

## PRESS RELEASE

PRES  
24 Jul**Kommentiert [CF1]:** Auf die Schnelle finde ich nicht heraus, wie man die Infos am rechten Rand bearbeitet - das Datum stimmt aber nicht!

### Successful start to test operation at Fraunhofer ICT: renewable energy stored in a large-scale battery is introduced into the power grid on demand.

Europe's largest vanadium redox flow battery – located at the Fraunhofer Institute for Chemical Technology - has achieved an important research milestone: In a controlled test, it was possible to successfully demonstrate for the first time how renewable energies such as wind and solar power can be fed into the power grid in a targeted and predictable manner, regardless of current weather conditions.

The large-scale battery therefore offers a concrete solution to a key problem of the energy transition: Surplus green electricity, which often remains unused when generation is high or even leads to negative electricity prices, can now be temporarily stored and retrieved when needed to serve the grid.

"We have shown that renewable energy can be managed intelligently with our storage platform. This is a decisive step towards a stable, flexible and resilient electricity system based on renewable sources," explains Adj. Assoc. Prof. (UNSW, UQ) Dr. Jens Noack, Team Manager for Flow Batteries at Fraunhofer ICT.

The modular vanadium redox flow battery was developed and built using only components and expertise sourced within Germany. It serves as a research and development platform for testing and further developing new storage technologies and components together with industrial partners from Germany and around the world.

---

**Press**

**Dr. Stefan Tröster** | Press spokesman | Phone +49 721 4640-302 | [stefan.troester@ict.fraunhofer.de](mailto:stefan.troester@ict.fraunhofer.de)  
Fraunhofer Institute for Chemical Technology ICT | Joseph-von-Fraunhofer Str. 7 | 76327 Pfinztal, Germany | [www.ict.fraunhofer.de](http://www.ict.fraunhofer.de)

---

**PRESS RELEASE**

24 June 2025 || Page 2 | 2

---

---

The **Fraunhofer-Gesellschaft**, headquartered in Germany, is the world's leading applied research organization. With its focus on developing key technologies that are vital for the future and enabling the commercial exploitation of this work by business and industry, Fraunhofer plays a central role in the innovation process. As a pioneer and catalyst for groundbreaking developments and scientific excellence, Fraunhofer helps shape society now and in the future. Founded in 1949, the Fraunhofer-Gesellschaft currently operates 75 institutes and research institutions throughout Germany. The majority of the organization's 32,000 employees are qualified scientists and engineers, who work with an annual research budget of 3.6 billion euros.