



The IEA's electricity sector report, which has been published regularly since 2020, provides insight into the evolving generation mix. In addition, this year's report features in-depth analysis on the drivers of recent declines in electricity demand in Europe; the data centre sector's impact on electricity consumption; and recent



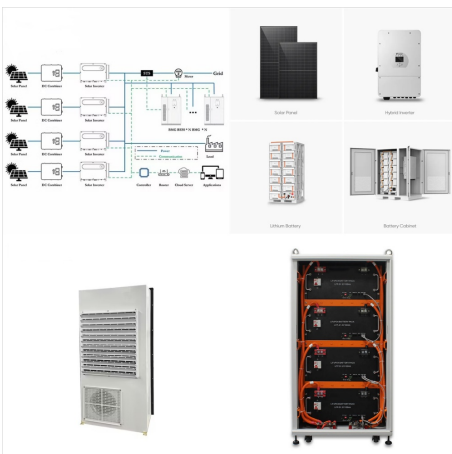
Growth in batteries outpaced almost all other clean energy technologies in 2023 as falling costs, advancing innovation and supportive industrial policies helped drive up demand for a technology that will be critical to delivering the climate and energy targets outlined at the COP28 climate conference in Dubai, according to a new IEA report.



Tripling renewable energy capacity, doubling the pace of energy efficiency improvements to 4% per year, ramping up electrification and slashing methane emissions from fossil fuel operations together provide more than 80% of the emissions reductions needed by 2030 to put the energy sector on a pathway to limit warming to 1.5 °C.



Explore the IEA's database of carbon capture, utilisation and storage projects. The database covers all CCUS projects commissioned since the 1970s with an announced capacity of more than 100 000 t per year (or 1 000 t per year for ???)



The International Energy Agency (IEA) has issued its first report on the importance of battery energy storage technology in the energy transition. It has found that tripling renewable energy



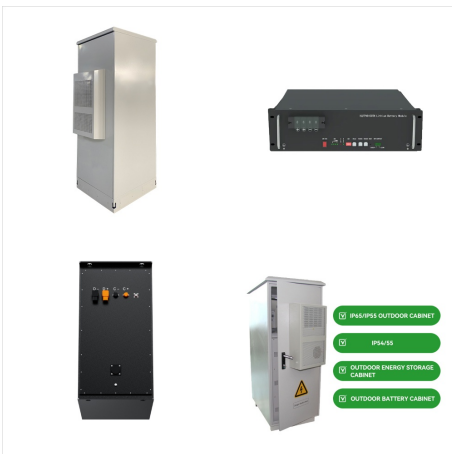
Annual grid-scale battery storage additions, 2017-2022 - Chart and data by the International Energy Agency. Flagship report ??? September 2023 All reports. 1. Sign In Email \* Password IEA analysis based on Clean Horizon, BloombergNEF, China Energy Storage Alliance and Energy Storage Association. Related charts



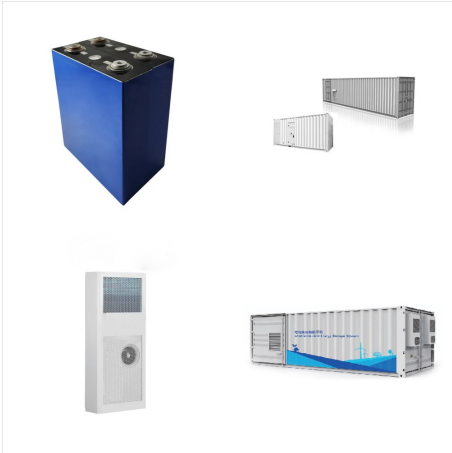
In addition to PSH, CSP storage and batteries, the IEA Special Hydropower Market Report estimated the energy storage capabilities of hydropower (IEA, 2021f). Accordingly, existing conventional reservoir hydropower plants can store up to 1 500 TWh of electricity, significantly more than all other storage technologies combined.



This joint study by the International Energy Agency and European Patent Office underlines the key role that battery innovation is playing in the transition to clean energy technologies. It provides global data and analysis based on the international patent families filed in the field of electricity storage since 2000 (over 65 000 in total).



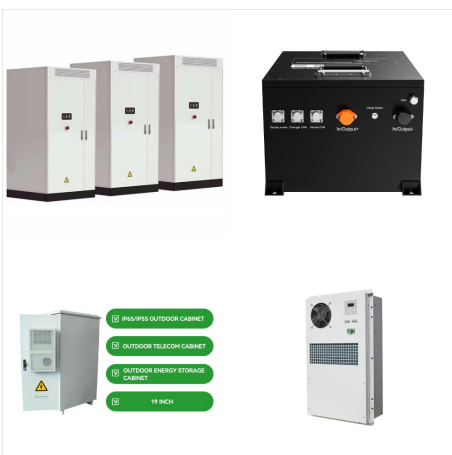
Growth in batteries outpaced almost all other clean energy technologies in 2023 as falling costs, advancing innovation and supportive industrial policies helped drive up demand for a technology that will be critical ???



The International Energy Agency (IEA), an autonomous agency, was established in November 1974. Its primary mandate was and is two-fold: to promote energy security amongst its member countries through collective response to physical disruptions in oil ???



Global clean energy deployment scaled new heights in 2023, with annual additions of solar PV and wind growing 85% and 60% respectively. Capacity additions for these two technologies reached almost 540 GW, with China accounting for the majority of both.



The IEA Oil Market Report (OMR) is one of the world's most authoritative and timely sources of data, forecasts and analysis on the global oil market ??? including detailed statistics and commentary on oil supply, demand, inventories, prices and refining activity, as well as oil trade for IEA and selected non-IEA countries.



