

EUROPEAN WINTER ENERGY STORAGE



Why is gas storage important in Europe? Gas storage is key for security of supply in Europe as it can cover up to one-third of the EU's gas demand in winter. The figures published today show that gas storage levels have reached 1024 TWh or 90.12% of storage capacity (equivalent to just over 93 billion cubic metres (bcm) of natural gas). EU Commissioner for Energy, Kadri Simson said:



When will gas storage be 80% of capacity in the EU? As of June 2022, there is new legislation that requires EU underground gas storage to be filled to 80% of capacity by 1 November 2022 and to 90% in the years after - to ensure supply for the coming winter. See latest figures. Gas storage in the EU is now at more than 90%.



What is the EU gas storage target for 2022? Aimed at optimising EU preparation for the coming winter, the gas storage regulation of June 2022 set a binding EU target of 90% filling storage facilities by 1 November each year, with interim targets for EU countries. Gas storage is key for security of supply in Europe as it can cover up to one-third of the EU's gas demand in winter.



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 a cold winter affect EU gas supply? However, the IEA said that in a scenario where there is a combination of a cold winter, a complete halt of Russian pipeline gas and low liquefied natural gas availability, EU storage could enter next April with only 20 per cent gas, a level that would threaten supply disruptions.

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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.



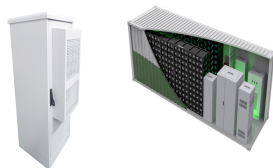
Amid the ongoing global energy crisis, Never Too Early to Prepare for Next Winter: Europe's Gas Balance for 2023-2024 examines the latest developments in European natural gas and electricity markets, and in global LNG markets ??? assessing their implications for Europe's gas balance in 2023 and 2024. Based on detailed analysis of global data and market ???



European gas storage more comfortable than expected. The 2023/24 northern hemisphere heating season has officially come to an end. Europe has managed to get through the winter months with very comfortable storage levels. In fact, with storage 58% full at the end of March, the region has exited the heating season with record high storage levels.



Timera Energy set out analysis of the European gas market winter balance, look at why prices are rising & set out key risks that could impact pricing dynamics into 2024. eating into the 44 bcma End of Winter storage buffer we show in Chart 2. Table 1: 5 key potential drivers of upside gas price risk this winter. Risk:



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Solar energy storage breakthrough could make European households self-sufficient Norwegian startup Photoncycle says it can store solar energy from summer to winter cheaper than batteries. Brandtzaeg says it could become a virtual power plant that can start trading energy on the European energy markets.



The IEA believes that Russia could do more to increase gas availability to Europe and ensure storage is filled to adequate levels in preparation for the coming winter heating season. This is also an opportunity for Russia to underscore its credentials as a reliable supplier to the European market," the IEA said.



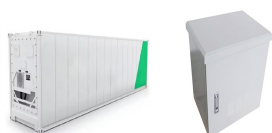
Energy Information Administration - EIA - Official Energy Statistics from the U.S. Government driven by a combination of mild winter weather and government policies aimed at reducing natural gas consumption. As of April 1, 2024, natural gas storage facilities in Europe were 59% full???the highest percentage on record for the end of a



Mild autumn weather and a dash to fill up storage sites across Europe has bolstered the region's energy security this winter, but concerns are starting to mount over whether sufficient supplies



However, Europe's energy crisis will not be over in April 2023. Decisions should be taken already with winter 2023-24 in mind. An EU gas-storage regulation requires volumes to reach 90 percent of capacity (1,007 TWh) by 1 October 2023 [2]. We calculated the required demand reduction for the EU to achieve this target, beginning with storage at

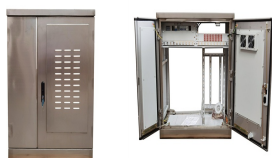


Transcript. Jason Bordoff [00:00:02] Europe is getting a bit of much needed relief in the midst of its energy crisis, although prices are still high. A warm October and a surge in liquefied gas imports. Bright spot prices down from record levels ???

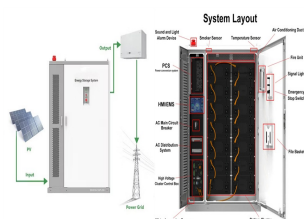
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In 2022, all EU countries ??? except for a few Mediterranean countries such as Malta, Greece and Cyprus1 ??? observed a significantly milder winter than in 2021. Across the European Union, heating degree days (HDDs) ??? a measure of how much energy is required to heat a building due to colder weather ??? were lower in 2022, resulting in lower electricity ???



