

# CHINA'S NETWORK FOR PUMPED STORAGE DEPLOYMENT

APPLICATION SCENARIOS



How big is China's pumped-storage capacity? China's pumped-storage capacity is set to increase even more, with 89 GW of capacity currently under construction. Developers are seeking governmental approvals, land rights, or financing for an additional 276 GW of pumped-storage projects, according to the data from Global Energy Monitor. Pumped storage is a type of energy storage.

APPLICATION SCENARIOS



How pumped storage plants will improve China's electric power system? As the government pays more attention to the development of pumped storage plants, the sustainable development of China's pumped storage plants will be further enhanced and the installed capacity will continue to grow, thereby increasing the proportion of installed capacity in the electric power system.

APPLICATION SCENARIOS



Should China promote pumped storage plants? China should not only promote about the construction of pumped storage plants but also implement reasonable policies to stimulate enthusiasm for pumped storage plant investment and promote their construction. The operators of pumped storage plants must find the proper business model for their development.

APPLICATION SCENARIOS



How energy storage technology can meet future system peak demand in China? Thus, rapid application of energy storage technology is crucial to meet the future system peak demand in China. Currently, pumped storage, compressed-air energy storage and chemical energy storage are the primary large-scale energy storage technologies.

APPLICATION SCENARIOS



Will pumped storage be China's primary peaking power source in the future? As pumped storage plays an important role in load regulation, promoting grid-connected clean energy and maintaining the security and stability of the electric power system, it will be China's primary peaking power source in the future (Zhang et al., 2013).

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APPLICATION SCENARIOS



Why is China building pumped-storage hydropower facilities? China is building pumped-storage hydropower facilities to increase the flexibility of the power grid and accommodate growing wind and solar power. As of May 2023, China had 50 gigawatts (GW) of operational pumped-storage capacity, 30% of global capacity and more than any other country.

APPLICATION SCENARIOS



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As with other countries, pumped hydro is the vast majority of energy storage GW installed in China today. The Ministry of Industry and Information Technology has also recently revealed that China's production ???



Pumped hydro is cost-effective and efficient for large-scale, long-duration storage, while batteries offer greater flexibility and quicker response times. The two technologies can therefore play complementary roles. As of ???



According to the China Energy Storage Alliance (CNESA), by the end of 2020, the total installed capacity of energy storage projects was approximately 191.1 GW, with pumped storage hydropower (PSH) accounting ???

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China leads the world in deployment of hydropower, with roughly 29% of global hydropower capacity. In 2021, approximately 80% of new hydropower capacity added globally was in China. In 2021, the NEA issued a Medium and Long ???



An AVIC Securities report projected major growth for China's power storage sector in the years to come: The country's electrochemical power storage scale is likely to reach 55.9 gigawatts by 2025? 1/4 ?16 times higher than ???