**A logo for a company

Description automatically generatedPress release and invitation to webinar on November 4, 2024**

**Hydrogen Research Forum Finland: strengthening Finland’s competitiveness through strategic hydrogen research**

A new report presents eight key research topics that can help Finland become a leader in Power-to-X (PtX) technologies and the hydrogen economy. An open webinar on the topic, conducted in Finnish, will be held on November 4, from 13:00 to 14:00.

[Hydrogen Research Forum Finland](https://www.h2finland.fi/sra-englanti) outlines in its new [report](https://www.h2finland.fi/_files/ugd/2e98da_6e9437e0dd554c40a9bcededa8f14f65.pdf?index=true) eight research topics that are particularly important for strengthening Finland's competitiveness. The aim is to enhance Finland's position as a pioneer in PtX technologies and the hydrogen economy, promote hydrogen research, and enable sustainable energy investments.

"Utilizing Finland's potential requires research efforts especially in hydrogen derivative production processes, necessary electricity and gas infrastructure, and extensive collaboration between research institutions, industry, and authorities. In addition, it is essential to verify the environmental benefits of selected processes and understand the role of international regulations in shaping the market," says **Pertti Kauranen**, chairman of Hydrogen Research Forum Finland and professor of energy storage at LUT University.

Hydrogen Research Forum Finland emphasizes that the success of the hydrogen economy demands significant investments in future energy solutions. For example, Finland's large wind power potential, competitive electricity prices, and availability of biogenic carbon dioxide enable substantial investments in the production of renewable hydrogen and related value-added products, such as synthetic e-fuels and green steel.

According to the report, hydrogen and PtX technologies play a crucial role in Finland's transition towards a more self-sufficient and sustainable energy system.

**Critical research topics for strengthening Finland's competitiveness:**

The report divides the research needs into short-term (1–3 years), medium-term (3–5 years), and long-term (5–10 years) goals. It highlights the most critical research areas that can advance the hydrogen economy in Finland:

1. **Synthetic value-added products of hydrogen, carbon dioxide, and their use** – including e-methanol, e-ammonia, and sustainable aviation fuels (SAF).
2. **Use of hydrogen** – in the production of clean steel, fuel cells, and maritime transport.
3. **Environment and sustainability** – assessing the environmental impacts of the hydrogen economy, raw material availability, and life cycle analyses.
4. **Storage and distribution of energy and hydrogen** – research on hydrogen storage and pipeline transmission.
5. **Energy and electricity system** – energy flexibility, demand balancing, and utilizing by-products from hydrogen production.
6. **Production of clean hydrogen** – development and commercialization of more efficient electrolysis technologies.
7. **Markets and society** – supporting the green transition through business models and the development of competitiveness.
8. **EU regulation and politics** – assessing the impact of key regulations and considering geopolitical aspects.

The national strategic hydrogen research initiative is supported by 12 Finnish universities and research institutions, including Aalto University, the University of Helsinki, the University of Jyväskylä, the Natural Resources Institute Finland, LUT University, the University of Oulu, Tampere University, the University of Turku, the University of Eastern Finland, the University of Vaasa, the VTT Technical Research Centre of Finland, and Åbo Akademi University.

**Welcome to the webinar on November 4 at 13:00**

The report [***Strategic Research Agenda for Finnish Hydrogen Research***](https://www.h2finland.fi/_files/ugd/2e98da_6e9437e0dd554c40a9bcededa8f14f65.pdf?index=true) will be presented in the Hydrogen Research Forum webinar ***Towards a Competitive and Sustainable Hydrogen Economy*** on November 4, 2024, from 13:00 to 14:00. The results of the work are presented by Professor [Pertti Kauranen](https://www.lut.fi/fi/profiilit/pertti-kauranen), Researcher [Teemu Tuomisalo](https://www.lut.fi/fi/profiilit/teemu-tuomisalo) and Project Manager [Eeva Lähdesmäki](https://www.lut.fi/fi/profiilit/eeva-lahdesmaki) from LUT University.

Register by October 31: [HERE](https://link.webropolsurveys.com/EP/14CCA8A0CD23F199)

**For more information:**  
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