Storage facilities of gas for heating and power generation are almost full, consumption is down and liquefied natural gas tankers are steaming in. Europe is in a stronger position than feared in



In 2022, European governments enacted policies requiring storage operators to maximize storage injections during the refill season to ensure availability of natural gas supply during winter. As a result, storage stocks on November 1 were 95% full, compared with the 12-year (2011???22) average of 89%, exceeding storage levels at the start of the



Europe's energy crisis began in 2021 as the region exited a prolonged cold winter with low natural gas storage levels. Concerns over tight supplies accelerated as Russia started to send less gas

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is the third year in a row in which the European Union has secured high reserves of gas well ahead of winter. The 90% storage filling target, agreed in 2022, was already reached in August. In June 2022 the EU took measures to increase gas reserves in order to secure sufficient supply and protect citizens from high energy prices.

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Europe's last winter was usually mild and had low energy demand, which left storage relatively full earlier this year, reducing the task of refilling depleted caverns during summer. Stored gas is



Ukraine's gas storage helps Europe avert further energy crises on x ahead of the following winter. The European Commission has a target of 45 per cent full storage on average across the bloc



While in 2021-22, infrastructure bottlenecks were a defining feature of Europe's energy crisis, this is no longer the case thanks to the construction of new pipelines and LNG import terminals. (200 TWh) than they consumed in total during the 2022-23 winter (166 TWh). Hypothetically, the region has enough gas in storage to manage the



The European Union is on track to beat targets for filling gas storage, but analysts warn the bigger factor for energy security this winter will be whether countries can slash consumption enough



While the description of energy storage used included gas reserves and the need to fill them up again ahead of next winter, the debate focused also on European energy security and decarbonisation. Commissioner Simson referred to the need for flexibility resources, which electricity storage using batteries can provide.



The Energy Storage Global Conference 2024 (ESGC), organised in Brussels by EASE ??? The European Association for Storage of Energy, as a hybrid event, on 15 - 17 October, gathered over 400 energy storage stakeholders and covered energy storage policies, markets, and

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The International Energy Agency has warned Europe could still face a very difficult winter if Russia cuts its remaining gas supplies to the continent and if the region experiences cold weather.



To ensure security of supply for the coming winters, we have put in place new minimum gas storage obligations and a target of 15% gas demand reduction to ease the balance between supply and demand in Europe. Efforts to save energy and fill ???



The European Association for Storage of Energy (EASE) said the ITRE report, which comes as the European Commission consults on its New Energy Market Design legislation, should be considered as a "first indication on what stance the European Parliament will take when amending the Winter Package". Yesterday, delegates at the APPG for



Europe's energy storage sector is advancing quickly, is home to several top energy storage manufacturers. This article will explore the top 10 energy storage companies in Europe that are leading the way in energy storage innovation. These leaders are setting new standards for performance and sustainability in energy storage.



Europe is staring down a winter energy crisis. Russia has reduced natural gas supplies as Europe supports Ukraine, and the continent's ability to get through the winter may depend on how cold it is and competition from Asia. In response, governments have worked hard to find new supplies and conserve energy, with gas storage facilities now

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Gas storage is key for security of energy supply in Europe as it can cover up to one-third of the EU's gas demand in winter. The figures published today show that gas storage levels reached 1 025 TWh or 90.02% of storage capacity (equivalent to just under 92 billion cubic metres (bcm) of natural gas) on 19 August.



In the present-day European electricity systems, energy droughts predominantly occur during the winter months (Fig. 1b???f). These can be attributed to factors such as strong heating demand and



Energy prices have fallen steadily in 2023, while Europe's gas storage levels hit 90% capacity three months ahead of the November target and could even hit 100% in September. European gas prices



Europe has dodged an energy apocalypse this winter, economists and officials say, thanks to unusually warm weather and efforts to find other sources of natural gas after Russia cut off most of its supply to the continent. (Matthias Bein/dpa via AP, File) Warm weather has allowed Europe's storage facilities to remain 83% full since Jan. 1