

Nedstack and ZBT to partner on Fuel Cell Co-Development and Industrialization

Duisburg (Germany) February 3rd, 2023

- Fuel cells offer a valuable pathway for the decarbonization of heavy polluters in the stationary and maritime domain and are becoming commercially available for widespread adoption;
- Nedstack is upscaling its advanced fuel cell manufacturing capabilities up to a 1-Gigawatt stack rated power capacity towards 2027;
- ZBT has supported the Nedstack technology roadmap definition and previous fuel cell design projects. Constituted on these prior experiences ZBT and Nedstack have engaged in a Co-Development Partnership to further support the industrialization of PEM Fuel Cell technology development and production in the Arnhem-Duisburg region;

DUISBURG – Hydrogen is an important energy vector to decarbonize hard-to-abate power generation applications such as ship propulsion, flex load power generation and temporary power systems. To enable such transition pathways technically mature fuel cell solutions are needed and such solutions need to become available in high volume production. Nedstack and ZBT are established players in the fuel cell eco-system and have both contributed for over 20 years to the development of fuel cell maturity. With the emerging hydrogen economy Nedstack and ZBT have committed to a deep co-development partnership to industrialize hydrogen fuel cell technology. The closing of this partnership took place during an Arnhem-Duisburg partner city dialogue attended by both the Mayor of Arnhem Mr. Ahmed Marcouch and the Lord Mayor of Duisburg Mr. Sören Link.

“The journey to a more sustainable society does not stop at borders. It's a global challenge that we share together. It makes cooperation inevitable; to share knowledge, to innovate. It also brings about opportunities for companies in Duisburg and Arnhem alike to develop solutions that make tomorrow's world better than the one we live in today. The cooperation between ZBT and Nedstack is a lighthouse example of such a fruitful cooperation. “

Nermina Kundić – Alderwoman, City of Arnhem

Arnhem and Duisburg – Friendly neighbors with a NetZero commitment

Arnhem and Duisburg are connected by more than the river Rhine and share a mutual interest in energy innovation and hydrogen technologies. Arnhem positions itself as the energy capital of the Netherlands and accommodates amongst others the seat of TENNET the Dutch TSO. Duisburg, in turn accommodates the University of Duisburg Essen, Ship Technology Center DST and an ecosystem of advanced chemical companies that develop critical products and solutions for the energy system of tomorrow.

Over the course of the last decade Arnhem and Duisburg have become more cohesive and have engaged in multiple high-level dialogues and seminars with the view towards further integrating and combining the strengths of their cross-border eco-system. In parallel to the Nedstack-ZBT partnership the mayors of Arnhem and Duisburg have jointly undersigned a letter of intent to further continue this process of symbiotic development in a cross-border partnership.

The Economic Board has been co-hosting the Arnhem-Duisburg dialogue and their director Mr. Jan van Dellen illustrates: 'Our region is leading the way in hydrogen technology development and deployment. IN doing so, many hydrogen innovations are co-produced by industry and academia. Today within our region we see hydrogen being used to power mobility, to heat our built environment and for providing clean sources of back-up power generation. Cooperation within our European region pays off: we learn from each other's innovations and cooperate to maximize our impact on the energy transition which is so much needed in today's Europe..

Fuel Cell Co-Development in the Arnhem-Duisburg region

ZBT was established in 2001 and incorporated under the University of Duisburg-Essen to provide a vehicle for fuel cell research and development. Its infrastructure includes production facilities, test facilities, chemical laboratories and high-tech analytics. State-of-the-art IT and software tools complete the portfolio. The initial installation of ZBT's infrastructure was supported by the European Regional Development Fund and the state of North Rhine-Westphalia.

Nedstack – in turn - was established in 1999 as a spin-out of AkzoNobel in partnership with ECN to provide a Netherlands based stack company and to deliver fuel cell power solutions for the most demanding high-power, high-use applications. Supported by the Netherlands Enterprise Agency under the framework of the IPCEI on Hydrogen, Nedstack is industrializing its fuel cell designs and scaling-up its fuel cell manufacturing capabilities to the Gigawatt scale under the Important Project of Common European Interest (IPCEI) on Hydrogen.

"Nedstack and ZBT have been partners in co-developing fuel cell solutions for over five years. Today's partnership agreement formalizes an ongoing cooperation and provides a much-needed framework for increasing cooperation and maximizing our mutual impact while maintaining our friendship." Says Arnoud van de Bree – Chief Executive Officer at Nedstack. Dr. Peter Beckhaus – Managing Director at ZBT: "We are pleased to make our contribution to the industrialization of Nedstack's hydrogen fuel cell technology. By combining the complementary experience and infrastructures of our teams at Nedstack and ZBT, we will secure substantial added value and thus jobs in the manufacturing industry in the Arnhem-Duisburg region." Part of the Fuel cell co-development partnership includes a diversity of engineering and test services provided executed by joint technology teams which are commencing with almost immediate effect.

=0=0=0=0=0=

About Nedstack (www.nedstack.com)

Nedstack is a Dutch developer and manufacturer of PEM Fuel cell power solutions for high power and safety relevant applications. Nedstack was founded in 1999 and is incorporated in Arnhem, the Netherlands, and is committed to contribute to a NetZero society by delivering state-of-the-art hydrogen fuel cell-based power solutions.

Nedstack Press contact:

Mr. Arnoud van de Bree - CEO Nedstack
Tel: +31 (0)26 319 7600
Arnoud.vandeBree@nedstack.com

About ZBT (www.zbt.de)

ZBT is one of the leading research institutes in Europe for fuel cell and hydrogen technologies and a sought-after R&D partner in both European and national cutting-edge research as well as in industrial projects focusing on automotive applications and stationary power generation. ZBT is a non-profit limited company (GmbH), the sole shareholder is the University of Duisburg-Essen.

ZBT Press Contacts:

Dr. Peter Beckhaus - CEO ZBT
Tel +49 203 7598 3020
Email p.beckhaus@zbt.de

Grant Support Notice:

ENG: This project is supported under IPCEI terms by the Netherlands Enterprise Agency on behalf of the Dutch Ministry of Economic Affairs and Climate.