









Press release

AquaSector: Study investigates potential for first largescale offshore hydrogen park in the German North Sea

RWE, Shell, Gasunie and Equinor signed declaration of intent

- Partners intend to construct offshore hydrogen park with ~300 MW electrolyser capacity by 2028
- · Feasibility study to be carried out

Essen/Hamburg/Hanover/Berlin, 23 July 2021

Project partners RWE, Shell, Gasunie and Equinor signed a declaration of intent to further intensify their collaboration on the AquaSector project - the vision of the first large-scale German offshore hydrogen park. The project aims to demonstrate that in Germany offshore based hydrogen production enables an efficient, cost-effective and sustainable way to produce green hydrogen.

The AquaSector project intends to install approx. 300 megawatt (MW) electrolyser capacity to produce up to 20,000 tons per year of green hydrogen offshore. The green hydrogen is planned to be transported via a pipeline, called AquaDuctus, to Heligoland starting in the year of 2028.

The partners regard the AquaSector project also as a 'proof of concept' for the realisation of the AquaVentus vision of producing up to 10 gigawatts of green hydrogen offshore by 2035 and transporting it via an extended pipeline to mainland Germany.

Compared to the transport of electricity generated offshore, the hydrogen production at sea and the transport via pipeline could offer clear economic advantages. The pipeline could replace five High Voltage Direct Current (HVDC) transmission systems, which would otherwise have to be built. It is by far the most cost-effective option for transporting large volumes of energy over long distances.

As part of the AquaVentus project family and together with the entire initiative the partners want to contribute towards the decarbonisation of energy supply in Germany and Europe. AquaSector is therefore a key milestone in the implementation of the German and European hydrogen strategies.

The project can support the development of the market that will bring a rapidly increasing demand for green hydrogen. The first step in the AquaSector project for the partners is to carry out a detailed feasibility study. The study will provide important initial indications of the conditions under which the large-scale offshore hydrogen park can be successfully realised as well as the technical and commercial challenges which need to be overcome in regards to offshore hydrogen production.

Read more about AquaSector and the other sub-projects on the AquaVentus' website: www.aquaventus.org











RWE Renewables is one of the world's leading renewable energy companies. With around 3,500 employees, the company has onshore and offshore wind farms, photovoltaic plants and battery storage facilities with a combined capacity of approximately 9 gigawatts. RWE Renewables is driving the expansion of renewable energy in more than 20 countries on five continents. From 2020 to 2022, RWE Renewables targets to invest €5 billion net in renewable energy and to grow its renewables portfolio to 13 gigawatts of net capacity. Beyond this, the company plans to further grow in wind and solar power. The focus is on the Americas, the core markets in Europe and the Asia-Pacific region.

Press Spokesperson

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Shell has set the global target of becoming a net-zero emissions energy business by 2050, in step with society and our customers. Shell is investing billions of dollars worldwide in low-carbon energy, including charging stations for electric vehicles, hydrogen, renewable energy and biofuels. Represented in Germany since 1902, Shell now employs more than 3000 people in research, production and sales of energy solutions for private mobility and home energy as well as energy and chemical products and lubricants for almost all industries and sectors. The company is gradually transforming its portfolio with a view to customer needs in order to advance the energy transition with energy solutions with lower CO₂ emissions.

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Gasunie is a European energy infrastructure company. Gasunie's network is one of the largest high-pressure pipeline networks in Europe and consists of over 17,000 kilometers of pipelines in the Netherlands and Germany. Gasunie is helping to accelerate the transition to a CO2-neutral energy supply. The company believes that innovations in the gas sector can make an important contribution to this, for example in the form of renewable gases such as hydrogen and green gas. When it comes to hydrogen, scale and an integrated approach to the entire hydrogen chain are important. Gasunie is therefore investing in innovative partnerships and a hydrogen backbone for transport and storage. Both existing and new gas infrastructure are important in this context.

Press Spokespersons

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Equinor is a broad energy company with 21,000 colleagues committed to developing oil, gas, wind, and solar energy in more than 30 countries worldwide. Equinor is building material offshore wind clusters in the UK, the US North East and in the Baltic Sea. Equinor is one of the world's largest developers and operators of offshore wind, and the company is well positioned in several large scale hydrogen projects throughout Europe. Our headquarters are in Stavanger, Norway.

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