

# PIB Hydrogen Australia

A Dutch Partnership of International Business



Netherlands

# Australia and the Netherlands: creating solutions for a hydrogen-powered economy

As countries scramble to reduce their carbon footprints, energy sectors across the world are undergoing a huge transition. Many are turning to hydrogen as part of the mix to reduce carbon emissions as set out in the Paris Agreement. However, hydrogen can only help achieve net-zero emissions if it is produced with green energy. We need to take action to accelerate the global energy transition.

Clean hydrogen is seen to be essential to this transition. As an optimal energy carrier it helps solve the problem of intermittent energy sources like renewables. In Australia, an abundance of natural energy resources in the form of sun and wind makes green hydrogen an attractive and viable proposition. That way, Australia can supplement the energy mix with green hydrogen and contribute to achieving UN Sustainable Development Goal 7 access to affordable and clean energy for all.

## Presenting PIB Hydrogen Australia

The capabilities of this cluster of Dutch hydrogen experts in the PIB (Partners for International Business) H2 Australia span the entire hydrogen chain. Together the partners can help Australia realise its ambitions to produce and export green hydrogen to the global market. To achieve this Australia wants to reduce its carbon emissions, and scaling up its green hydrogen production facilities. The H2 Australia cluster can help it achieve this while keeping costs down. This partnership provides an opportunity for Dutch and Australian companies in the hydrogen chain to exchange knowledge and share innovative ideas. This includes know how on hydrogen development from supply chain (production, transportation and storage) to usage and applications (mobility, built environment and energy and industrial sectors). Australia also has a huge potential for developing very large batteries – another essential component for the energy transition.

## Let's create solutions for a hydrogen-powered economy!



## Developing a hydrogen market together

In early 2023, Minister for Climate and Energy Policy Rob Jetten signed a Memorandum of Understanding for hydrogen with his Australian counterpart Chris Bowen. The MoU marks the beginning of a collaboration focussing on the development of an international hydrogen market and the setting up of export-import hydrogen corridors for green hydrogen.

The hydrogen sector is a strong upcoming industry with high potential for growth in both the Netherlands and Australia. Innovative cooperation between the two countries will drive innovation in the production and supply of hydrogen and accelerate the broad application of hydrogen in industry, mobility and the built environment.

# Partners



**ARCADIS** is a leading global company delivering sustainable design, engineering, and consultancy solutions for natural and built assets. Our mission is to support our clients, to meet and to exceed their net zero aspirations in both public and private sectors across the entire hydrogen value chain. We provide services from vision forming and policy advice, all the way through the project lifecycle including asset management.

[www.arcadis.com](http://www.arcadis.com)



**elestor** aims to enable large-scale economical use of self-generated renewable electricity on a 24/7 basis. The company's mission is to minimise the costs of electricity storage by introducing large scale cost-effective HBR storage technology.

[www.elestor.nl](http://www.elestor.nl)



**Gasunie** is an energy network operator, managing and maintaining the infrastructure for large-scale transport and storage in the Netherlands and Germany. Gasunie wants to help accelerate the energy transition to a CO<sub>2</sub>-neutral energy supply and believes that hydrogen has a crucial role to play. It is easy, reliable and affordable to transport and store in large quantities. Gasunie wants to have an efficient and large-scale hydrogen network ready for industry, mobility and the built environment in the Netherlands and Germany by 2030.

[www.gasunie.nl/en](http://www.gasunie.nl/en)



**Metalot** is a network organisation combining knowledge by scientists, government agencies, students and entrepreneurs. Through research into sustainable, circular processes for metals and renewable energy, Metalot aims to accelerate the energy transition.

[www.metalot.nl](http://www.metalot.nl)



**Nedstack** is a leading player in the PEM fuel cell industry with a strategic focus and unique track record on the high power and mission critical domain. Nedstack enables the hydrogen economy by developing, realizing, verifying, applying and servicing PEM fuel cell solutions. Its products and services are superior in quality, durability, safety and reliability and are cost competitive.

[www.nedstack.com](http://www.nedstack.com)



**The Port of Rotterdam** is Europe's largest seaport. The company manages, operates and supports the smooth and safe flow of shipping to and from Europe and across the oceans. Through digitalisation and innovation, the Port of Rotterdam is transforming into a cleaner and greener port for transport, transshipment cargos, storage and pleasure craft.

[www.portofrotterdam.com](http://www.portofrotterdam.com)



**Prodrive Technologies** portfolio ranges from embedded computing, motion & mechatronics, power conversion, automation control systems, vision & image processing systems and internet of things products, configurable to their customers' needs.

[www.prodrive-technologies.com](http://www.prodrive-technologies.com)



**SoluForce** is the originator and technological leader of Flexible Composite Pipe systems. These systems are used for various high pressure applications for (energy-bearing) fluids and gasses, such as high pressure flowlines, water injection or gas transport.

[www.soluforce.com](http://www.soluforce.com)



**TES** is a producer of green hydrogen at scale. Its product is sold to hydrogen users in the mobility, industrial and power sectors. TES is developing energy supply and import hubs in Germany, Belgium, the Netherlands, France, Canada and the United States to integrate and optimise global supply chains, as well as production and export hubs in the Middle East and North America.

[www.tes-h2.com](http://www.tes-h2.com)



**TNO** is an independent research organisation. More than 15 research departments spread over 5 units are collectively working on innovations along the entire hydrogen value chain from production to infrastructure, storage and final applications. TNO is involved in over 50 hydrogen related projects. From developing new materials in its Faraday lab to work on pre-feasibility and engineering studies for large scale deployment in project such as NorthH2 and the Gigawatt project.

[www.tno.nl/en](http://www.tno.nl/en)



**Royal Vopak** is the world's leading independent tank storage company, storing vital products with care. The company ensures safe, clean and efficient storage and handling of bulk liquid products and gases for its customers. It can help the deployment of hydrogen around the world, through the development of international value chains and open-access, innovative infrastructure. Vopak aims to enable renewable hydrogen exports and imports, transportation, storage and transportation, using three technologies: Liquid Organic Hydrogen Carriers, Green Ammonia, and Liquefied Hydrogen.

[www.vopak.com](http://www.vopak.com)

# Curious to learn more? Get in touch!

This partnership is coordinated by the New Energy Coalition. New Energy Coalition is a network and knowledge coalition that is committed to a smart and successful transition to the sustainable energy system of the future, in the Netherlands and the rest of the world. New Energy Coalition is the catalyst behind Hydrogen Valley, a six-year European programme in which more than thirty public and private parties are contributing to the construction of a hydrogen network in the northern Netherlands. From large-scale production of hydrogen to the expansion of the number of hydrogen vehicles and refuelling stations, and from underground hydrogen storage to hydrogen to heat residential areas.

[www.newenergycoalition.org](http://www.newenergycoalition.org)



You can contact the coordinators of this partnership via the following details:



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