This report offers an overview of the technologies for hydrogen production. The technologies discussed are reforming of natural gas; gasification of coal and biomass; and the splitting of water by water-electrolysis, photo-electrolysis, photo-biological production and ???



World Energy Outlook Special Report. Flagship report ??? July 2023 IEA-Tsinghua Joint Report Launch: The Role of China's ETS in Power Sector Decarbonisation. Report launch ??? 20 Apr 2021 11:30???13:00 The potential for carbon capture and storage in China. News ??? 25 May 2016



This edition of the IEA's annual Renewables market report provides forecasts for the deployment of renewable energy technologies in electricity, transport and heat to 2030, while also exploring key challenges facing the industry and identifying barriers that are preventing faster growth.

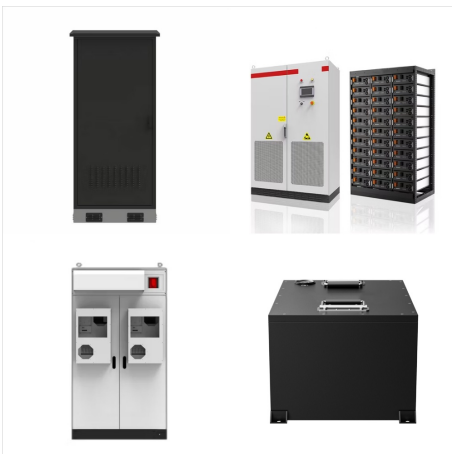




A report by the International Energy Agency. CCUS - Analysis and key findings. A report by the International Energy Agency. About; News; Events; Programmes; Help centre particularly related to the development of CO<sub>2</sub> storage, will be critical to achieve those levels. Capture capacity. Milestones 2022 2030 2035 2050; Total CO<sub>2</sub> captured



countries made major collective pledges on energy at the COP28 climate summit in Dubai with the aim of keeping within reach the Paris Agreement target of limiting global warming to 1.5 °C. For the first time, governments set key goals to help meet this objective, including tripling global renewable energy capacity by the end of this decade.



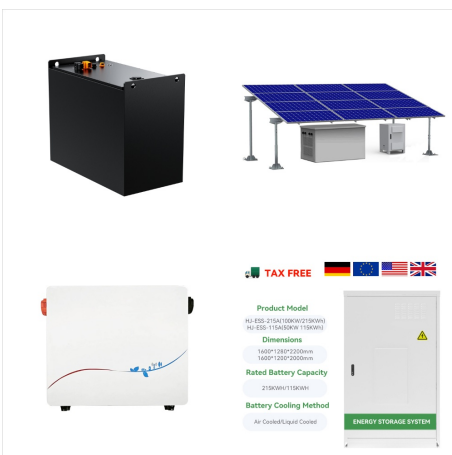
World Energy Outlook 2020 - Analysis and key findings. A report by the International Energy Agency. World Energy Outlook 2020 - Analysis and key findings. A report by the International Energy Agency. About; News; Events; Programmes Storage plays an increasingly vital role in ensuring the flexible operation of power systems, with India



Carbon capture and storage (CCS) technologies are expected to play a significant part in the global climate response. Following the ratification of the Paris Agreement, the ability of CCS to reduce emissions from fossil fuel use in power generation and industrial processes ??? including from existing facilities ??? will be crucial to limiting future temperature increases to "well below ???



The Covid-19 pandemic and Russia's invasion of Ukraine have led to major disruptions to global energy and technology supply chains. Soaring prices for energy and materials, and shortages of critical minerals, semiconductors and other components are posing potential roadblocks for the energy transition.



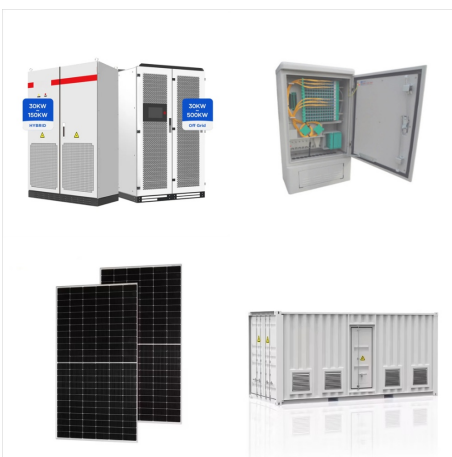
The Future of Hydrogen - Analysis and key findings. A report by the International Energy Agency. About; News; Events; Programmes; Help centre; Skip navigation. Energy system . Explore the energy system by fuel, ???



China is set to cement its position as the global renewables leader, accounting for 60% of the expansion in global capacity to 2030. The country is forecast to be home to every other megawatt of all renewable energy capacity installed worldwide in 2030, after surpassing its end-of-the-decade 1 200 GW target for solar PV and wind six years early.



The Clean Tech Guide is an online, freely available database tracking clean energy technology developments globally, put together by the International Energy Agency (IEA). The IEA regularly updates and tweaks the database, so changes often occur between downloads.



Energy storage technology mix, 2015-2020 - Chart and data by the International Energy Agency. Flagship report ??? September 2023 All reports. 1. Sign In Email \* Password IEA (2021), Energy storage technology mix, 2015-2020, IEA,





Gas Market Report, Q3 2024 - Analysis and key findings. A report by the International Energy Agency. Gas Market Report, Q3 2024 - Analysis and key findings. A report by the International Energy Agency. About; News; Events including underground gas storage facilities. In this context, security of supply for natural gas remains a key aspect



This report describes the development of a simplified algorithm to determine the amount of storage that compensates for short-term net variation of wind power supply and assesses its role in light of a changing future power supply mix.