

Press release

## FOUR TEAMS SELECTED AS FINALISTS OF "LONG-DURATION ENERGY STORAGE" CHALLENGE

*Leipzig, November 29, 2023*

The Federal Agency for Disruptive Innovation (SPRIND) today announces the participants of the second stage of the SPRIND Challenge "[Long-Duration Energy Storage](#)". From five teams that participated in the first phase, the expert jury from science and industry selected four teams that will further develop their technologies for the next 18 months. The four finalists receive four million euros each for the whole duration of the Challenge.

Energy storage systems are a key element for the successful transition to renewable energies. High percentages of renewable energies in power generation in Germany and other geographies is only achievable with energy storage systems in place able to bridge periods of low power generation from wind or solar energy.

In order to achieve a breakthrough in the development of technologies that can store energy efficiently and cost-effectively over a long duration, the German Federal Agency for Disruptive Innovation (SPRIND) called for this innovation competition in July 2022. In a SPRIND Challenge, teams compete in parallel with different solution strategies to identify the most promising technological approaches in a competition over several years.

The following four teams are participating in the second phase of this SPRIND Challenge:

- **Ore Energy** is an ambitious spin-off from TU Delft. Leveraging their academic background, they are working towards the commercialization of their ultra-low cost batteries, based on iron. All components used are optimized for high efficiency while maintaining high stability. Supported by SPRIND and additional investors, and being engaged in multiple pilot-projects, they aim for rapid scaling of production capacity in second stage of the Challenge.
- **Reverion** aims to push the efficiency of their gas battery into uncharted territory, making it a one-of-a-kind energy storage system combining different storage solutions for lowest cost at different time scales. Building on their proven biogas conversion technology, they will scale their prototype towards industrially relevant size and apply it for seasonal energy storage in the second stage of the Challenge.
- **Unbound Potential**, a spin out of ETH Zurich, is driven by the team assembled around Dr. David Taylor. They are building and scaling a new membrane-less redox flow battery and already secured their first paid customer project. In the second phase of the SPRIND Challenge, they aim to scale production capacities and deploy more pilot systems to validate their battery technology.
- **HalioGEN Power** is a spin-out from the University of Manchester, founded during the first stage of the LDES Challenge by Prof. Robert Dryfe, Dr. Andinet Ejigu, Dr. Lewis Le Fevre and Dr. Athanasios Stergiou. They are scaling up an innovative Long-Duration Energy Storage

technology, which is based on a membrane-less single-loop redox flow system that has already demonstrated efficient energy storage for up to 15 hours.

Jano Costard, Challenge Officer of SPRIND, the German agency for Disruptive innovations, said: "Energy storage is essential for the energy transition. To achieve this, we need new and better technologies. With the SPRIND Challenge, we have created an effective innovation competition. Through this, we can help promising technologies achieve a breakthrough for which there is not yet sufficient private venture capital. By tying further funding in the second phase of the SPRIND Challenge to interim results, we ensure competition between teams and ensure that funds are invested in the most promising technologies and teams."

For the allocation of funds in the SPRIND Challenges, the German Federal Agency for Disruptive Innovations utilizes a new innovation funding mechanism called pre-commercial procurement. Compared to previous procedures for government innovation funding, pre-commercial procurement is much faster and the formal requirements are far less extensive, so that even smaller teams and start-ups can participate successfully and without special funding application know-how.

To ensure that teams can drive their innovation independently over the long term, all intellectual property generated during the Challenge remains with the teams.

For more information about this SPRIND Challenge and the participating teams, please visit <https://www.sprind.org/en/challenges/energystorage>.

## About SPRIND Challenges

SPRIND Challenges are innovation competitions that aim to generate solutions to the grand societal and technological challenges of our time. They create the vision of a better future and gather the scientists, innovators and entrepreneurs who can make that vision a reality. That's why Challenge Teams are funded quickly and without red tape, and immediately launch into a multi-stage competition. At the end of each stage, the teams' work is evaluated and only the best remain in the Challenge and receive further financial support to develop their idea.

## About SPRIND

The Federal Agency for Disruptive Innovation (SPRIND) was founded in 2019, with its registered office in Leipzig. The sole shareholder is the Federal Republic of Germany, represented by the Federal Ministry of Education and Research (BMBF) and the Federal Ministry of Economics and Climate Action (BMWK). SPRIND fills a gap in the German innovation landscape: it finds new, groundbreaking technologies for the major challenges of our time, while ensuring that the value created by the resulting companies and industries remains in Germany and Europe. SPRIND is financed by funds from the federal budget. It is managed by Rafael Laguna de la Vera and Berit Dannenberg.

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