

Permascand AB  
Press Release  
April 1, 2021

## Permascand presents extensive innovation investment in green hydrogen – will build full-scaled technology center

**Permascand, a technology-driven manufacturer of world-leading electrochemical solutions, today presents an extensive innovation initiative to develop the hydrogen technology of the future. Through the construction of a full-scaled technology and innovation center and investments in the company's research team, Permascand will conduct advanced research and development to enable large-scale and cost-effective production of green hydrogen for energy storage, where Permascand has a unique position. In total, the company plans to invest around SEK 300 million over the next three years.**

Global demand for green hydrogen is growing exponentially, driven by electrification, and increasing demand for renewable energy. Green hydrogen will play a significant role in the energy system of the future in energy storage, as industry feedstock, in grid balancing, and as fuel for vehicles. Today's production technology needs to be developed and streamlined in order for green hydrogen to become a competitive and meaningful energy carrier, as well as to meet the high expectations in the industry and the transportation sector.

“Permascand has 50 years of experience in manufacturing electrochemical solutions on an industrial scale and today delivers critical components to several of the world's leading players in the hydrogen market. We are now launching one of the largest innovation investments in the company's history. It is natural that we build on our expertise and take the lead in our segment to enable cost-effective production of green hydrogen on a large scale”, said Permascand's CEO Peter Lundström.

The goal is to develop production technology to a more efficient use of materials to achieve lower production costs of green hydrogen. These include reducing the use of the noble metals' iridium and ruthenium, which are currently used as catalysts in the production of hydrogen. There is a limited supply of these noble metals which has resulted in sharp price increases recently and the price is expected to rise further as demand increases.

“With today's methods and materials, it costs about 4 dollars to produce one kilo of hydrogen. If hydrogen is to become a meaningful and competitive energy carrier in the future, and enable energy conversion, production costs must be reduced to around USD 1.5 per kilo of hydrogen,” Peter Lundström continued.

Demand for efficient production equipment that can produce large volumes of components to be used in large plants to produce hydrogen is high and is expected to grow. In 2021, Permascand will therefore recruit top engineers to the company's R&D team and in 2022 open a full-scale technology and innovation center with the aim to conduct advanced research and development of materials and technology. The center will have the capacity to carry out pilot tests, as well as product development together with selected partners.

**Permascand AB**  
Press Release  
April 1, 2021

Over the next three years, Permascand plans to invest around SEK 300 million in the development, and thereafter extensive investments in scaling up the production capacity are expected to be implemented.

The center's geographical location depends on the access to expertise and customer demand. The starting point is Permascand's research center in Ljungaverk. The company is now recruiting international expertise in electrochemistry, metallurgy, mechanics, technical design, and construction, and has recently recruited additional expertise in the field of hydrogen.

“Sweden has the opportunity to take a unique position in hydrogen development internationally with large, planned, investments in both green steel and heavy transport and we will contribute with our cutting-edge expertise in this development. With our production facility in Ljungaverk and the research conducted at KTH, among others, a location in Sweden is very interesting,” Peter Lundström concluded.

The vision for Permascand is to be the global independent preferred supplier of coating, electrodes and electrochemical cells for water electrolysis and green hydrogen production for mid and large sized installations by 2030.

**For more information, please contact:**

---

Peter Lundström, CEO  
Tel: +46 73-028 14 76  
E-mail: [peter.lundstrom@permascand.se](mailto:peter.lundstrom@permascand.se)

**About Permascand AB**

---

Permascand is an independent technology-driven manufacturer of world-leading electrochemical solutions – based on proprietary catalytic coatings – for clean tech applications. With a customer-centric focus, the company has supplied electrodes and aftermarket services for a variety of industries for nearly 50 years. Permascand is headquartered in Ljungaverk, Sweden, with operations including R&D, Technology Development and Production, with offices in Gothenburg, Sweden and Vancouver, Canada. For more information visit: [www.permascand.com](http://www.permascand.com)

**Attachments**

---

[Permascand presents extensive innovation investment in green hydrogen – will build full-scaled technology center](#)