

# CURRENT STATUS OF RESEARCH ON DOMESTIC ENERGY STORAGE DEMAND PREDICTION



What was the growth rate of energy storage industry in 2015? Driven by the Euramerican and Asia-Pacific market, worldwide energy storage industry experienced fast development in 2015. According to CNESA, global cumulative installed capacity of energy storage system was 946.8 MW (excluding PSS, CAES and heat storage) by the end of 2015 and the growth rate was 12.7% compared with year 2014.



What is the energy storage demand in China? Energy storage demand in China is without a doubt. Currently, China is carrying out the urbanization of centrality, intelligence, green and low carbon. Among them, the application of DG, smart micro-grid, EV, and the intelligent management of power grid all need energy storage , , , , .



Will China's energy storage demand reach 50 billion yuan in 2020? It is predicted that with the continuous development of smart grid and RES' grid connection, energy storage demand during the "13th Five-Year" will further arise and reach to 50 billion yuan in year 2020 . This paper begins with the elaboration the development status of China's energy storage.



What is the future of energy storage study? Foreword and acknowledgments The Future of Energy Storage study is the ninth in the MIT Energy Initiative's Future of series, which aims to shed light on a range of complex and vital issues involving



Why are China's energy storage devices mainly installed in the demand side? China's energy storage devices are mainly installed in the demand side with the proportion of 46% and most of them are DG and micro-grid projects. One reason is that China's large electricity demand brought by the large population and growing economy leads a big peak-valley difference.

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How can a power supply reduce energy storage demand? The addition of power supplies with flexible adjustment ability, such as hydropower and thermal power, can improve the consumption rate and reduce the energy storage demand. 3.2 GW hydropower, 16 GW PV with 2 GW/4 h of energy storage, can achieve 4500 utilisation hours of DC and 90% PV power consumption rate as shown in Figure 7.



Intelligent energy delivery can serve domestic, industrial, and commercial demand. As a result, the energy sector is faced with a wave of change. AI technologies offer a lot of ???



Modelling electricity demand can be categorised into three, namely, top-down (black box), bottom-up (white box) and hybrid (grey box) [[36], [37], [38]]. The top-down approach ???



Energy landscapes in Asia and other regions are currently undergoing a transformation aimed at increasing the share of clean energy sources. This article analyzes and forecasts the electricity demand in Vietnam, ???



Liu et al. [32] sorted out the current status of research on the economics of energy storage at home and abroad, summarized the different revenue models of energy storage in ???

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Currently, energy storage industry in China is extending from demonstration project stage to commercial operation stage, but series of development dilemmas exist. For example, ???



A typical MG comprises decentralized sustainable energy, ESS devices, energy regulation equipment, and loads, as illustrated in Fig. 4. It's a tiny power allocation, stockpiling, ???



Through analysis of two case studies???a pure photovoltaic (PV) power island interconnected via a high-voltage direct current (HVDC) system, and a 100% renewable energy autonomous power supply???the paper elucidates ???



Machine learning (ML) methods has recently contributed very well in the advancement of the prediction models used for energy consumption. Such models highly improve the accuracy, robustness, and



Energy Information Administration - EIA - Official Energy Statistics from the U.S. Government Gasoline Production, Imports, Stocks, Supply, Prices by Grade and Sales Type, Retail City Average Prices, Data and Analysis from the Energy ???