New solar battery technology breakthrough

New solar battery technology breakthrough

Dig into the prospects for sodium-based batteries in this story from last year. ...

Lithium-ion batteries are also finding new applications, including electricity storage ...

Solar energy storage is a key part of the clean energy puzzle.

The world is on track to install nearly 600 GW worth of solar power this year - 29 per cent more than last year even after unprecedented growth in 2023.

Making sure solar energy can be stored is key to taking the renewable to the next level, according to UK think tank Ember.

But - among other challenges - many batteries are made from unsustainable materials, and have a tendency to overheat.

In a "very exciting" development, researchers based at the Polytechnic University of Catalunya (UPC) have now tackled both issues with a unique hybrid device.

"I am very excited about this since we are demonstrating that it is possible to increase efficiency and add storage to photovoltaic systems," lead researcher professor Kasper Moth-Poulsen tells Euronews Green.

The device combines a silicon solar cell with a storage system called MOST, which stands for molecular solar thermal energy storage systems.

While working at Chalmers University of Technology in Gothenburg, Moth-Poulsen used MOST to show that solar energy can be stored for 18 years.

The technology is based on a specially designed molecule of carbon, hydrogen and nitrogen that changes shape when it comes into contact with sunlight.

These are common elements - providing an alternative to other technologies relying on scarce materials like lithium.

New solar battery technology breakthrough

Email: energystorage2000@gmail.com
WhatsApp: 8613816583346