic production of battery cells is expected to cover EU's consumption needs for electric vehicles and energy storage.



However, the analyst said at the California trade show and reiterated this week that demand for energy storage remains strong, with the challenges largely representing a series of delays in project development and execution, rather than cancellations. "The energy storage industry is facing growing pains.

# EUROPEAN ENERGY STORAGE DEMAND 2025



The Europe Energy Storage Market is projected to register a CAGR of greater than 18% during the forecast period (2024-2029). This will increase the demand for battery energy storage systems during the forecasted period. a significant grid hub. It is planned for completion in 2025. Therefore, owing to the above points, Germany is expected



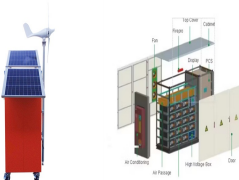
In the current "EU Energy Outlook 2060", we show long-term trends in Europe. To give an idea of how the energy market may develop in the future, Energy Brainpool's "EU Energy Outlook 2060" illustrates commodity prices, power plant expansion and electricity demand, and shows the wholesale power prices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



European Market Outlook For Residential Battery Storage 2021???2025. 5. Executive summary. The strong growth path of residential battery energy storage systems (BESS) across Europe continued in 2020 with a 44% year-on-year increase in annual installed capacity. In spite of the COVID-19 health crisis, for the first time the European BESS market



The installed capacity has doubled every year since 2020. The European Energy Storage Association (EASE) predicts that it is expected to continue to grow in the next two years. 70% and 65% respectively. The decrease of electricity price and the subsidy will inevitably affect the energy storage demand. According to data, the installed



In the European energy storage market, Eastern European countries started later than their Western European counterparts. In September 2022, Romania announced a goal to deploy 480 MWh of battery energy storage by 2025. In Poland, the proposal for power market reform was released in March 2023, which encouraged battery energy storage to enter

# EUROPEAN ENERGY STORAGE DEMAND 2025



The European Energy Storage Market Monitor (EMMES) updates the analysis of the European energy storage market (including household storage, industrial storage and pre-metre storage) and forecasts until 2030. The Dutch grid has high renewable energy penetration and grid congestion, and demand for energy storage is strong. Energy storage



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



In July 2021 China announced plans to install over 30 GW of energy storage by 2025 (excluding pumped-storage hydropower), a more than three-fold increase on its installed capacity as of 2022. The United States' Inflation Reduction Act, passed in August 2022, includes an investment tax credit for stand-alone storage, which is expected to



Europe is on course to become the world's second-largest lithium-ion battery cell producing region by 2025, although some key challenges need to be addressed, a European Commission vice-president has said. of the established players and startups it has supported have said they will be working also with the stationary energy storage space



The EC has made the following recommendations to encourage the uptake of energy storage on the continent. European member countries must avoid double taxation on and facilitate permit procedures for energy storage by recognising their double role (generator-consumer) among other things, particularly when implementing the EU law concerning the



# EUROPEAN ENERGY STORAGE DEMAND 2025



Produced with the support of our members and national solar association, the Outlook demonstrates how solar energy can, and will, be the engine that drives the European Green Deal. The EU Market Outlook for Solar Power 2021-2025 contains an updated forecast for the EU solar market in 2021 and projections of the evolution of the market through 2025.



Until January 2025, and then every two years, regulators in the Member States will be required to assess the need for flexibility in the electricity system for a five-year time horizon. The potential of non-fossil energy storage and demand side response for covering the demand is to be included both for transmission and distribution.



European Battery Alliance will roll out updated plan to enable 90% of EU demand to be met with domestically made products by 2030. The expected value created will shoot up sharply from ???250 billion a year by 2025, to ???625 billion per year by 2030, with Europe aiming to be capable of supporting 1TWh of demand across mobility, energy



The Whole European Value Chain. This is an event where you are guaranteed to meet over 2000 delegates from across Europe's energy storage value chain.. With 44 countries represented in 2024, the Summit brings together investors, developers, IPPs, banks, government and policy-makers, TSOs and DSOs, EPCs, optimisers, manufacturers, data and analytics providers, ???