

China Has An Underwater Data Center. The U.S. Will Build Them In Space



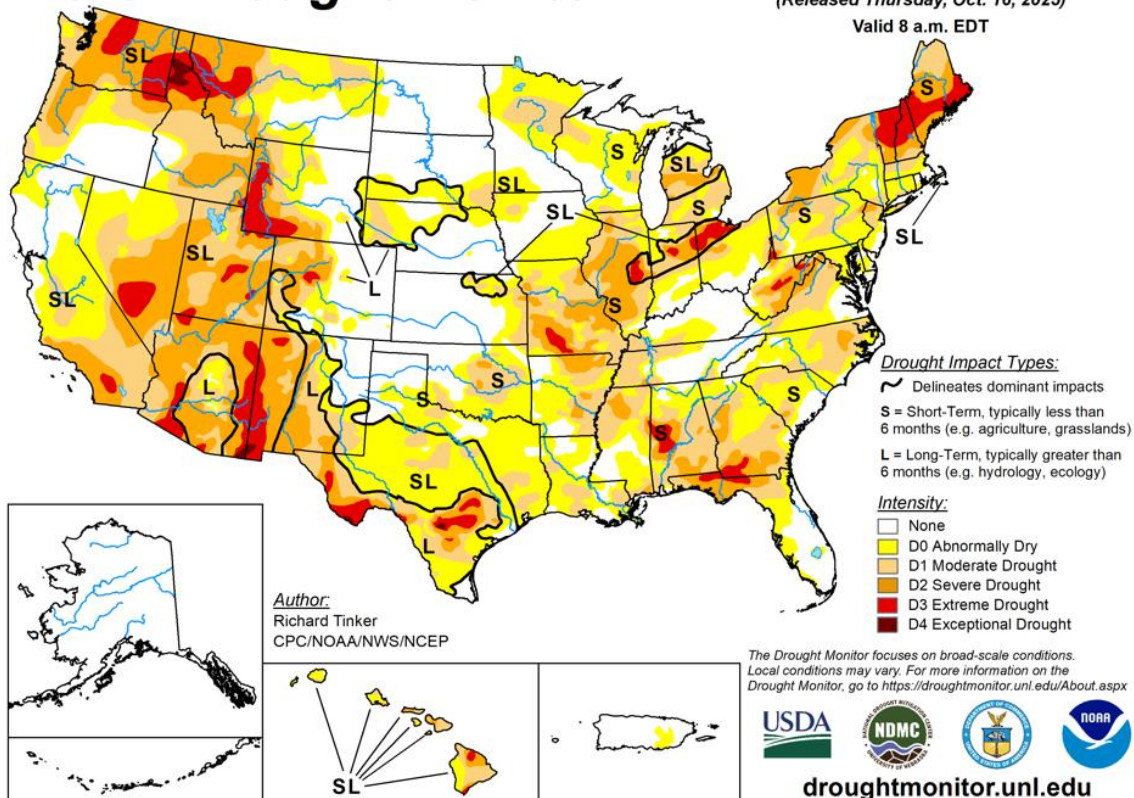
China's Highlander has launched an underwater data center in Hainan, the first project like it to be deployed at commercial scale. The energy demands of Ai data centers come largely from the cooling requirements of the servers, and China has answered this question by placing their Ai data centers underwater. This is something that's been successfully experimented with by Microsoft among others but hasn't been deployed commercially before now. The benefits of submerged data centers include a reduction of 90% in cooling costs as the ocean's currents do what fresh water would otherwise; this translates into 40% more compute than a comparable land-based system. When coupled with renewable energy the costs drop further as this project is largely powered by an adjacent offshore windfarm; the company says that it's 95% powered with renewable energy.

Ai and Water

Microsoft and others have built underwater data centers, but no projects of this caliber are currently operating in the West. Anything that saves water is welcome as current land-based data centers are often built in arid regions and require massive water withdrawals that stress already water stressed regions. The current trajectory is toward continued water disregard, as the recent batch of data centers announced by OpenAI will be built in Texas, New Mexico, and somewhere in the Midwest. These states are not water abundant, and any withdrawals will come at the expense of local residents' drinking water and competing industries such as agriculture.

