



In theory, yes. Wave energy globally could meet the world's annual electricity needs, if it was fully harnessed, scientists have estimated. Indeed, the waves around the United States coasts could provide 66% of the country's electricity, according to the US Energy Information Administration. Many countries - including Australia, China

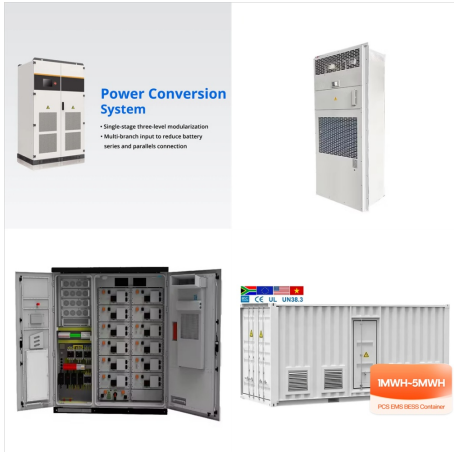


Investing in Africa's renewables. According to the International Energy Agency (IEA), Africa has 60% of the world's best solar resources, but only 1% of solar generation capacity. To achieve its energy and climate goals, Africa needs \$190 billion of investment a year between 2026 to 2030, with two-thirds of this going to clean energy, the

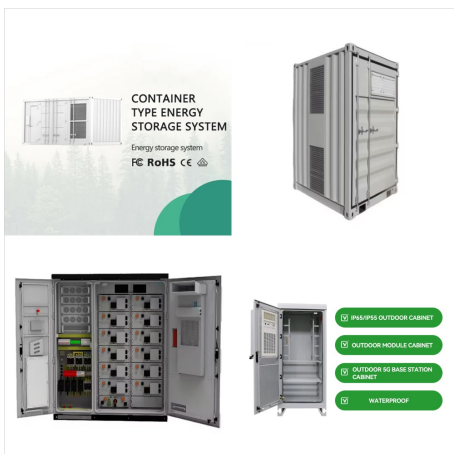


Saudi Arabia can transition to a 100% renewable energy system by 2040, according to another Finnish study. While the country is known for its oil deposits, it is also rich in another energy source: sunshine to power solar energy. By 2050, solar power could account for 79% of the country's energy demand, supported by enhanced battery and water

HOW MUCH SOLAR ENERGY DOES THE WORLD USE



All energy sources require land: from the area of a power plant to the plot used for mining the materials needed to construct it. Nuclear power is the most land-efficient source, needing 27 times less land per unit of energy than coal and 34 times less than solar PV, as this chart shows. But land use of renewable energy sources like wind farms



The rise and rise of cheap solar is our best hope for rapidly mitigating climate change. Total solar capacity tipped over 1 terawatt (1,000 gigawatts) for the first time last year. The sector is growing at around 20% a year. If this continues, we'll hit 6 terawatts around 2031.



Agrioltaic farming is the practice of growing crops underneath solar panels. Scientific studies show some crops thrive when grown in this way. Doubling up on land use in this way could help feed the world's growing population while also providing sustainable energy. As world leaders prepare to gather at COP27 amid a global energy crisis

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Clean energy boomed in 2023, with 50% more renewables capacity added to energy systems around the world compared to the previous year. Additional renewable electricity capacity reached 507 gigawatts (GW) in 2023, with solar PV making up three-quarters of global additions, according to the International Energy Agency's (IEA) Renewables 2023



For the first time, wind and solar generated more than 10% of electricity globally in 2021, according to latest data. Fifty countries have now crossed the 10% wind and solar landmark, with seven new countries added in 2021. But power from coal also rose 9% in 2021, to a new record high. The World Economic Forum says "decoupling" from fossil



The cost of renewable technologies like wind and solar is falling significantly, according to a new report. This is fuelling the rise of renewables as the world's cheapest source of energy. The cost of large-scale solar projects has plunged 85% in a decade. Retiring costly coal plants would also cut around three gigatonnes of CO2 a year.

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Across the industry, the increasing energy demand, primarily from building and running the data centres used to train and operate AI models, is contributing to global greenhouse gas (GHG) emissions.

Microsoft, which has invested in ChatGPT maker OpenAI and has positioned generative AI tools at the heart of its product offering, recently