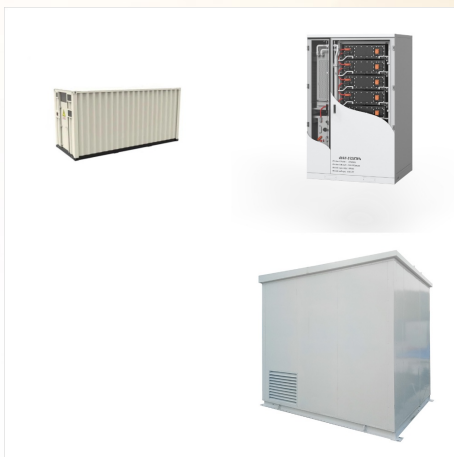
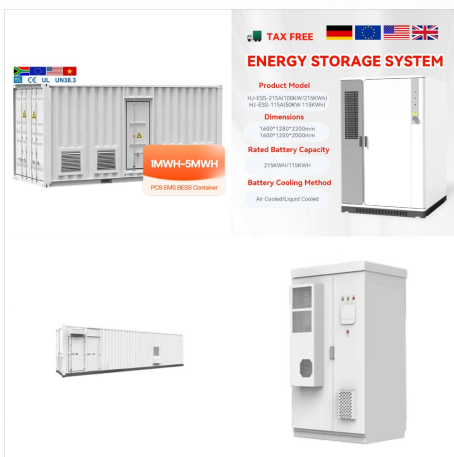


Cutting-edge machine learning models continuously monitor and analyze data from solar installations, reducing downtime and maintenance costs while extending the lifespan of solar equipment. To swiftly identify anomalies, these AI systems monitor temperatures, irradiance, orientation, tilt angle, humidity, rainfall, dirt accumulation, power



And canals in India are being turned into solar farms to save land for living and farming. Solar power is now the cheapest source of electricity in history, according to the International Energy Agency (IEA), while solar power generation grew 22% in 2019, making it the second-fastest growing renewable technology, behind wind power.



The Cornell team has deployed a floating solar array comprising nearly 400 panels across three ponds. Over the course of several years, they will meticulously monitor the intricate interplay between the solar farm and its surroundings, aiming to identify and understand any potential negative consequences.



The solar cold stores will boost seasonal income for farmers by more than \$10 million and cut greenhouse gas emissions by 15%, AkoFresh says. Finding ways to store freshly harvested fruit and vegetables is a big problem for smallholder farmers in Ghana in West Africa.



Offshore wind farms are hitting the headlines for their size and for gaining government backing across the globe. Boosting offshore wind power is seen as a way to reduce reliance on fossil fuels and speed the journey to net zero, and it can also create jobs and economic growth.



If the 7.2 billion square feet of big-box roof space in the US were covered in solar panels, it would generate enough electricity to power 8 million homes. Climate Action Superstore rooftops are ideal for solar farms, report finds



Singapore is utilising floating solar farms and vertical panels to increase its clean-energy supplies due to a lack of space. The model could be used in other densely populated land-scarce cities. Floating solar farms can generate more electricity than rooftop or on-ground installations and can protect lakes and reservoirs from rising temperatures.



Images from a NASA satellite show one of the world's biggest floating solar farms in Dezhou, China. Covering just 10% of hydropower reservoirs with solar panels could produce as much electricity as that currently produced by fossil fuel plants worldwide. South Korea, India and Germany are some of the countries developing floating solar projects.



This increases land-use efficiency, as it lets solar farms and agriculture share ground, rather than making them compete against one another. And certain crops appear to thrive when grown in such environment s, according to a number of recent studies.



There is huge potential for solar energy in Africa, but installing the arrays can have an impact on local ecosystems. Agrivoltaics is the simultaneous use of land for growing crops and generating electricity with photovoltaic panels. The first agrivoltaic array has opened in Kenya after successful trials in Eastern Africa.