## **Artificial Sun of China**

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## In news

Recently, China successfully powered up its "artificial sun" nuclear fusion reactor(HL-2M Tokamak) for the first time, marking a great advance in the country's nuclear power research capabilities.

## Key highlights

- The HL-2M Tokamak reactor is China's largest and most advanced nuclear fusion experimental research device, and scientists hope that the device can potentially unlock a powerful clean energy source.
- According to the People's Daily, the reactor uses a powerful magnetic field to fuse hot plasma and can reach temperatures of over 150 million degrees Celsius, approximately ten times hotter than the core of the sun.
- The reactor is located in Sichuan province and completed late last year
- The reactor is often called an "artificial sun" on account of the enormous heat and power it produces.
- Chinese scientists have been working on developing smaller versions of the nuclear fusion reactor since 2006.
- According to the scientists, they plan to use the device in collaboration with scientists working on the International Thermonuclear Experimental Reactor, the world's largest nuclear fusion research project based in France, which is expected to be completed in 2025.