U.S. Drought Monitor

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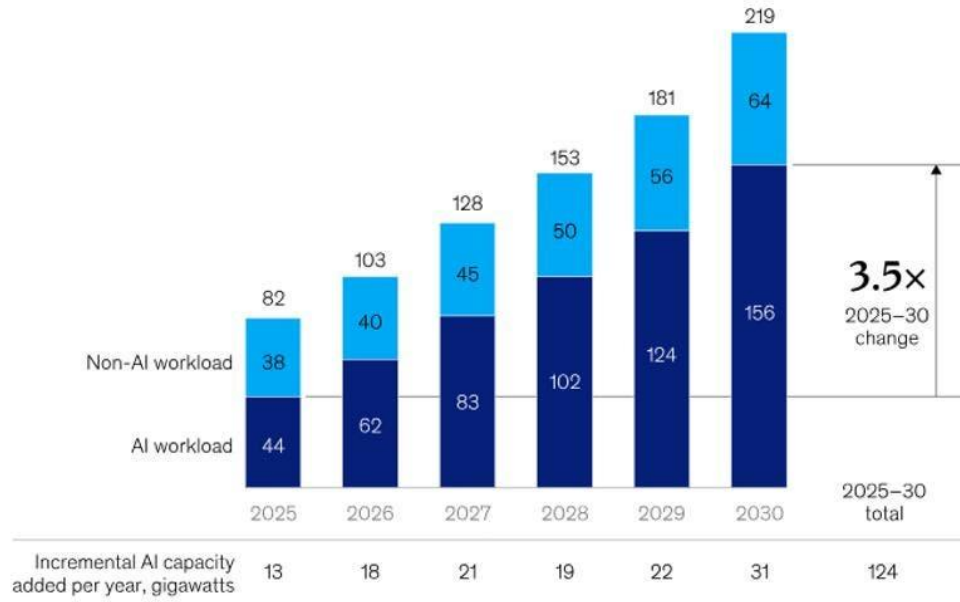
More encouraging from Sam Altman this month is the news that Samsung and OpenAI will develop floating data centers, a signal of openness and sign that OpenAI recognizes the strengths of diversification. The specific reasons stated in Samsung's statement about this collaboration highlight a few strategic advantages of floating data centers, "Floating data centers are considered to have advantages over data centers because they can address land scarcity, lower cooling costs and reduce carbon emissions."

What's Amazon's response to this? They plan to build Ai data centers in space. They will save water for cooling because it's cold in space, and with large solar arrays they will have a limitless power source. The EU supports the idea, and other companies are working on the this; one company has already tested a launch and claim success; with some advancements in rocketry and solar arrays, some claim this could be viable by 2037. Whenever this feat is achieved and normalized, it will drop the water demands of Ai to zero while allowing infinite expansion of capacity while removing land competition on earth. Ambitious plan: I would encourage that we continue with sea based instead, but at least space-based is more viable in the long term than land-based solutions that will run out of both water and land.

Exhibit 1

Both AI and non-AI workloads will be key drivers of global data center capacity demand growth through 2030.

Estimated global data center capacity demand, 'continued momentum' scenario, gigawatts



Note: Figures may not sum to totals, because of rounding.
 Source: McKinsey Data Center Demand Model; Gartner reports; IDC reports; Nvidia capital markets reports

McKinsey & Company

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5 Clean Energy Myths the Data Has Finally Put to Rest – And Where the Industry Is Heading



Key Insights

- **Cost parity achieved:** 91% of new renewable projects are cheaper than fossil alternatives. Solar PV costs have fallen 80% since 2010, saving **US\$467 billion** in fuel costs last year.
- **Reliability revolution:** Battery storage costs down **93%** since 2010; grid-scale storage now underpins 93% of new U.S. capacity additions.
- **Minimal footprint:** Wind emits **13 g CO₂/kWh**, solar **43 g**, versus coal's **1,001 g** - a 75–80× difference.
- **Job creation engine:** Clean-energy employment surpassed fossil fuels in 2023, with **35 million workers** and another **10 million** expected by 2030.
- **Acceleration underway:** China's 2025 solar surge - **93 GW in one month** - shows the transition is outpacing forecasts; renewables will overtake coal globally by mid-2026.

Where the Industry Is Heading:

The data signals a decisive pivot: renewables are now the economic, secure, and scalable backbone of global power. The next frontier lies in **storage integration, workforce reskilling, and cross-sector electrification** - areas where policy and investment alignment will determine leadership.

Summary: Global data now confirms that renewables are not only viable - but they are also outperforming fossil fuels across cost, reliability, and employment metrics.

Source: *Earth.Org, May 2026 by Mitota P Omolere*

Full article: https://earth.org/5-clean-energy-myths-the-data-has-finally-put-to-rest-and-where-the-industry-is-heading/?mc_cid=adced7c8e5&mc_eid=5dec3f1a33

The resolution calls on all UN member states to align with these obligations, avoid transboundary climate harm, and deliver on their Paris commitments. It is expected to accelerate global climate litigation, with courts already referencing the ICJ opinion in recent rulings.

Pacific Island nations - responsible for less than 1% of global emissions yet among the most climate-exposed - hailed the vote as a breakthrough for climate justice. UN Secretary-General António Guterres called the adoption a “powerful affirmation” of international law and urged a rapid, equitable transition away from fossil fuels. Environmental groups, including Greenpeace and Amnesty International, said the decision strengthens accountability for climate-driven human rights harms and reinforces the legal responsibilities of major emitters.

Contribution – earth.org

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