

PRESS

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New VDE white paper: Making Europe the lead market for the hydrogen economy

- Following the first edition from 2022, the VDE Group now publishes second white paper for the hydrogen economy
- Attracting the attention of investors white paper presented in Liechtenstein and at the World Economic Forum in Davos
- Driving forward European solutions for greater energy sovereignty

(Frankfurt a. M., 16.01.2024) The budget situation in Germany, uncertainty among the population about the future energy supply, difficult geopolitical conditions – all this could have a negative impact on the hydrogen economy in Europe, because young, less established technologies are losing out in the current situation. "That would be fatal," says VDE President Alf Henryk Wulf: "Because green hydrogen is the missing piece of the energy transition puzzle. It bridges the gap between the consumption and production of renewable energy, which fluctuates greatly and is distributed very differently geographically. What Europe urgently needs is the expansion and industrialization of reliable, safe and standardized hydrogen technologies."

Europe has sufficient potential for the production of green hydrogen

With the <u>new white paper for the hydrogen economy</u>, the VDE Group is working with national and international experts to ensure that Europe does not fall behind in promoting the hydrogen economy. Key aspects of hydrogen technologies and solutions were developed in specialist workshops, online surveys and individual expert interviews. "It was important to us not to discuss the current challenges in terms of a crisis, but to recognize and exploit the opportunities," says Burkhard Holder, VDE expert for future key topics in the energy sector. "There is sufficient potential in Europe to produce green hydrogen at competitive prices. The production of green hydrogen should therefore focus on locations in Europe. This will strengthen the idea of an economic union based on partnership in the energy sector and reduce



geopolitical dependencies." In 2022, VDE Renewables published the first white paper for the hydrogen economy.

Hydrogen solutions already a reality in many areas today

The authors make it clear that the most important thing now is to finance the new hydrogen technologies and business models. This is less about the technical challenges and more about the industrialization of high-quality hydrogen technologies for a sustainable energy and heat transition. Hydrogen will make the transformation economically, ecologically and socially feasible. The VDE is contributing its expertise in the areas of standardization, technological safety and also ecological, economic and social sustainability.

Hydrogen solutions are already a reality in many areas today. To attract the attention of investors, the white paper was presented in Liechtenstein and on the fringes of the World Economic Forum in Davos. It was transported from Liechtenstein to Davos in a BMW iX5 Hydrogen – an example of how hydrogen is also a sensible solution for passenger cars, as an emission-free addition to battery-electric vehicles. Rudolf Hilti, President of The System Change Foundation and family investor: "Change often starts small, usually as thoughts, but it is important that these small first steps scale accordingly to create the big picture. I am therefore delighted that we are partnering with the VDE together with The System Change Foundation to bring the energy and heat transition and the possibilities of hydrogen from Vaduz to the World Economic Forum in Davos and to the world."

Electrolysis: key technology of the hydrogen economy

A central approach of the white paper is that policymakers will drive forward European solutions to an even greater extent. This is because importing hydrogen from overseas is technically more challenging, often only economical at first glance and frequently associated with high political risks. Hydrogen solutions therefore support the goal of establishing European energy sovereignty. The great potential of solar and wind energy in Europe, combined with political stability, helps in this respect.

China has already taken the lead in electrolysis, the key technology of a future hydrogen economy. More than half of today's installed capacity is located there. The Chinese economy has very quickly recognized that the expansion of photovoltaics is closely linked to the hydrogen economy and must therefore be considered strategically. Burkhard Holder: "The scenario is emerging that Europe – as with photovoltaics and lithium-ion battery technologies – will once again be left behind in an important field of the energy industry. We want to counter this and our white paper provides the necessary impetus."

About VDE Renewables

VDE Renewables GmbH, a subsidiary of the VDE Group, offers quality assurance services in

the global renewable energy market. The core tasks of the Alzenau-based company are quality

testing and certification to the highest quality standards for safety, reliability and performance,

as well as independent engineering and due diligence services. VDE Renewables cooperates

with all structures of the VDE Group and has an international partner network that includes

leading research institutes such as several Fraunhofer Institutes, as well as insurance groups

such as Allianz and Munich Re. Together with its partners, VDE Renewables supports clients in

accessing new markets, differentiating themselves from the competition or facilitating more

attractive insurance or financing conditions, for example.

More information at www.vde.com/renewables-de

About the VDE

The VDE, one of the largest technology organizations in Europe, has stood for innovation and

technological progress for more than 130 years. VDE is the only organization in the world to

combine science, standardization, testing, certification and application consulting under one

roof. For more than 100 years, the VDE symbol has been synonymous with the highest safety

standards and consumer protection.

We are committed to promoting research and young talent and to lifelong learning with on-the-

job training opportunities. In the VDE network, more than 2,000 employees at over 60 locations

worldwide, more than 100,000 volunteer experts and around 1,500 companies are shaping a

future worth living in the VDE network: connected, digital, electric. We are shaping the e-digital

future.

The VDE (VDE Association for Electrical, Electronic & Information Technologies) is based in

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