BMBF funds German-New Zealand projects on green hydrogen

02.08.2022 | Internationalisation of Germany, bi-/ multi-lateral cooperation

Three projects of the bilateral funding call "Research Cooperation Green Hydrogen with New Zealand" have started their work and complement the existing German research activities in the field of Green Hydrogen with New Zealand. The DLR project management agency, in cooperation with Projektträger Jülich, organized the selection process of the funding program.

In the course of the bilateral funding call, the German Federal Ministry of Education and Research (BMBF) funds three research projects starting on August 1, 2022, with the aim of strengthening international exchange and cooperation with New Zealand on green hydrogen technologies, thereby laying the foundation for a lasting research, development and innovation partnership. The topics covered by the research projects are hydrogen production, hydrogen storage and a system study on hydrogen distribution. The following three German-New Zealand consortia will be supported with a total of 1.2 million euros over three years:

The HighHy project is working on AEM (anion exchange membrane) electrolysis, which, compared to other electrolysis processes, does not require expensive, hard-to-find precious metals and therefore represents a cost-effective alternative. So far, however, this process has not been efficient enough. The aim of HighHy is therefore to develop highly efficient catalysts made of nickel and manganese. To this end, the Fraunhofer-Gesellschaft and the University of Bayreuth on the German side and the Universities of Canterbury, Auckland and Wellington on the New Zealand side have joined forces.

Titanium-iron materials are among the most promising candidates for large-scale, stationary hydrogen storage. Within the NZMat4H2Sto project, partners from the Helmholtz Centre Hereon and the University of Otago investigate the extent to which existing New Zealand resources can be used to produce such titanium-iron alloys economically and ecologically. The research work of the project covers all process steps from the laboratory to the construction and testing of a demonstrator for hydrogen storage.

The aim of the HINT project is to identify strategies for the timely and cost-effective production and system integration of large quantities of green hydrogen in Germany and New Zealand. The joint development of methods by the German Aerospace Center (DLR) and the universities of Canterbury and Auckland provides an excellent basis for longer-term collaboration as part of a broad-based research and innovation network.

Source: International Bureau

Editor 02.08.2022 by DLR Projektträger, Sabine Breiderhoff

Countries / organization: Germany, New Zealand

Topic: Energy, Innovation, Environment & Sustainability

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